

Simplifying the next coming future store with ubicomp

The new radiofrequency technologies are changing the way in which people interacts with computers, transforming the ordinary human activity in the unaware and natural way to access and provide information to machines, simplifying it in a seamless paradigm, opposed to conscious desktop activities that are at the base, for example, of the web model. Examples of technologies that support this idea are Radio Frequency Identification (RFID), Speech recognition, Touch screen, Mobile Phone and Near Field Communication (NFC). This is what is called ubiquitous computing, term coined by Mark Weiser, chief Technologist of the Xeros Palo Alto Research Center, since 1988, in its famous quote *"Ubiquitous computing names the third wave in computing, just now beginning. First were mainframes, each shared by lots of people. Now we are in the personal computing era, person and machine staring uneasily at each other across the desktop. Next comes ubiquitous computing, or the age of calm technology, when technology recedes into the background of our lives."* In the most recent idea, "ubicomp" (also called pervasive computing) is more connected with the auto-identification of goods, to which a person is interested in, and of people accessing services, for example, by the NFC contained in the mobile phones.

Not a better place than the store to apply the "ubicomp", this is the designated place where people meet the goods and where bilateral information flows take place: information on the goods (features, availability, prices), from the retailer side, and information on the preference and purchasing behaviour, from the customer side. In the store, desktop activities (but almost all the other "transactional" activities) are not practical at all, because of time and complexity involved in the information collection. All the transactional system implemented in the In-store Information (e.g. fixed scanners, keyboard kiosks etc.) statistically attract few users. Only more "natural" interactions can attract and involve most of the customers visiting the store.

"Simplify the interaction providing better services", this is the key to successful engage consumers in more sophisticated marketing and CRM programs at the store, and this is the way that HSCustom (www.hscustom.com) is experimenting in its retail projects with the application of radiofrequency identification and wireless communication.

Since the beginning of 2000, the HSCustom partners are experimenting radiofrequency technologies to simplify the human interaction with computers, at the beginning applying mobile computing to the logistics process and later, since 2003, using RFID to identify goods and people in the distribution and retail market. HSCustom is a pioneer in the application of RFID in Italian retail, where, since 2006, it launched the first contact less loyalty card used in a chain of more than 100 optician stores, for which recently also



developed the first RFID Smart Store pilot in a mall of Bologna. In 2007 HSCustom developed its contact less multi-service ASMCARD already used by thousand citizens in pharmacies and other local services in several towns. HSCustom give concrete answers to the growing request to high-value goods retailer for a new concept of store, where the customers find new buying emotions and an unprecedented service level, interacting with reactive systems and people.

In the vision of HSCustom the "natural interaction" at the store is the key element of development. HSCustom researches new way to detect the presence or the absence of goods and people in "sensing areas" like shelves, displays, dressing rooms and to react at the detection displaying pertinent information and multi-media content, related to the goods and people, creating the premises for one-to-one marketing and CRM. Automatically presenting marketing and technical information on the worn goods, offering personal price and promotions to the customers that qualify themselves with contact less loyalty card or trough mobile phone's NFC, are just some example of "natural" or "quasi natural" interaction. "Sensors" also provide precious on-line information to the logistic, to the marketing and to the store manager, related to the presence of goods on the shelves or to the movement of goods inside the store with the objective to improve customer service.

In the concept presented at CeBIT, HSCustom shows a RFID Smart Display able to detect eyeglasses movements for logistic and anti-theft purposes and a RFID Smart Mirror that the shopper can interrogate, obtaining information about the glasses and their prices. All this is part of **HSCStorePoint**, which includes several innovative solutions for the retail, as multi-vendor / multi service contact less loyalty card, real-time RFID inventory system for the front and back office, amazing in-store information systems and CRM features to excite the consumer and capture an unprecedented level of information on the store activities. Together with C System (www.csystem.it), its partner in StoreIsopen.org, HSCustom also presents an innovative video security system that can be used to monitor activities in store, warehouses, and all the other places where monitoring and retrieving security information is an issue.

HSCustom listen to retailed ideas, helping to transform them in real solutions, participating to all the project phases, from the "concept", to prototyping, technology selection and RFID tag/antenna design till the deployment of the system, providing a single face to customer. HSCustom, trough consolidated partnership with several company, can lead all the level of a complex supply chain that involve all the players, from tag, electronic and mechanic design, RFID, Wireless vendors, to store designers offering the customer prime contracting and system integration.

Renzo Ottina – Dr. in Information Science and C.E.o of HSCustom


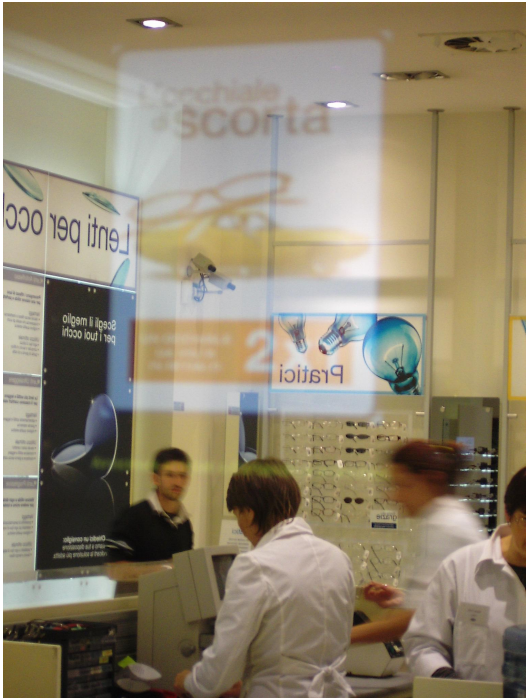
About HSC

Since 2003 HSCustom (www.hscustom.it) is providing comprehensive "Turn key" RFID and Wireless solutions for the identification and management of goods and people and for the collection and communication of the information from the point where it is originated to the systems that use it. HSCustom founders developed more than ten years of experience in consulting, development and deployment of ERP and Supply Chain Management Systems, working together in medium and large international manufacturing and distribution groups. Today, HSCustom electronic engineers combine the skill in the radiofrequency technologies to consulting and IT experience to provide to the market a unique portfolio of competences. HSCustom serve several clients in retail, textile, distribution, manufacturing and services.

H&S Custom S.r.l. – Romagnano S. (Novara) – Italy
Tel: +39 0163 818038 - Fax: +39 0163 818149
www.hscustom.it info@hscustom.it

CeBIT 2008 – Italian Pavilion - Hall 9 - Stand B2

Marketing referent: Renzo Ottina – C.E.O. HSCustom
renzo.ottina@hscustom.com mob: +39 335 7093616

	
<p>HSCStorePoint</p>	<p>Smart mirror at optician store</p>