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Board Report - Technology
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**Looking Back**

Mainframe Computers

What was once old is now new! Many of us may be able to remember back to "the old days" of punch cards and main frame computer systems. While punch cards are not mounting any serious comeback efforts, the main frame has been alive and well this whole time.

The main frame computers allowed many people to use a single computer by connecting to it with a terminal. These terminals (a screen, keyboard, and possibly a mouse) allowed one system to serve a large number of users. Over time and because of the advances in computer chips, the personal computer became the dominant form of computing. The idea of a mainframe computer then became synonymous with old, text-based, and generally clunky computing systems.

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**What's Current**

Workstations/Desktops

Since I have been working in La Center, we have never had any mainframe computing systems. Instead, our experience has been with the microcomputer /personal computer. Whether you call it a desktop, a workstation, a notebook or a laptop, the computers we have used were personal computers; computers that had everything built in and all the customer had to supply was the electrical power to run them.

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**Looking Forward**

Thin Clients

We are now beginning to explore an alternative method of rolling out systems: Thin Client.

A thin client computer is very much a throwback to the days of a single mainframe computer "feeding" numerous terminals so that multiple users are connected to a single server computer that does all the computational work and then sends back to the terminal the results. I think of it as a terminal sending mouse clicks and letters up to the server and, in return, the server sends back "screens" to the user which make the user experience seem very much like they are using a computer located right at their desk. In actuality, the server is doing all the work and is simply using the network to "feed" the terminals display.

We are going to be installing a couple of thin client solutions in a some select areas to see if our investment in enhancing the network is able to support this model.

The thin client solution has the advantage of providing a lower cost computer experience than is possible with the standard workstation model we've been using. Essentially you buy one very capable server and the terminal hardware (keyboard, mouse, monitor, and thin client device). The thin client device is about the size of paperback book and has a monitor connection, USB ports, an Ethernet link, and a power cord. The cost for the terminal hardware is far less than the cost of a full blown computer. My initial figuring shows this is about 60% of the cost we would have paid for computer systems - and we'll have more computing power per workstation as well!

In addition to the financial benefits, it is also easy to deploy and there is only one computer where previously there may have been as many as 60. It reduces the number of "things" out there that can fail. Another way of looking at it would be to see the computers as eggs. So now, instead of 30 eggs that need to be carried carefully around, you have them all in one place - a basket so to speak. When you want those 30 users to have a piece of software, you install it one time and, voila!, everyone has it. And since there are fewer computers to manage, it should result in increased efficiency and greater up-time.

I look forward to the learning this thin client solution will provide. Other districts I've spoken with have given this thin client solution rave reviews. I look forward to doing the same.