

EcoWallet, a unique card for all the value added services

EcoWallet is a versatile and secure contactless card and, at the same time, a software architecture that can be usefully applied to the realization of local public administration multi-services projects as well as to development of cooperative loyalty programs sharing the same card between several organizations. Access to cultural and sports facilities, to parking, ticketing in transportation, bike sharing, personal healthcare, school meal booking are some of the application of EcoWallet, applied to the local administration. On the retail side, EcoWallet, used in cooperative loyalty programs, helps the partner organizations to share information in a "loosely coupled" environment, not requiring on-line connection of the Points of Use.

EcoWallet can be used as an identification card as well as an electronic wallet, rechargeable at the authorized point or debited on the bank account. It can be used as a loyalty card to collect points or money in a payback schema and can record many data as blood pressure and analysis, car plates with parking permission, information on goods purchased and services subscribed.

EcoWallet sums up in a single card the features of several cards, offering more convenience to its users, a better way in promoting services to the service providers, and, in addition, a saving in cards and in the cost and time of subscription. The EcoWallet of a user is once created during the first services subscription, registering all the user's relevant information in the card and in the system, than it can be quickly and simply updated when new services are added. In complex transactions that require the user data registration, EcoWallet speeds up the process of data collection, transferring data from the card to the host system.



EcoWallet uses ISO 14443 contactless cards to identify the user, to record and to transport data between the various system points. The selected standard, compared with the other existing card technologies, offers an higher level of security on data, encrypted and password protected. More, the ISO 14443 cards offer other significant advantages:

- they can record many information – starting from 1000 characters
- they use an open standard therefore they can be read and written by multi-vendor hardware, a mandatory requirement to operate in a multi-service – multi-provider projects
- the same hardware can read and write the cards allowing the immediate update of the card

These feature are the prerequisite of the EcoWallet "loosely coupled" architecture, that allows not connected systems to exchange data via recording on the card and deferred update on connected systems. In fact, in the EcoWallet architecture, several independent systems synchronize data either on line or via remote connection (e.g. via modem or GPRS/UTMS) – while cards are normally updated in real time. Finally users can access all their relevant data on the web by card number and PIN or in public kiosk reading the card.

EcoWallet: the result of real experiences

EcoWallet solution is mostly the result of a co-project of HSC and Azienda Speciale Multiservizi di Venaria (www.asmvenaria.it), company that manages several public services, from parking to school meal booking, pharmacy management, in behalf of Venaria, a town in the Torino area, in Italy, well known for the royal residence. HSC is providing all the technical and ITC know-how while ASM Venaria selects the applications to operate with EcoWallet, provides the experience and organizes the services offered to thousand of citizens. The result of the partnership is not only a multi-service card, but a new way to interpret the relationship between the Public Administration and the citizen, improving efficiency, the level of services while easing the communication.

SIMPLICITY, RELIABILITY AND QUICKNESS

The most important requisites of **EcoWallet** are simplicity and usability, in fact the system is used by citizen of all ages (also kids use it at school for meal booking) without any training, following simple explanations. Most of the applications simply require to put the card close to a reader to have all the relevant information, some time a simple choice is required to qualify the transaction. The systems are reliable and quick, therefore, normally, all the control are made at the point of use, using the data recorded in the card together with the data available in the local system (e.g. black lists of missed or stolen cards), reducing the risk of disconnections from the remote system.



MULTI-SERVICE AND MULTI-PROVIDER ARCHITECTURE

EcoWallet is designed to operate in a multi-service and multi-provider environment, where different operators share the same support (the card) to read and write data, in a secure and interoperable environment. In the ASM Venaria project different services will be assigned to specialized operators (e.g. in bike sharing, recycling household waste management or in sport facilities) using the same card on different systems autonomously operated.

ACCESS TO THE INFORMATION

One of the key point in the **EcoWallet** is the user's easy and quick access to its pertinent information, collected at the Point Of Use. Kiosks installed at the strategic point of the town are a widely available alternative to the internet access. The users access information contained in the card (e.g. credit available, bonus) or in the systems archives using card identification.

HSC PROJECT CAPABILITY

HSC provide to its customers complete "turn key" solution from the Concept and Business Process Engineering to introduce the new technologies in the existing and new process to the prototyping of the concept, that includes the selection and development of tags, cards, sensors, antenna, wireless and IT infrastructure, cooperate with designers and other suppliers to develop a fashionable solution. In its project HSC works in co-design with a consolidated structure of partners providing every single detail of the solution, from tag and card developer, to the RFID and Electronic vendors, to designer, POS system providers etc. HSC provides a strong Project Management to grant its customers in Time and in budget delivery.

HSC provides consulting, RFID and wireless solutions to retail, distribution and manufacturing as well as to public administration – between its customers ASM Venaria, BTicino (Legrand), Ottica Avanzi (GrandVision), Rubinetterie Ritmonio, Webasto.