

# Online Tourism Communities on the Path to Web 2.0 - An Evaluation

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## Abstract

In recent years a technological and sociological paradigm shift has taken place in the Internet that is often referred to as Web 2.0. Companies and individuals have started to adapt existing Web sites to the new standards and principles and created new types of Web services and communities. The tourism domain is no exception to this trend - new tourism communities emerged and long-established ones integrated new features to keep up with this trend. In this paper we are evaluating eight tourism communities with respect to Web 2.0. Each community is evaluated based on a criteria catalogue that draws ideas from online community studies. The findings are discussed in the context of the tourist life cycle that is structured in a pre-trip, on-site and after-trip phase. The value for the traveller is highlighted for each phase and potential problems are discussed.

**Keywords:** Online communities, Web 2.0, Tourist life cycle, eTourism

## Introduction

In the last decades the Information- and Communication Technology (ICT) has revolutionized the global economy and almost every business. Not only businesses took advantage of the “digital technology boom” but the fast evolution of ICT also enabled consumers to have access to a broader range of information services. Combining the commercial, technical, social and psychological aspects of groups of people, the interacting persons therein could be defined as an online community (Eigner, Leitner & Nausner, 2003). Following this trend many companies see the creation of “business-sponsored-communities” as an additional channel of distribution. In this context, companies analyse user profiles in order to provide personal advertisements and product-related information to community members.

The tourism sector has been particularly active in this field, because customer loyalty depends not only on social interaction but also on the quality of the information provided, e.g., prices or opening times. In this way, online tourism communities constitute a special position. They focus on information search rather than on social interaction. Furthermore the planning of travel intentions makes high demands on the information search (Pöttler, 2007).

An online community is only successful when it attracts and retains a large number of members to reach critical mass (Wang, Yu & Fesenmaier, 2002). The potential of online-communities lies in the ability to be integrated in the economic value chain for product and service design. To tap the full potential, the creation of online communities has to be technically, operationally, strategically and economically planned to meet the users' requirements. Not only social interaction is of great importance during the process of community building, but community members also want to communicate using a technically sophisticated platform (Pöttler, 2007). This technological development has taken place in recent years on the Web, where new types of businesses and communities started to emerge. The term Web 2.0 is used to describe these new products and services. It covers developments such as user-generated content, consumer oriented business models and the use of new technologies such as RSS (Really Simple Syndication) and AJAX (Asynchronous JavaScript and XML). Web 2.0 Web sites not only have a more sophisticated technical and visual presentation, making them more responsive and usable, but also tend to focus on the user and strongly rely on user input. This has resulted in the development of numerous new forms of online communities. Examples of such communities are Wikipedia ([www.wikipedia.org](http://www.wikipedia.org)), an online lexicon compiled and maintained entirely by users, MySpace ([www.myspace.com](http://www.myspace.com)), a huge social networking site with millions of users or YouTube ([www.youtube.com](http://www.youtube.com)), a video portal with user-provided video content.

The goal of this paper is to present an overview of the state-of-the-art of online tourism communities by discussing their technological features as well as the integration of Web 2.0 technology. In this context, eight online tourism communities are evaluated. This evaluation consists of two parts, a technological and a sociability/usability part. In the technological part the focus is placed on the supporting software tools, which are grouped into Web 1.0 and Web 2.0 components. The second part studies the motivation of people to join and contribute to a community, as well as usability aspects. The criteria for these two parts are derived and aggregated from related work on online communities. The evaluation results are presented with respect to the phases of the tourist life cycle (pre-trip, on-site, after-trip) whereby the community features are discussed for each phase.

The paper is structured as follows: Section 2 explains the concept of “online communities”, its history as well as different community types. In Section 3 we give an overview of Web 2.0 technology. In Section 4 we give an overview of the eight online tourism communities and explain the evaluation criteria in Section 5. Then in Section 6 we present the evaluation of the tourism communities. The results of the evaluation are discussed in Section 6 as well and the last section includes an outlook as well as the conclusion.

## **Background & Related Work**

A community is defined as a group of individuals who want to interact to develop knowledge, share experience and build up their own identity. The development of a common knowledge base is the driving force of a community. Moreover, social, economic and technological aspects should be incorporated into the “community-success-concept” as well (Wenger, McDermott & Snyder, 2002). We distinguish two types of communities: those that are created for economic-, advertising- and customer-loyalty reasons, the so-called “business-sponsored-communities” and those that are developed based on idealistic motives

The invention of list-server technology in 1975 marks an important step in the history of group communication. It now became possible to broadcast messages and thus to ensure effective group communication. This technology was the basis for more advanced ways of information presentation such as Newsgroups and Bulletin Boards (Roberts, 1998).

