

EVOLUTION OF TOURISM APPLICATIONS IN VIRTUAL MEDIA

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***Abstract:** The importance of the Internet for the travel and tourism industry has increased rapidly over the last few years, because the new technology allows an active access to information, but also increasing coverage. Besides personal computers, with the advent of smartphones and tablet devices, access to information, we can say that we are at your fingertips, no matter where we are. For this reason, lately, tour operators have to develop applications that can be found in mobile web.*

***Keywords:** web 3.0, mobile web, smartphone, travel apps, semantic web*

Introduction

Although there are international standards for computer systems, they are used in part due to their deficiencies. For this reason, the methodologies developed so far give the impression of arbitrariness and improvisation. The lack of criteria for the classification of these methodologies, except certain classification criteria attempts more or less historical or after the approach of the systems.

But one great thing about using development tools on an operating system is that you can use standardized objects to create your interface. You also have a lot of control over how you interact with those objects, and can even create your own replacements. With web programming, it is more difficult to achieve this level of control, mainly because web browsers were not initially intended to be sophisticated clients for a large application -- much less be the operating system of the future.

The increasing popularity of Smartphones and mobile devices is creating a whole new frontier for the Internet. With the success of mobile apps, the world of content is migrating from web 2.0 to apps as the new format for creating, packaging, discovering, paying and interacting with information. Apps are the new channel for delivering services and experiences in mobile devices. , taking over from the old world of web pages, texting, ringtones, wallpapers, MMS, Mobile TV.

Evolution of Tourism Applications in Virtual Media

The development and evolution of the Internet (www) is divided into periods:

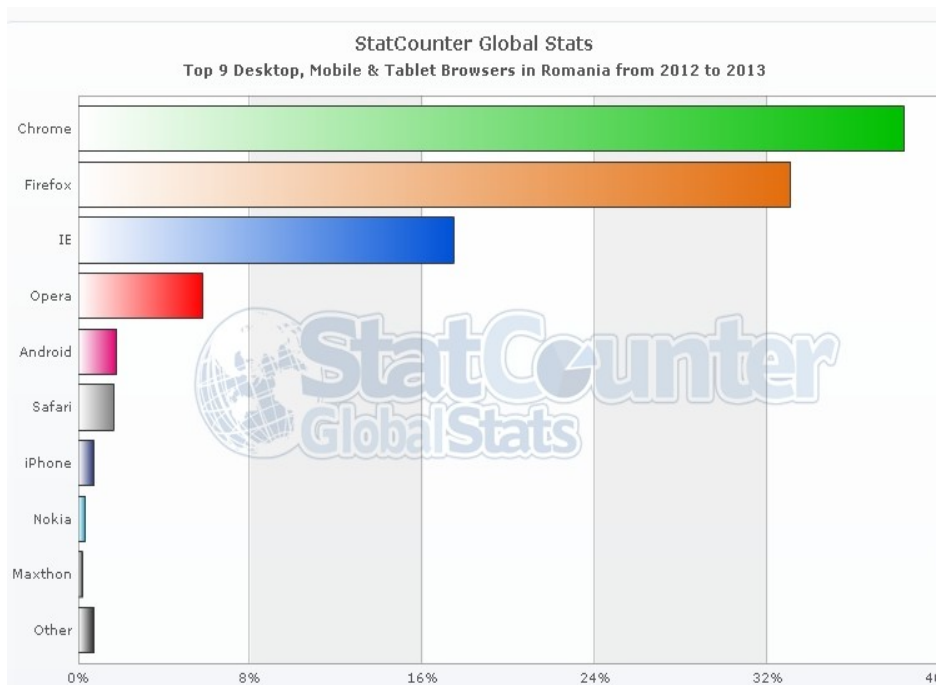
Where is **Web 1.0** websites that are static, there is no feedback of users.

Web 2.0: were made automatic management systems information from a web site, called Content Management Systems (CMS). They can build up dynamically on demand, the new version of the web page may, in consultation with a data bank.

Some of these distinct elements of the Mobile **Web 3.0** era include:

- Real-time
- ubiquitous (Always connected, always with you)
- Location aware
- Sensors
- High quality audio and video.

If web 1.0, information from tourism were presented as a "catalog" in the web 2.0 blog is an essential item, preceded by the keywords. An important role is the one given by the browsers, which allow access to information the tourist potential. This information is found in the **GDS** (Global Distribution Systems), **ADSs** (Alternative Distribution Systems), but last but not least, the actual website.



Sursa: <http://gs.statcounter.com/#desktop+mobile+tablet-browser-RO-yearly-2012-2013-bar>

Fig. 1. Desktop, Mobile and Tablet Browsers in Romania

In parallel with the development of the virtual environment, the evolution of mobile communications is and she even explosive. It merges in large measure with trends in radio. For large networks with many users, having at their disposal a limited frequency band, it was switched to the use of cellular coverage. At the momnet we have:

- 3 g offers greater transmission speeds up to 2 MbitVs (in some variants up to 8 MbitVs) and presents multiple opportunities for high-quality multimedia services and to operate in different environments.

- 4 g offers four-speeds up to ten times higher than those offered by 3 g networks. There are two main technologies that underlie the 4 g: WiMax and Long Term Evolution (LTE)

Tourist market in Romania, except websites listed below (Tabel no. 1), a great deal is still in web 1.0 era. For this reason, and the online travel market is growing, but for certain operators.

