Tap-to-pay

Introduction :

In today’s presentation, we are planning to look at tap-to-pay. ◊ Our presentation is divided into five points. We will explain ◊ what is tap-to-pay, ◊ how does it work, ◊ its defaults and ◊ advantages, and finally about ◊ RFID-blocking wallet.

◊ What is it ?

Tap-to-pay, or contactless payment, allow us to use our credit cards very quickly and without enter PIN code. We just need to hold it above a contactless-enabled card reader, and the payment will be accepted, if it does not exceed a ceiling. Currently, tap-to-pay can be used with a contactless card and also with mobile phone.

◊ How does it work ?

Contactless payment uses a technology which is called by ◊ radio-frequency identification **(RFID)** (or NFC **(Near Field Communication)** for smartphone). Contactless cards were equipped with a microchip, which can emit radio waves, and allows the connection with a contactless reader. Thank to RFID technology, cards give signals to a nearby card reader, then, if the card reader is ready for the transaction, it will catch up the signal sent out by the card and will be able to process to the payment.

◊ Defaults :

- ◊ The ceiling or the number of transactions allowed per day are sometimes not enough, even if these limits are setting in order to prevent robberies.

- ◊ Contactless payments need card reader which allows RFID technology, otherwise, contactless does not work. And not all of the sellers were equipped with this type of card reader. And even if the card reader suits with such technology, contactless payment can be rejected for unknown reasons.

- ◊ Contactless payment may not work internationally too, because of the technology, which can be slightly different. And sometimes, an additional foreign transaction fee can be added.

- ◊ We also need more precautions with contactless cards, because if we lost it without noticing it, someone can use it very easily.

- ◊ When the contactless card validity expired, we have to go through one more step to totally disable it : disable RFID chip.

◊ Advantages :

- ◊ As we said earlier, the payment process does not take long, like more than 10 times faster than others classic payment methods. One second is enough for a mere process.

- ◊ We do not have to enter the PIN code every time we use credit cards, so more than a gain of time, we get a guarantee of safety, because fewer the time we enter the PIN code, fewer is the risk to be seen tapping. And blocking credit card by forgetting PIN code is no longer an issue.

- ◊ Nowadays, many people also add their debit and credit card information to their mobile devices and use applications like Apple Pay, Google Pay or Samsung Pay. So, we can use our credit cards even if we do not bring them.

- ◊ Since the beginning of the COVID-19 pandemic, tap-to-pay is more used to avoid touching multiple public surfaces.

- ◊ A huge amount of security measures has been established in order to protect credit card, like low-value transactions, limited number of transactions per day, or the prevention of twice payments at the same time and for the same thing. Contactless payments only work when the space between the card and the card reader is very close, like fewer than 4 cm, so there is no risk to pay for someone else accidentally, or to be stolen in subway or shopping center. The technology used also create an unique wave per transaction, with unique data, so nobody can duplicate our card, and use this duplicated card without our agreements.

## ◊ Should You Get an RFID-Blocking Wallet?

## In order to protect your contactless credit cards, you can buy a RFID-blocking wallet. It uses materials made of conductive metals which can cancel outside electromagnetic fields from an NFC card reader. However, this kind of precaution is not necessary, because contactless cards are enough secure to prevent from thefts. Unless, if you feel insecure, you can still buy it.

◊ Conclusion :

To conclude, we can see that tap-to-pay has defaults, of course, like others payment methods. But it significantly has more advantages than defaults. For these reasons, we can expect a larger use of contactless payments year by year.