

TELECOM ITALIA

FUTURE CENTRE



# Tourism Scenario Life & Lives in Bits

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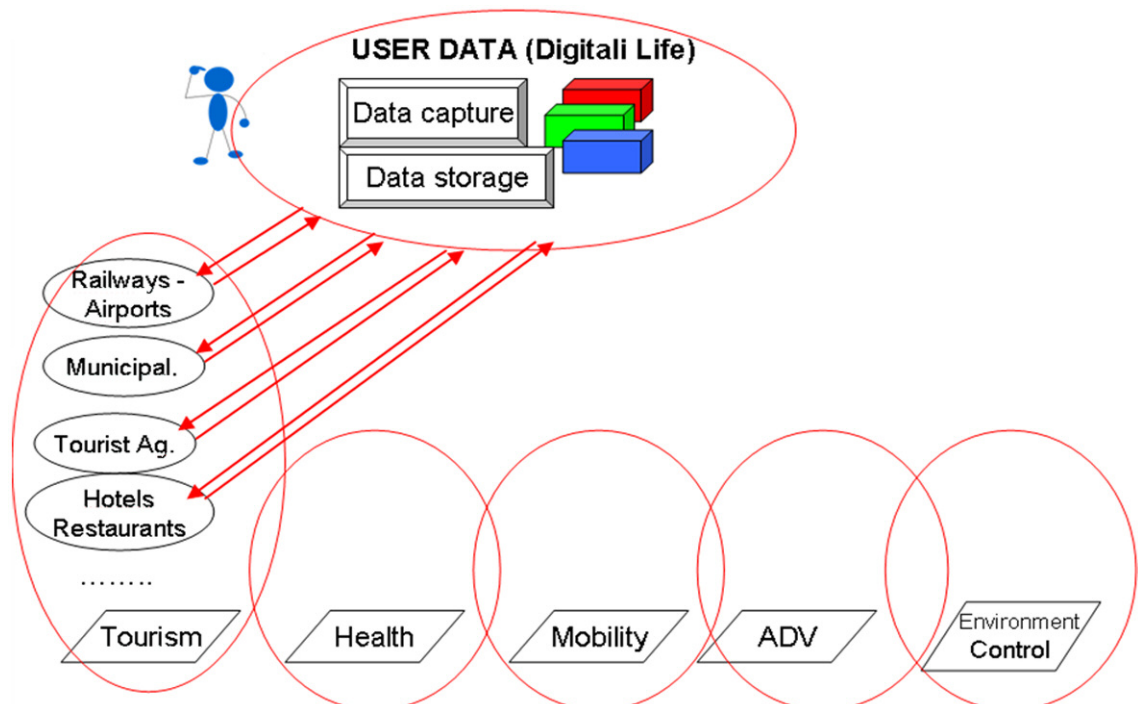
# 1 Executive Summary

Nowadays, the gathering of the entire digital memory of an individual is technically within reach. New technology and devices enable the recording of everywhere we are and everything we see and hear. The whole life of an individual could be automatically stored and managed on line in large personal digital archives, where the user can search at later time for his digital memories: from photos to MMS, from documents to SMS.

In every day life each of us generates a shadow made of information SMS, MMS, voice calls, browsing the Internet, using a credit card, GPS localization data. Several actors are involved in the gathering of information, sometimes with the explicit consent of the owner, sometimes without his awareness. Because of the plurality of gatherers and ways of storing there is no easy way to place the various fragments together. Would it be possible, and would it make sense the creation of a business ecosystem of players? From user's metadata it would be possible to create services based on information, customized user experiences, discount coupons and behavioural targeted advertising.

We have to examine in depth business models and scenarios to create value to the individual owner of the data, to the Society and to the players of the business ecosystem of the digital shadow.

Each player (in the real world or in the Internet world) has a bit of the digital shadow of an individual. There should be a third trusted party, a consortium of the players of the ecosystem that collect all users' information and create a digital diary. Every player of the ecosystem can use the information of the digital diary if the user agrees. In exchange the user has discount, personalization of services, better services.



A macro classification of the user's digital information that can be collected is:

- SMS / MMS
- Voice/Video Calls
- Geo Localization (user tracking)
- Photo / Video (geolocalized and tagged)
- Biometric monitoring
- Electronic Documents
- E-mail, chat/messaging (history of conversations)
- Social network, Blog
- Browsing (history, click stream, search)
- Transactions and online purchasing
- Credit Cards purchasing
- Telepass
- Fidelity Cards

By knowing some particular aspects of the customer it is possible to have the Customer Profile System. With that System it gets much easier to understand their needs and to offer the right service at the right time and to create an ecosystem of players that work all together.