	Romania	Vizitatori unici
1	Amfostacolo.ro	126 634
2	Turistinfo.ro	95 274
3	Infoturism.ro	70 758
4	Paralela45	44 602
5	Super cazare.ro	39 087

Source: trafic.ro

With the growing use of mobile web, semantic searching, and other real-time data, it can be argued that the Web 3.0 era has already begun. Marketers will need to adjust their approaches in order to benefit from the changes that are expected to come in this latest iteration of the Web.

Hospitality, travel and tourism organizations will need to consider how the evolving mobile Web can be used to deliver greater value and convenience to travelers.

Traditional Web searches have been based on searching the Web for keywords. The next generation Web will move well beyond simple keyword searches by increasingly adopting “semantic” technologies, by using an Intelligent Agents (Artificial Intelligence).

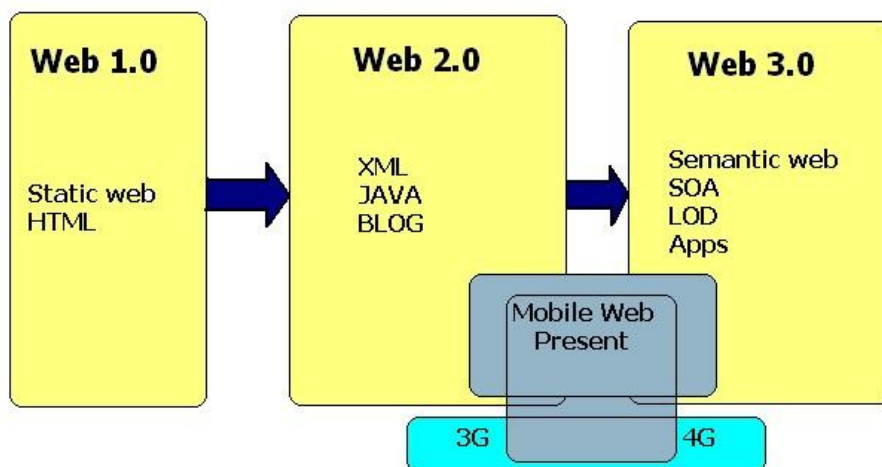


Fig. 2. Internet Evolution

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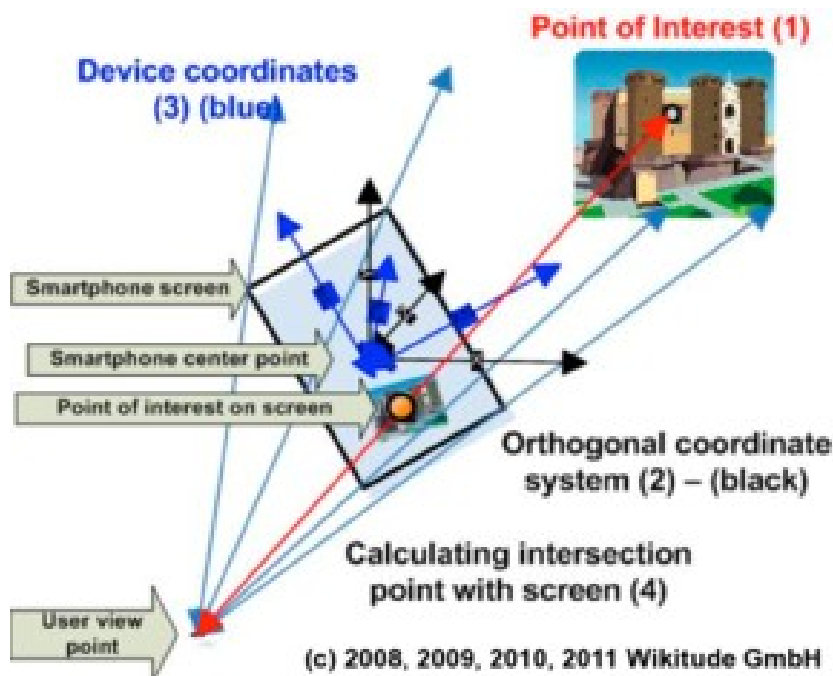
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The *Semantic Web* is an evolving development of the World Wide Web in which the meaning (semantics) of information and services on the web is defined, making it possible for the web to understand and satisfy the requests of people and machines to use the web content.

Linked Open Data (LOD, project of the World Wide Web Consortium (W3C)) is a technique for linking or connecting Web-based data. Linked Data is about exposing, sharing, and connecting pieces of data, information, and knowledge on the Semantic Web.

Service-oriented architecture (SOA) is a software design and software architecture design pattern based on discrete pieces of software providing application functionality as services to other applications. The properties and benefits of using a SOA such as Web services is well suited for binding small modules that perform independent tasks within a highly heterogeneous e-business model.



Source: http://en.wikipedia.org/wiki/File:Wikitude_explained.png

Fig. 3. Wikitude - location-based Augmented Reality explained

The potential for developing and deploying new and creative services that combine mobile devices, GpS and Web-based data are Wikitude, a mobile travel guide built around augmented reality.

Conclusions

The concept of the semantic search is based on searching not just for keywords, but on determining the meaning of those words, by analyzing their context. The movement toward true semantic searching is already well underway.

The increasing number of mobile devices has led to a reorganization of the web infrastructure. Thus, in the virtual environment, from a simple presentation of some data was arrived at smart application development. One advantage of these applications is the great degree of customization.

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