

# Do smart cards benefit hk society?

[Society](#)



This topic was chosen because it involves a lot of peoples' daily lives. It is also part of one of the leading industries in the economy which changes very often and changes the way of our living. Smart cards have tiny computer chips as they can process jobs like a computer with the tiny microprocessor. They are new technology products similar to credit cards but have a greater range of usage. Data are stored inside the smart card. When smart cards are inserted into a reader, the data stored in the microprocessor of the smart card is sent to the operating system and data are transferred to and from the operating system to perform jobs.

Why were smart cards invented? It is believed that computer technology participates a very important role and they are replacing various things in our daily live things. Smart cards have come up to our lives as a technology investment and benefit us from carrying less hard cash with us which reduce Hong Kong crime as a whole, there will be less theft. In Hong Kong's society, smart cards almost involve in most peoples' lives, they can be used to buy goods from supermarkets and to pay transportation fees such as the Mass Transit Railway in Hong Kong, lunches from some restaurants and they can also be recharged in a lot of places such as 7-11 convenience stores.

Mass Transit Railway is an underground railway in Hong Kong which is similar to the Underground in Britain. Hong Kong is also moving onto a new invention, HKID smart cards. This is personal identification cards of Hong Kong citizens which will contain their personal information including thumbprints. The other type of commonly used smart cards in Hong Kong and the world is SIM cards, Subscriber Identity Module. They are cards that you put in your cell phone to receive signals from your service providers

which will give you access to phone calls. Do these smart cards benefit Hong Kong society? Mondex as a smart card that was in Hong Kong has failed but Octopus clearly has a success and the new HKID cards with advanced security claim will help the Hong Kong society into a more secure country.

### Advantages of Smart cards

The security of smart cards is better than magnetic tape credit cards as they " On the Internet, smartcards increase the security of the building blocks Authentication, Authorization, Privacy, Integrity, and Non-Repudiation. Primarily, this is because the private signing key never leaves the smartcard so it's very difficult to gain knowledge of the private key through a compromise of the host computer system."(Secure service provider). Smart cards have better security than the credit cards which use a magnetic tape at the back of the card to read data. It is also possible of doing the jobs of a credit card, withdrawing money from the bank just like a credit card. It can do the same jobs as the credit cards in a faster way as well.

As we know from experience, when we use our credit cards to buy goods from a shop, you will have to wait for the computer system to check your credit card credit limit with the bank account. If you are authorized to use the card and then you have to sign on the receipts to make sure you are the cardholder. But with Octopus from Hong Kong or any other smart cards, it directly take credit from your Octopus, therefore you do not have to wait for the computer system to check your authorization, it transfers the data immediately back and forth to your smart card. Smart cards speed up our

daily life, " improving the delivery of services and reducing the cost of administration."(totse. com)

Smart cards are " secure, reliable and compact device" (totse. com) As the smart cards work with their own microprocessor data transferred back and forth into the microprocessor and this means data can be changed and the value inside the smart card can be changed. This is one of the greatest advantages of the smart cards because they are unlike telephone cards, which has their own set amount of value. Once they are used up, they can not be revalued and has to be thrown away, this is environmentally harmful which means smart cards are good to Hong Kong and the world if they are relying more on smart cards. Another advantage of smart cards is that magnets can not destroy them. Unlike credit cards, when the magnetic tape gets around magnets, they can get destroyed and all the data will be lost.

This will be time consuming for the user to renew the card because the bank has to send him the new card and new password, while the banks have to do this with machines because no one from the bank is allowed to know the password. Smart cards are not only used like Mondex and Octopus to do payments. In Germany, there are also smart cards which are healthcare cards, they store patients' personal health record.