

Use Case 2 in Service Industry – Business Cases **B2C Marketplace for Tourism**

KW Partner: France Télécom R&D

1 Overview

Challenge

Offer on line personalized tourism packages
One stop purchasing shop of the tourism
package

(Train, plane, B&B or hotels, river excursions)
Solution

Dynamic exploitation of content, service providers and personalized data.

Commercial partnership setting

Why a Semantic solution

Dynamic exploitation of c/s providers makes full use of semantic web technology (brokering, mediations, discovery, composition, orchestration and invocation)

Key Business Benefits

Regional tourism offers today very heterogeneous resources that cannot be easily exploited and packaged. In France, the tourism market was evaluated 32 Billion euros whose river tourism represents a turnover greater than 250 Million euros.

Business Partners

Tourism content providers Tour operators Regional tourism councils

Keys components

Existing Software

Domain ontology

Geographical Information System

Web Services (1st generation)

e-Business solutions

Research and Development

Semantic data integration

Natural Language Processing

Semantic exploitation of content

Secured payment services

Technology locks

Semantic Web-Services

Semantic aggregation of content

Trusted services

Online sales and information on tourist offers have become prototypes of B2C (Business to Customer) processes on the Net and make up an important part of its commercial activity.

This is for several reasons:

- The consultation of offers can be spread out over time, with no pressure, unlike in specialized travel agents,
- It is possible to consult rival sites directly on line,
- It offers centralized reservation and payment services, just like an agency.

However:

- The customer does not benefit from the expertise of a professional, who can guide him through the ins and outs of the offers and the opportunities to grab hold of. His visibility of offers and services depends on his skills in using a search engine and browsing Internet sites,
- The offers valued on the existing sites are those of which the integration is valued by a minimum turnover: group offers with progressive prices according to the period, and both "standard" and "faraway" destinations (the Mediterranean, Central America, the Pacific).

The current sites essentially suggest package offers based on some information combinations (destination, period, price...), which form the framework of the promotional "package". The

business objective is thus to complete the commercial perimeter of current holiday package offers, with some dynamically packaged solutions to meet the customers' expectations (holidays, weekend, all leisure services).

2 Current Practices and Technologies

2.1 Typical business practices

Weekend in Brittany Use Case (Figure 1):

A businessman away on business wishes to make the most of his weekend by visiting the Brittany region. He connects up to his favourite travel portal and enters the following information, speaking normally: "next weekend I'm going to Brittany". The portal suggests offers on hotel rooms, plus enjoyable walking routes and the possibility of refining his geographical, activity and affinity requests if he is not satisfied with the suggestion.

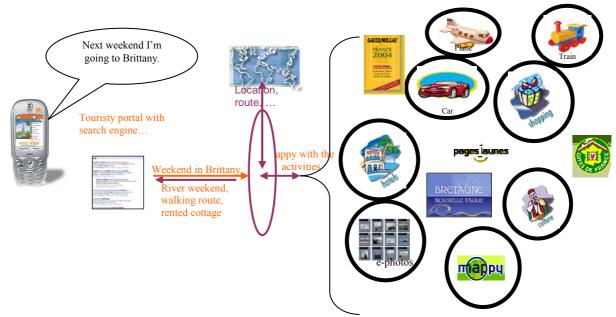


Figure 1 – Weekend in Brittany use case

The object of this Use Case is to suggest services for a marketplace for online holiday information and purchasing, which may not be simply based on a promotional push, but gives:

- A sufficiently user-friendly interface and ways of accessing information (by natural phrase, geo-localization...) to entice the customer towards a more interactive tourist search,
- Varied offers (this variety being more limited by the integration costs of the content on the site). In particular, access to regional offers that are currently available on institutional sites, but rarely valued on the marketplace commercial sites,
- A more realistic value with a standardized view and comparison of offers.

