Ubiquity
ubiquitous computing

Tomorrow's Network Today Workshop

Ubiquitous Services

Contribution Paper
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a little bit forward

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Background

An international experts workshop on "Ubiquitous Network Societies" was held from 6 to 8 April 2005 in Geneva, Switzerland by ITU – International Communication Union. Ubiquity has participated in this workshop, contributing to two documents presented in the framework of the event:

- " Ubiquitous Network Societies: The Case of Italy "
- " Ubiquitous Network Societies - Survey on the Case of Italy "

Also, Dario Calogero of Ubiquity has delivered a presentation on day 1 of the workshop, titled " Innovative applications and content for a ubiquitous era ", where a few Italian cases of ubiquitous applications were presented, including Banca Intesa Mobile, the innovative mobile banking solution introduced by the large Italian bank, leveraging the SMS Premium paradigm, commercially launched in December 2003.

Over the last few months, very interesting further evolutions of this approach have been accomplished and we believe they are worth being mentioned in this contribution paper to the upcoming Strategic Planning Workshop entitled "Tomorrow's Network Today", to be held in S.Vincent (Aosta, Italy), on October 7th - 8th 2005. The event will be jointly hosted by **International Telecommunication Union**, the **Italian Ministry of Communications**, the **Ugo Bordoni Foundation** and the **Aosta Valley**.

Aim of this paper is to highlight what's going on in terms new services and applications in converging networks today in Italy.

This Voluntary Contribution has been prepared by Dario Calogero <dario.calogero@ubiquity.it> CEO of Ubiquity. The author wishes to thank Mrs Paola Bonomo, Marketing Director at eBay Italy (www.ebay.it) and Mr. Edoardo Giorgetti, Head of the on-line Banking at Fineco Bank (www.fineco.it), for their invaluable assistance in providing information about eBay, eBay Sempre and Fineco Mobile. The opinions expressed in this paper are those of the author and do not necessarily reflect the views of the International Telecommunication Union, its membership, or the Italian Government.

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1 AN EMERGING NETWORK PARADIGM IN MOBILE MESSAGING SERVICES

Since the launch of application-to-person SMS value added services (VAS) in early 2000 by the Italian Mobile Network Operators (MNO's), the largest segment of traffic revenues has been related to the so-called 'Personalization' services for the mobile phones: 'logos and ringbones' and 'Infotainment' services. In the year 2004 the Mobile VAS market was estimated by the Politecnico di Milano School of Management – Osservatorio Mobile VAS to be worth about € 620 million.

Leisure services are still largely exceeding more 'serious' convenience services such as Mobile Banking and other similar alerting services, based on individually profiled personal content. Nevertheless, the about 70 thousand customers profiled on Banca Intesa Mobile were generating an average of about 500 thousand Premium SMS per month, with an incremental average revenues per user (ARPU) of about € 1,80 per month for the banking customers profiled on Intesa Mobile[1]. This figure is particularly interesting considering that the average monthly ARPU is about € 30 for the Italian MNO's.

In the meantime, the supply chain has moved along the learning curve and understood that this kind of applications (different content to each user) requires a peculiar professional skill set, which is quite complex compared to the relatively easier applications to deliver massively broadcast information such as news, logos and ring tones (the same content to many users). In fact, bringing an account balance, a transaction notification or a transaction history to the mobile phone of the owner of that specific checking account is quite a different issue.

Also it has become clear that the complexity of integrating each of the MNO's networks with the banking back-end was useless and cumbersome compared to the integration of a staging entity that could act as a hub between the systems of several banks and the MNO's, generally specifying different integration interfaces and different protocols.

In the year 2005, a 'Centro Stella' (Star Center) has been established to outsource this complexity; it has already connected to some banks (Fineco Bank is a good example with its Fineco Bank Mobile) and to a hosting provider of very personalized content: eBay (its mobile service is branded eBay Sempre).

In this paper we will have a look at these two converging services, taking them as good examples of ubiquitous services dynamically interacting across different networks: wireline and wireless.

