Tech Talk

The Internet of Things: Payments ©

by John McCarthy

Welcome once again to 'Tech Talk', brought to you by EnglishWaves.fr. Today's TT is about something that allegedly makes the world go round, according to some, or reputedly is the root of all evil, according to others: bread, dough, dosh, smackers, spondulix... There are many words in the English language that refer to money. So, the next time you pull a crumpled €5 note from your pocket in a brasserie to pay for a coffee or whatever, remember the fact you're handling one of the oldest and most important inventions in society. Since time immemorial, we've come up with ways to value our belongings … and make others pay for them. Not so long ago we bartered livestock and cereals until one day it dawned on us that these were rather impossible to stuff into the old wallet, and subsequently introduced government-minted coins. These were still the proverbial pain to carry around (particularly in large amounts, as the grasping, money-grubbing, tight-fisted Don Salluste discovered), so over time these evolved into the paper money we all use and love today. Of course, we all accept that there are alternative ways of paying for things these days; if you have a meal in Paris you could pay with Tickets Restos, credit card, gift cards in many shops, with an Apple Pay app, internet payments conducted through Paypal, Bitcoin, etc. … And that's another way that money, or transactions have changed and indeed become more abstract. 'Virtual' money nestling surreptitiously in our bank accounts or on credit-card statements, and almost impossible to access should you have immediate needs for large amounts of cash.

Experts maintain that in the near future we will be moving further and further away from the idea of using cash, mainly because the number of devices connected to Internet will mushroom from 10 billion today to 50 billion by 2020, in large part due to the rise of the Internet of Things. This IoT has the potential to exert an enormous influence on any number of industries, but perhaps the biggest of them all for us as consumers, will be the payments industry.

As the market for wearables continues to shape and progress worldwide, this is providing companies with a golden opportunity to add payment credentials to such

devices as smart-watches, phones, automobile key-rings and even clothing through a chip used as an extension of its digital enablement service.

Indeed, French-based leader in seamless payments Ingenico and CPU specialist Intel have partnered to build mobile payment capabilities into a wide array of connected devices, and these include intelligent vending machines and digital signage. This would appear to be a marriage made in heaven, as Ingenico could provide payment acceptance capabilities, and of course Intel's contribution will be their state-of-the-art CPU technology, accompanied by their own Intel Data Protection Technology for Transactions, which would protect payment data with a combination of encryption.

Payment services are literally queueing up to join the bandwagon. MasterCard, Visa and American Express are on the threshold of making major gains through increased non-cash exchanges and greater access to data. The incorporation of Internet capabilities into an ever-increasing number of devices will increase payment endpoints and allow payment service companies to charge fees. Apple is also at the forefront, and users of their watch will be able to add their credit card information to a secure chip that can be used to purchase almost anything with many of the world's leading retailers.

The transition to a 'cashless society' could be a major boon to practically every industry – and indeed companies and start-ups are looking to tailor payments not just to the consumers' individual needs and usage, but also to automating the process of in-store payments. Through chips included in wearables, shops could access certain buyer information upon a customer's entrance into their establishment. This will then allow clients to breeze into a store, choose the item they desire and simply walk out, their cards charged automatically. Call me an old fogey, but I think I still prefer more traditional methods of payment and believe there remain two salient difficulties for this technology. One is standardisation, although of course this is probably only a temporary hiccough as once the major tenors agree this will no longer be a problem, but the security issue will perhaps take longer to solve, as hardly a month goes by without a major hacking problem or security scare.

There exists an old marketing adage which is perhaps pertinent and goes something like this: "a pessimist sees the difficulty in every opportunity, while the optimist sees the opportunity in every difficulty". The potential of the Internet of Things represents trillions of Euros, and along with renewable energies there are enormous fortunes to be made over the coming decade. That's it for today; join me for more Tech Talk next time on Englishwaves.fr.