Using mobile devices is a common behavior for consumers and business people. In fact, 5.9 billion of us (87 percent of the world’s population) are mobile subscribers for one type of device or another, many of us using two or more. One visit to an airport and a glance at all the folks working their wireless computers, smart phones, iPads and Kindles will tell you that mobile computing is an imperative today. And, mobile use has begun to permeate the consumer market in ways beyond simple communication, web browsing or ordering from e-stores.

Today, when you’re not home, you already can monitor your house through your web-enabled computer or smart phone. You can check the status of your door locks, grant entry to your home, and turn your lights off and on. You can conserve energy and save money by controlling your lights and thermostat. Contractors are already creating the infrastructure for such services in much new home construction.

Additionally, as students are using mobile applications in the rest of their lives, those entering the workforce will fuel demand for increased use of their smart phones. As businesspeople, they will expect office buildings and technical campuses, as well as services, to be mobile-friendly. They won’t want to remember and manage multiple cards, items and ID credentials when they could simply use their smart phone to do all.

Why all the talk about NFC?

Near field communication, or NFC, provides simplified transactions, data exchange and wireless connections between two devices that are in close proximity to each other, usually by no more than a few centimeters. It is expected to become a widely used system for making payments by smart phone in North America. Many smart phones currently on the market already contain embedded NFC chips that can send encrypted data a short distance (“near field”) to a reader located, for instance, next to a retail cash register. Shoppers who have their credit card information stored in their NFC smart phones can pay for purchases by waving their smart phones near or tapping them on the reader, rather than bothering with their actual credit card. Co-invented by NXP Semiconductors and Sony in 2002, NFC technology is being added to a growing number of mobile handsets to enable mobile payments as well as many other applications.

A smart phone or tablet with an NFC chip can also serve to quickly gather information. NFC devices can read NFC tags on a museum or retail display to get more information or an audio or video presentation. NFC can also share a contact, photo, song, application, or video or pair Bluetooth devices.

NFC technology within smart phones can also be used to emulate smart credentials, allowing use of a mobile phone for entry to secure areas. To turn a smart phone into an access control credential, one simply downloads an app, such as aptiQmobile™ from Allegion. The web-based key management system then sends access control credentials over the air to the NFC-enabled smart phone, which the owner then uses to retrieve the secure mobile key that was set up by the smart phone owner’s access control site administrator. To enter buildings, students simply open the app and tap their phone to the smart reader on the wall in the same way that they would present their work ID badge or One Card campus ID badge at a university. It’s very secure and extremely easy to use.
Many end-users are very excited about this new technology and its future use in the marketplace. And, like smart cards and biometrics, the early adaptors have been on college campuses, ready to bring the technology to the commercial market along with themselves and their degrees. Already used to using their smart phones as a card credential at college, they will want to do likewise once they are in the job market.

The future for NFC is imminent

Near Field Communications (NFC) technology is now being added to a growing number of mobile handsets to enable access control as well as many other applications. More than 125 million NFC-enabled devices were sold in 2012 and over half the phones sold in 2015 are expected to be NFC-capable.

The equipment that makes selling the NFC future easier

Besides providing a solution that customers will be demanding within the next year or so, integrators need to focus on two things. First, the system being selected must be able to read and leverage smart cards, ideally in an open architecture framework for future compatibility. Secondly, you want to set up the infrastructure for NFC now. If you can sell something now that won't have to be replaced when the customer moves to NFC, you have a competitive advantage.

Using NFC-enabled smart phones in conjunction with your customers’ present smart card/multi-technology readers let organizations be assured that their systems are flexible and their investments are solid. When NFC-enabled phones are available, they won't have to replace their present smartcard/multi-technology readers if they have already installed NFC-enabled readers. For transition and planning for future expansion, spanning the various technologies of the past, present and future with a multi-technology reader only makes sense in this fast-paced world.