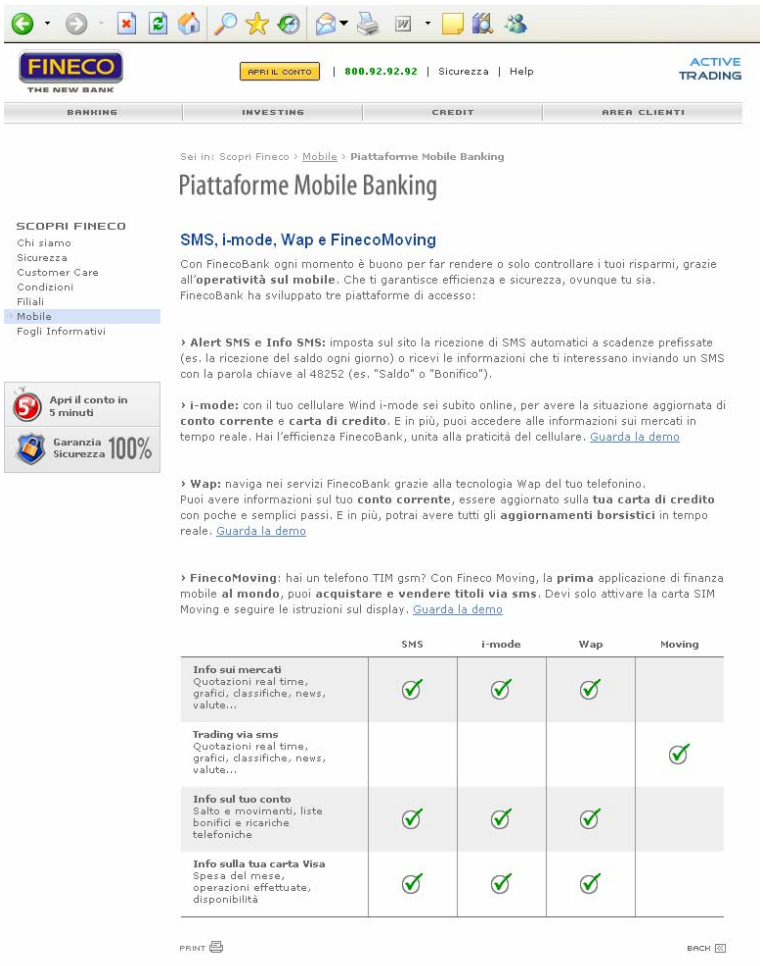
[1] Figures officially communicated by Banca Intesa in several public presentations

In the conclusions we will provide also an quick overview on the Mobile TV Broadcast opportunity, based on the DVB-H technology, for which lab trials are ongoing with the challenging aim of putting in place in Italy a field trial to test the whole distribution chain, from the play out to the handset, testing also the consumer acceptance of these innovative services and to evaluate the tentative business models among the content owners, the distribution players (Broadcasters and MNO's) and the final customers.

2 FINECO BANK MOBILE

Fineco Bank has been pioneering Mobile Banking services since launching its Fineco Moving service, back in 1999. The service was based on a Sim Application Toolkit (SAT) technology and it is still live, providing TIM/Fineco Traders with a convenient way to trade via mobile.

More recently, Fineco Bank refined its strategy on the Mobile Channel, launching online micro browsing service with WAP and I-Mode, and enhancing the messaging services based on the SMS Premium infrastructure of the Centro Stella, Multi MNO[2].