The second idea of this scenario is to use public photo albums (aggregation of photos of the same topic coming from different personal albums). There is a double interest:

- First, customers can visualize through photos and aggregated information spots corresponding to their requests.
- Second those public albums are published on a community portal and with time, this portal will get richer and richer.

The regional choice of the scenario is based on the acknowledgement that the offers (hotel rooms, walking or cycle routes, river boat trips...) linked to regional tourism are rarely developed on the Web.

They are essentially non-packaged and non-packageable on the principle of current tourist site offers, as they cause some distinct actors that do not increase the value of their offers to intervene. They would, on the other hand, be recyclable by a new generation of platforms based on the semantic Web.

Practically, our businessman expresses his request speaking normally: "Next weekend I'm going to Brittany and I would like to walk at the seaside". The last precision allows not only to restrict or to be more precise to refine customer tastes but also to underline capabilities of this portal. Indeed, whatever customer tastes, if the portal owns available photos about this topic, it will be able to compose a public album and also to publish it. Afterwards, the customer selects lovely spots that they would like to visit. The portal recovers them and transmits them to a broker in charge of the realization of weekend proposals. This broker has access to different tourism services providers through web services and composes them in order to produce weekend proposals fitting customer choices. We can also extend functionalities of this portal with on-line purchasing and booking services.

2.2 System requirements Analysis

The use cases are centred on the creation of a research and content aggregation Web platform with a sufficiently generic and modular technical solution for integrating additional services.

These Use Cases make the following problems stand out:

- With some existing solutions:
 - 1. Geo-localization

The needs in terms of geo-localization, geo-coding, routes, etc. require the integration of a GIS (Geographical Information System). These days, this type of problematic gives rise to solutions that are already industrialized.

- With some potential semantic type solutions available in few months time:
 - 2. Semantic data integration
 - 3. Natural Language Processing
 - 4. Exploitation of personal data
 - 5. Secured payment services
- With the problems that we do not yet have solutions for:
 - 6. Semantic Web-Services
 - 7. Semantic aggregation of content
 - 8. Trusted services

2.3 Review of the current systems

Dedicated sites for regional tourism become more fashionable thanks to content management capabilities but remain limited in providing personalized tourism package offers. Those sites take into account these pitfalls http://www.maine-anjou-rivieres.com/, http://www.tourismebretagne.com/.

For example research on http://www.tourismebretagne.com for a "Week-end in Brittany" proposes only information pages and no tourism offers (Figure 2):



Figure 2 – Search results at the Brittany tourism website

The choice of research criteria on B2C marketplace for tourism sites is limited. The responses are oriented to and reflect the commercial partnership of the given tourism marketplace. The offers are pre-packaged based on the prior knowledge of typical customers (see Figure 3).

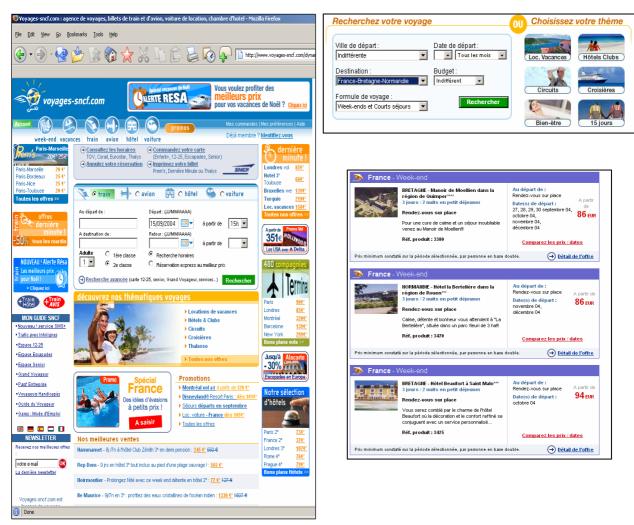


Figure 3 – Examples of packaged holidays found currently on websites (clockwise from left: front page of site, search for Brittany holiday, pre-defined packages as result)