

Five Ways to Maximize the Lifespan of Kiosk Hardware

The return on investment for a kiosk deployment depends in large part on the lifespan of the hardware.

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Deploying kiosk or self-service hardware can involve a significant capital investment. In order to get the best return on that investment, it's critical that kiosks be designed to ensure maximum lifespan.

It's not just a matter of packing components in a heavy-duty enclosure, however. There are a number of other factors to consider when designing and deploying a durable and long-lasting kiosk.

In most cases, maximizing kiosk lifespan comes down to one thing: money. A few well-spent dollars today can add up to big savings later.

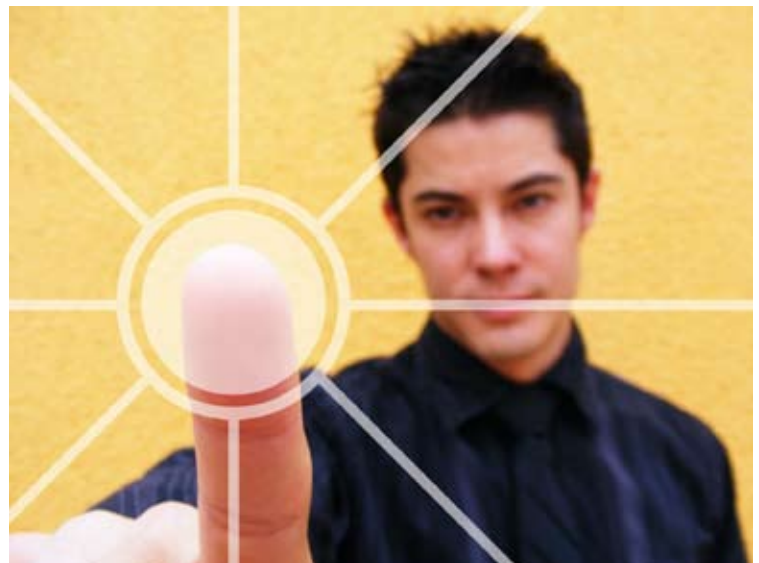
Here are the top considerations when deploying kiosk or self-service hardware.

Match the equipment to its intended use

While some kiosks are intended to be used 24 hours a day, 7 days a week, 365 days a year, others may only see traffic during weekday hours. When designing a kiosk, it is important to make sure that components

are designed to handle the amount of traffic they will receive. Touchscreens or keyboards need to be durable enough to withstand constant use.

It's also important, though, to avoid spending more than necessary, especially when it comes to the internal kiosk hardware.



Ensuring equipment can withstand the amount of expected traffic is crucial to a successful kiosk deployment. A touchscreen needs to be durable enough to handle constant use.

“I have people come to me all the time and tell me they want the biggest, fastest computer I have, and they really don’t need that,” said Howard Horn, president of Wilmot, N.H.-based Advanced Kiosks, a kiosk supplier.

“It’s a kiosk, it’s not the computer you are going to have on your desk. You really don’t need a huge processor,” he said. “The higher-end ones run a lot hotter, so you need a better cooling system, and then you start having other issues that can potentially cause a problem.”

Plan for the future

There are plenty of stories about NASA and other government agencies turning to online auction sites in order to find replacement parts for computer equipment. It’s important to not be in the same situation a few years from now.

“Because we create our own motherboard designs, we are able to keep our motherboards in production for eight to 10 years,” said Jason Wallace, marketing manager with Cedar Park, Texas-based Corvalent, a designer and manufacturer of long-life, PC-based embedded boards, motherboards and systems for embedded and industrial applications. “This is of particular importance to military and medical (industries), where even the slightest changes to board designs cause headaches with the bidding process, or with the FDA.”

In every area of manufacturing, however, motherboards frequently are discontinued, creating extensive problems for manufacturers who are dependant upon a reliable supply of those components, Wallace says. Having a source of

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“When you consider the issues of retooling and redesigning housings, compatibility issues with external devices and reliability issues with unproven designs, you begin to see the value,” he said. “Then consider the delays created during those ‘end of life’ transitions, and one finds the idea of being able to obtain an identical board, with identical specs for a decade, to be quite a compelling thought.”

Install equipment properly

Setting up a kiosk isn’t simply a matter of plugging it in, walking away and letting it earn money. Improperly installed equipment can lead to a host of other problems.

Kiosks should be installed in accordance with the manufacturer’s specifications. That can include secure electrical and Internet hookups as well as adequate



Installing a kiosk can be complicated. Following the manufacturer's specifications is one important step that can ultimately save money and reduce downtime.

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— Frank Olea, CEO, Olea Inc.

ventilation around the kiosk and in a manner that allows easy customer access with a minimum of movement. In most cases, kiosks should be installed in an area where the machine won't be exposed to wide variations in temperature.

One of the most important things a deployer needs to do is to read the manual when setting up a kiosk, Horn says.

“We have 20-page manuals that go with most of our products, and I get calls every day from people who don't read them,” he said. “Most manuals spec out what you need for proper installation. If it says you need to have three inches around it for airflow, make sure you have it.”

Ensure proper ventilation and cooling

According to Frank Olea, CEO of kiosk manufacturing company Olea Inc., proper heat management is one of the biggest concerns when it comes to stretching the life of hardware.

“Proper design and cooling techniques are crucial to longevity in a kiosk,” he said. “Heat is the enemy within the kiosk.”

That means always keep air passages through the machine clean and unblocked, allow plenty of space around and above the machine for circulation and periodically check that internal cooling components are functioning fully.

“Clean the machine occasionally,” Horn said. “Dust builds up, cuts down on airflow and creates an insulating layer. The next thing you know the temperature of your components are going up. Get in there every so often with a little vacuum cleaner and clean it out.”

Don't let price be the main consideration

Billionaire investor Warren Buffett once said, “Price is what you pay. Value is what you get.”

Despite the inclination to save money when designing and deploying a kiosk, the lowest cost doesn't always provide the most value. Using inexpensive components could end up costing more in terms of service calls and downtime.

A single service call, Olea says, can end up wiping out the savings gained by using a low-end component. A service call to replace a broken keyboard might be \$250, he says, while buying a more durable keyboard in the first place might have cost only \$100 more. Multiply that cost over several machines, and it quickly becomes apparent that the use of inexpensive parts doesn't make good financial sense.

About the sponsor: Olea Inc. has more than 35 years of experience in building kiosks, interactive displays, trade show exhibits and custom enclosures. The company offers complete design, construction and integration services.