[2] As of today this infrastructure is interconnected with TIM, Vodafone and Wind, whilst H3G is still in the process of being integrated

Clearly, for the sake of this paper, it is interesting to evaluate the impact of this new channel policy compared to the mix of the other channels already available to the bank's users. Fineco Bank is a Virtual Bank with Phone, Internet and Mobile Banking. Now, SMS Premium alerting is a very convenient way for the bank to inform its customer about basic information as: account balance, stock market indexes and quotes, credit card transactions, and so on. The service is available to the user both in a 'pull' mode, by sending a request SMS to a specific short number, and in a 'push' mode, for the users who have profiled this service on a specific Web front end. The push messages can be event driven (i.e. stock price changes or payments made on a credit card) or time driven (i.e. account balance once a day/week/month)

The service itself is perceived as very useful by the user in mobility, but it is interesting to consider that most of the users would access the bank to retrieve the same information from another channel (i.e. phone, ATM, Internet), channels that generally are more expensive to manage (higher cost per transaction).

This means that the bank is providing a better service to its customers at a lower cost.

3 EBAY SEMPRE

eBay is The World's Online Marketplace®, enabling trade on a local, national and international basis. With a diverse and passionate community of individuals and small businesses, eBay offers an online platform where millions of items are traded each day.

eBay has recently announced the new wireless service for eBay's Italian Users: eBaySempre.

eBay Sempre enables all Italian users to receive news about their eBay transactions (both buying and selling) directly on their mobile phone via SMS. The service, accessible by all TIM, Vodafone and Wind customers, can be activated by all eBay users reaching the eBay Sempre profiling site through a dedicated web page (www.ebay.it/wireless).

Any user within the eBay Italian community can choose to receive his notifications also via SMS in addition to the usual email message: for several types of events on the eBay platform or only for some of them, at his discretion. A premium SMS will inform the user when a watched auction is about to end, when another user has made a higher offer on an item (outbid), when the user has won an online auction, or when an object auctioned by the user has been sold. .

Moreover, the users who own a WAP enabled phone can follow the hyperlink embedded within the SMS notifying that they have been outbid and get into an online mobile Internet service to bid back, in order not to lose the item, even when a PC is not available at hand.

Clearly this mobile service is an interesting extension of the web virtual space, enabling use of eBay in mobility and linking the user with the eBay marketplace through another network paradigm.

4 CONCLUSIONS

Both the two service briefly described above are good examples of how companies, leaders in their respective market segments, could decline in a converging and complementary way the opportunities provided by existing technologies and networks to creatively innovate their value proposition to their customers, generating value to them.

It is important to outline that this blended and successful approach is possible since the technology and the players along the value chain have both reached a rate of maturity able to grant a quality of service and a scalability which is in line with the customers' expectation and the leading position of the supplier, not to miss their promise to their marketplace.

To get to this point heavy investments in research and development from the industry and the academy has been put in place over a period of years and the standardization bodies have supported the process of setting up network and communication standards.

If we move a few steps ahead to other examples, which are on the press and in the labs today, we can find other situations which, despite their very promising future in terms of customer demand and potential marketplace, aren't yet fully exploited.

An example of a new thing that is in this stage is represented by the Mobile TV on DVB-H, a technology to bring the TV signal on mobile phones. The standard is there and many technology vendors have already released their products to cover all the pieces of the technical chain. Many technical trials are in place and a few field trials have been set up across Europe. Italian players that are rolling out Digital Terrestrial TV services based on DVB-T (Digital Video Broadcasting – Terrestrial) are trying to put in place DVB-H along aside, taking advantage of a number of resources that could be shared between the two technologies, very similar and part of the same standard framework (DVB).

Nevertheless, recent experiences have shown that still there is a way to go to get the things going on DVB-H, where encoding and decoding technology is not yet fully compatible from end to end. In fact most of the trials in place across Europe are using pieces of proprietary technology sourced from one single vendor, which have been in the position of supplying a chunk of the chain, from the head-end to the handheld device, or – alternatively – using alternative devices, like personal pc or tablet pc instead of integrated cellular and DVB-H handsets.

In this perspective appears extremely important, not to say fundamental, to get support from both the standardization entities and from harmonization bodies that in a precompetitive approach could support and sustain the industry in this technical effort with appropriate resources. Also, the reality of the All Digital regions, as Valle d'Aosta, are very interesting opportunity to provide a consistent and appropriate test bed for these king of field trials.