These are some classes that can be composed in the Customer Profile System:

- **Preferences:** The preference information that could be used in the profile system will be classified as a set of data: Interests and Degree of Interests. The aggregated interests data could be gathered from various media sources. Such like the purchasing history and channel browsing cookie in IPTV, the cookies of web-browsers, the online communities and clubs, the type of photos, etc...
- **Localization:** The city that consumer is staying at the moment. The type of store that consumer is interesting. The activity that consumer spend most time with.
- **Mood (better to have in real time):** The information of mood could be gathered from personal status of several sources, such like IM software(Twitter or MSN), online community (like Facebook's status function).
- **People: who you are? Who are you with?:** The connected people in the profile system. Who act as a group will be showed in map. The system would process their profile after the data comparison which aiming to find out group interest.

## 2 Tourism Market

Tourism can be categorized in:

- Business tourism  
(Employee from a company or academic area travelling to work in other working place).
- Eco-tourism / Adventure tourism  
(It typically involves travel to destinations where flora, fauna, cultural heritage and the practical of ecological sports are the primary attractions).
- Entertainment tourism  
(A period of time spent out of work and essential domestic activity to promote leisure time, such as visiting museums, parks, going to a concert, visiting other countries, different cities).
- Educational tourism  
(The main focus of the tour or leisure activity includes visiting another country to learn about the culture, such as in Student Exchange Programs and Study Tours, or to work and apply skills learned inside the classroom in a different environment, such as in the International Practicum Training Program).
- Health tourism  
(Every type of health care, including psychiatry, alternative treatments, convalescent care and even burial services are available).

### 2.1 Past Situation

Customers go to travel agency where they can buy the tickets, book the hotel and have all the information of the place given by the travel agent, the tourist have to follow the schedule of the group or do all the traveling process by themselves (no information about traveling and customer information not exploited).

### 2.2 Current Situation

Is less the number of customers that go to travel agency; more people do it by themselves using web travel portals, and other web resources (a lot of information about travelling and customer information exploited, but not in ecosystem model).

### 2.3 Future Scenario

Fewer customers will go to travel agency for information. The tourist agency will change their target segments. Focus on high quality and cheap trip market segments. Most part of customers will do it by themselves with web travel resources, and will received only usable and preferred information. (Lots of information about travelling and customer information exploited in ecosystem model).

### 3 Market Players

The market players can be very powerful providers of information. Passing through each player the customer leaves a lot of very useful information that can let us understand better about their preferences.

- Travel agency
  - What is the reason for the trip,
  - Where the tourist is going to,
  - Who he/she is traveling with,
  - How long they are staying in each place,
  - Preferences about ticket ( what is the transportation and what class),
  - Preferences about hotel (how many star),
  
- Restaurants
  - Where is the restaurant located,
  - Preferences on food and beverage,
  - How much they paid for the meal,
  - What meals the tourist usually have in restaurants,
  
- Hotels
  - What kind of hotel the customer like to host,
  - How much they are able to pay for the accommodation,
  - If they have their meal at the hotel,
  
- Taxi
  - How often the customer takes taxi,
  - Their spends with taxi,
  - The places they like to go,
  - Payment preferences.
  
- Car rental
  - How often the customers rent a car,
  - Where are they going to,
  - How many people are traveling together,
  - What kind of car they like to rent,
  - How long they are going to stay traveling,
  
- Health system
  - What is the hospital location,
  - How often they go to the hospital,
  - If they go to public or private hospital,
  - If they pay any special health insurance.
  
- Banks /ATM
  - Where the tourist is,

- What is his/her bank,
- If they are special clients.
  
- Municipalities
  - Where the tourist is,
  - What kind of public entertainment they like,
  - How often do they go to that place,
  
- Railways system
  - From where to where the person travel,
  - How often they travel,
  - How often the tourist use to go to that place.
  - What class do they like to travel at
  
- Car parking
  - Where the person use to go,
  - How often they go to that place.
  - Stores close to that location,
  
- Telepass / Highway pass
  - Where the person use to go,
  - How often they go to that place.
  - Stores close to that location,
  
- Local entertainment places
  - What kind of entertainment they like
  
- Web travel portals
  - Where the person use to travel to,
  - How often they go to that place,
  - What places do they travel most,
  - What kind of trips they like,
  - How long they are staying there,
  
- IM Platform
  - The person's network,
  - Is possible to locate the person.
  
- Guide Experts
  
- Twitter
  - Is possible to know what is the person's concern according to his/her phrase posted

## 4 Tourism Ecosystem

The future tourism ecosystem will have to build on several aspects. First the traveller behaviour and segment would be categorized as following:

### **Not organized**

Behaviour: No reservation for hotels, restaurants, local entertainment  
Segment: Backpacker.

### **Little organized**

Behaviour: Reservation for hotels only (B&B)  
Segment: Young couples, budgeted people, backpacker, family.

