

**SEGITTUR**  
turismo e innovación

# Towards a Single Market in Tourism: The Role of Multilingual Interactive Digital Assitants

**NETWORKING SESSION**

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**Carlos Romero Dexeus**

**R&D&i Director**

**[Carlos.romero@segittur.es](mailto:Carlos.romero@segittur.es)**



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## Why a Digital virtual assistant?

*Smart Destinations as an opportunity: Tourism destination “**intelligence**” driven by LT semantics.*

***Big Data technologies** such as LT interacting with Destinations needs: Data has become one of the more valuable assets and DMOs are looking forward to exploiting in order to create competitive advantages.*

*Increasing number of **specialized cloud tourism services** platforms.*

***Semantically rich located knowledge** for the tourism industry.*

*There will be a **new-generation of cloud tourism services**: Tourist have demonstrated their appetite for more personalised and contextual services (Who is where, doing what, in what context).*

***Social media represents a paradigm shift with enormous consequences for the tourism industry.***

## Why a Digital virtual assistant?

*Smart Destinations: **new tourist-centric DMOs** are emerging (where new needs, new roles, new profiles, new tools are required)*

*Tourism is one of the major drivers of the rapid growth of digital information on the Internet but most are **unstructured data**: an opportunity for new capture, discovery, search and analysis tools.*

*Mobile and online **self-service apps** are replacing customer service phone calls or personal service (i.e. “virtual hotel concierge”, “virtual restaurant advisor”)*

***Natural Language Understanding technologies** or speaker verification services (voice biometrics) could be useful tools in tourism services (at Call Centers, Airports, Information spots), including emotion-rich voices.*

***Predictive modeling of tourism demand** based on language analysis.*

**1** ■ **DMOs are looking for a more “Unified Tourist Experience” based on natural interaction between their IT systems and their tourist/clients in any language.**

**1.1. Customizing products and services to different cultural segments in the respective language (tourism resource – Chinese, Arabic, Korean cultures)**

**1.2. Increasing interaction with the biggest social platforms (Facebook or Twitter) but also with others like Sina, Weibo, Douban, etc... in many other languages**

**1.3. Social media represents a paradigm shift with enormous consequences for the tourism industry: Increasing role of peer recommendations online.**

**1.4. LT as an engagement tool for tourist in virtual spaces: from search a destination to engage with it**

**1.5. Virtual assistants for tourism business: voice-enable virtual assistants for tourism enterprises (ie. Apple’s Siri application).**

**2.** The ability to manage and process tourism data across the world's languages is one of the biggest challenges of a DVA (optimize, data harvesting, aggregation, visualization, dealing with highly fragmented information, etc).

**2.1.** There are multiple channels, languages and content types being published online by people from different cultures, it is crucial to optimize that content by making it clear, concise, consistent, and easy to find.

**2.2.** How could you help my community manager (to manage more social channels, using more languages, in less time, in providing content, answering questions, etc.). .

**2.3.** Ways of organizing my content on the basis of semantic analysis, instead of the traditional geographical criteria, what other ways...

**2.4** Monitor what people are saying about my company or destination on the Web and social platforms (or monitor my competitors).

### **3. Translation is a constant concern in tourism (cost/quality).**

**3.1. Content and services cannot be translated/provided in all languages: how to decide what contents on what languages, (content relevance for different markets/cultures on the basis of semantic analysis).**

**3.2. Keep additional costs low: Quality translations is a must but the need for an audit to check on the correct translation is too expensive.**

**3.3. Pros&cons: Translating or generating new content in their own language.**

**3.4. Facilitating interaction between asian tourist and SMEs tourism business (online and offline), when making a reservation, selling a service, etc.**

**3.5. Developing specific tourism taxonomies, ontologies, vocabularies or translation memories and integration with content management systems.**

## **4. ■ Improving our online positioning (search optimization), online presence.**

**4.1. Detecting emotions and negative or positive opinions about our hotel or destination by nationalities.**

**4.2. Improving our communication with tourist and travellers in real time is needed (crisis management, big events,...).**

**4.3. Semantic tagging and SEO, to cope with GOOGLE requirements to maintain top places).**

**4.4. How to create smarter content using semantic keyword research: synonym creation, semantic search optimization or topic trending.**

**4.5. Text messaging and automated proactive notification/alerts to tourist.**

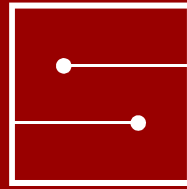
## **5. Identifying trends in our tourism markets: through market intelligence, segmentation, sentiment analytics, etc..**

**5.1. Detailed analytics enabling touristic product and service suppliers to understand customer needs better (CRM).**

**5.2. Support destinations in identifying new tourism products and develop new tourism segments quickly.**

**5.3. Market intelligence, georeferenced language analysis to understand better tourism flows, or mine for cause and effect (e.g., determine causes of marketing campaign failures).**

**5.4. Mapping semantic relationships and characteristics to identify sentiment patterns, spatial biases, predictable patterns of correlations between tourism resources, destinations, activities....towards the semantic geographies of tourism.**



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+ 34 91 443 07 07



Carlos.romero@segittur.es



@carlosromerodex

[www.segittur.es](http://www.segittur.es)



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