

Changes in Technology Since the 1960s

For many months I have been considering writing a column about how the technological field has changed since I was in high school 60 years ago. I purchased a new MacBook Air laptop computer a couple weeks before Christmas; that is what prompted me to finally write this column. The knowledge of what these devices can do is mind-boggling - and scary - for this old guy. We read the novel 1984 by George Orwell while attending high school and knew that could never happen!

During the time that I was in high school any calculations that we made had to be done in our head or on a piece of paper; some approximations could be made using a slide rule. Of course we had desktop adding machines, but nothing for multiplying and dividing. It was after my freshman year that we changed from having a party line phone at home where our ring, if I remember correctly, was two longs and a short. [If you don't have any idea what this means, talk to somebody 60 or older.] Our phone number changed in October 1963 from 937-G to my current phone number; the phones changed at that time from those on the wall with a ringer on the side to the ones with rotary dials that many young people now might not know how to dial.

I purchased my first calculator in January 1975 after my first semester of teaching; it was time to average the three six-week grades with the final exam score to get the students' semester averages. I believe the calculator cost \$29.95, a good amount since my biweekly take-home pay was \$231.61. It had one memory position and could only add, subtract, multiply, and divide. It also had to be plugged into the wall socket in order to be used. It was well worth the money so I didn't have to calculate the averages of those 100 or more students by hand.

Things progressed quickly after that, especially when the desktop computers came into vogue! I began to teach computer programming on those Apple computers in 1980; that was when I purchased my first desktop computer. The teachers received the powerful tools of a word processor, data base, and spreadsheet at that time. That definitely made jobs much easier, but also added some stress to their lives because the learning curve could be tough. But nothing changed the lives of all of us like the development of the Internet and cell phones.

Fast forward to December 9, 2024 when I walked into the Apple Store in Madison to purchase another new Apple computer - the only brand of computer I have ever owned. There are so many items in the store that we never could have imagined 60 years ago. There were laptop computers, desktop computers, iPads, iPhones, watches, storage devices, and much more. It amazed me that there were no visible cash registers in the building. The employees use their iPhones when they need merchandise brought from the back room. They also use their phones to accept credit card payments. No signature is necessary; everything is quick and the customer walks out. The receipt is emailed to the address that they have on file for the customer.

After I got my computer home, I decided to wait until the next day to set everything up. The technician had told me that it would be easy to transfer the information from my old computer to the new computer; it might take four hours. I went on Youtube to see how to do the transfer; I also read the instructions that were given with the new computer. However, that wasn't working for me; I called their toll-free number and reached a female technician in Mississippi. She was able to help me move things



This photo shows how much technology has changed in the last few decades. It was taken at the Swiss Colony Data Center in the 1970s and came from the Monroe Evening Times collection. Marc Klein, right, is showing the magnetic storage media to the ladies who are standing in front of the Magnetic Tape Drive. Machines like this have not been used for decades.

along. The instructions did not tell me that I had to get my old computer ready to transfer the data. As I was explaining to the technical advisor what was on each of my screens, she didn't understand what I described. I told her that I had an iPhone and could take pictures of the screens and text to her. She asked if it would be all right if she would hook into my screen so she could view what my iPhone saw. It took a matter of seconds before I was able to set up my old computer to transfer the data.

When it came time to transfer the data. I pushed the necessary buttons and ended the phone call. Since I knew it was going to “take a minute,” as the Mississippi technician said, I decided to take a walk to Walgreens. By the time I arrived home, 25 minutes later, more than 100,000 documents, photographs, and other digital images scanned from decades of newspapers had all been transferred.

Thanks to a friend who had sent an email to me about my columns, I was reminded of another capability of the computer that I haven't been using. He mentioned that his message to me had been dictated by him to the computer. That is a technique that I've started using to write parts of these columns. This might help me put out columns more frequently, but this is NOT a promise!

For this old man, who as a boy walked or biked to the one-room country school for eight years, it is rather difficult to realize how things have changed in less than 60 short years. I first taught computer programming at an Indiana high school in 1974 using card punch machines and a large mainframe computer, which was in another building. We can't imagine how much things will change in the next 20 or 50 years, as we weren't able to imagine today's technology in the 1960s.