### **Organized**

Behaviour: Reservation for hotels and restaurants.  
Segment: Stable but normal income people, school and association activity

### **Very organized**

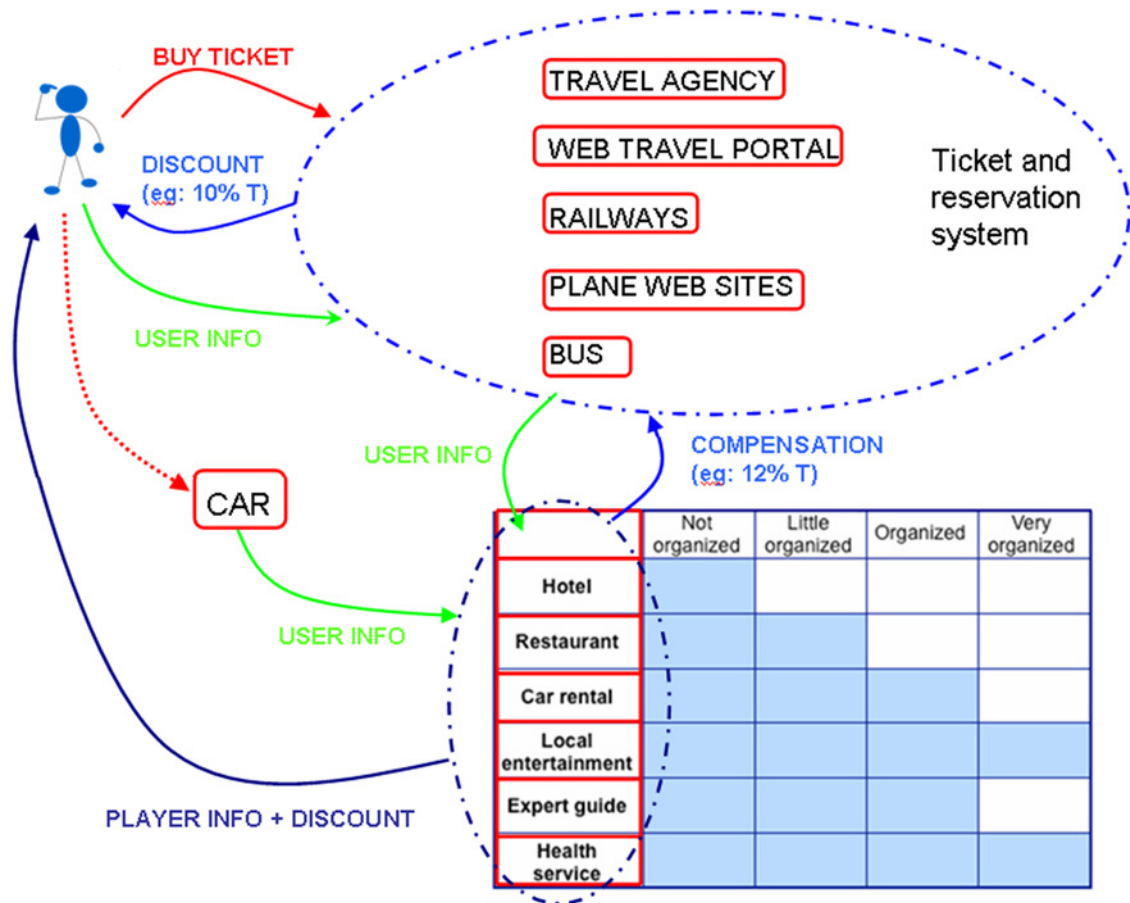
Behaviour: Reservation for hotels and restaurants, car rental, guide  
Segment: Agent, high income people.

There are some success drivers to pursue this system for each side. The consumers could have discounted service and practical information which is customized base on their profile. No more annoying advertisement and useless various information. Personal profile information will start to create tangible benefit for individual owner. The market player will also benefit from this system. Their investment in the profile information system will be paid off by the enlarged business scale, higher quality of service and lower inventory level.

The individual profile will continuously be collected and stored in the system when travellers need some information during the trip. They would start to receive the services and information that they accepted to share their profile for specific market or activity. The flow of ecosystem model would be described in the following picture.



Automatic digital diary of the user



Understanding better this ecosystem:

When the customer uses any of the players on the “Ticket and reservation system” he receives a discount on his purchasing (eg.: 10% based on the ticket price) to leave a lot of his trip’s information there, just like; where he is going to, how long he is going to stay there, how many people are travelling together, who he is travelling with, what kind of transportation he is taking.

From the “Ticket and reservation system” the information about the travellers can be sold to the next players; hotel, restaurants, car rental, local entertainment, expert guide, health service. In that transaction the first player can charge (eg.: 12% over the ticket price) so they can earn some money.

Other scenario is, if the traveller take a car and go straight to the finals players, he can leave direct there his information and receive discounts for that.

So, if we have one database to storage all costumer information the user automatic digital diary would be made. From user's metadata it would be possible to create services based on information, customized user experiences, discount coupons and behavioural targeted advertising.