Historically one of the first online communities was the Debating Club “The Well” ([www.well.com](http://www.well.com)) initiated by Stewart Brand and Larry Brilliant in 1985. The term “virtual community” was coined by Howard Rheingold in the book “Virtual Community” (Rheingold, 1993) – whose spiritual home was “The Well” – in the year 1993 where he speaks about the virtual community as a democratic and egalitarian aggregation of individuals who cooperate on a fact-based communication.

Three prevalent terms and conditions are defined in Lave & Wenger (1991) and Lindstaedt (2007): “Community of Practice” (CoP), “Community of Interest” (CoI) and “Community of Knowledge” (CoK). In the CoI social interaction and communication are the central aspects whereas the CoK is basically knowledge-oriented and is created within corporations and is not voluntary. The CoP is defined as the concept of apprenticeship. It is a practice oriented consortium that focuses on the development of knowledge and methods to solve problems based on a communication process between supervisor and apprentice. When an online tourism community follows the CoI approach more it is usually created by individuals to share the collective interests of travelling whereas in the CoP approach the community is mostly business-initiated and focuses on the provision of

knowledge. Tourism communities can be developed using the proven concept of CoP, which consists of five phases of development as well as the promotion of a well-running community platform (Wenger et al., 2002).

A CoP comprises of three components: domain, community and practice. The domain is the common body of knowledge of the CoP. The members of the community agree to the constraints of the domain, and decide which activities and content are relevant. The community is comprised of the social interaction between community members. The practice is defined by the concept of apprenticeship as described before. A CoP is developed in five phases (Wenger et al., 2002):

1<sup>st</sup> phase: One or more persons attend to a certain topic;

2<sup>nd</sup> phase: By developing the basic structure the aims, tasks and communication channels will be defined;

3<sup>rd</sup> phase: This is the main phase of a CoP. This phase is characterised by the knowledge exchange and the evaluation of the aims, tasks and communication channels;

4<sup>th</sup> phase: The knowledge exchange eventually results in community members no longer carrying out any activities within the community;

5<sup>th</sup> phase: There is no further demand for information and the CoP ceases to be an information exchange.

In order to counteract the fourth and fifth phases a concept has been developed to make sustainable online communities: Design for evolution, open a dialogue between inside and outside perspectives, offer different levels of participation, develop both public and private places, focus on value, combine familiarity and excitement and create a rhythm for the community (Wenger et. al, 2002).

The term Web 2.0 was originally coined during a brainstorming between O'Reilly and Medialive International in 2004 and has been used since then as a synonym for new emerging applications on the Web. Web 2.0 caused much controversy, because people argued that the included technologies like asynchronous javascript calls have been around for quite a long time. Thus, the novelty of Web 2.0 is still under dispute as no exact definition exists and since the term is often used as a buzzword.

Our definition of Web 2.0 draws from two articles by O'Reilly (2004) and Graham (2004). O'Reilly's definition of Web 2.0 is based on seven principles which form the cornerstones of Web 2.0. In the second article Graham reflects on the term Web 2.0. The most important lesson from both articles is that a Web site cannot be classified as Web 2.0 based on the technology used, but that other factors such as the business model, the content creators or the types of services need to be considered in order to determine whether or not a Web site is Web 2.0. The

most interesting principles in O'Reilly's article are the Web as platform, the harnessing of collective intelligence, data as an integral aspect and rich user experiences. Web 2.0 sites feel like stand-alone applications rather than as traditional Web sites. This is achieved through the technology used. For example, AJAX allows the developer to construct Web sites that communicate with the Web server behind the scene. Page reloads are no longer necessary. Only relevant parts of a Web site are updated resulting in more responsive and usable Web services. In contrast to desktop applications, Web 2.0 applications are not installed on the user's computer but are provided on the Web. This not only changes the software release cycle where new features can be slipstreamed into existing services but also allows providers to distribute the same service to multiple end user devices. The content creators have changed in the course of the Web 2.0 era as well. There has been a shift from supplier-provided content to user-generated content. In Wikis, for example, the collective intelligence from thousands of people is harnessed and information spaces of high quality are created.

Graham identifies AJAX and collective intelligence as a driving force of Web 2.0 services. He redefined O'Reilly's "collective intelligence" democracy and states that "amateurs can now surpass professionals". He argues that the high quality of user contributed content is based on the large pool of writers and the fact that there are Web services promoting the best articles. As a third point he mentions the company and advertising policies with regard to the user. Traditional Web sites were overloaded with intrusive brandings making them unresponsive and conveying the impression that "this is our site, not yours". In the Web 2.0 era, companies are more focused on the user and try to do everything they can to satisfy the user. This is achieved by making Web sites more usable and giving away features for free for which competitors charge. It has become more important to create a large user base in the first place and then generate revenue through this user base, than trying to generate revenue with every new user that visits the Web site.

Online communities have also been strongly influenced by Web 2.0 developments and new forms of communities emerged over the last years. It has become easier to add content to the Web, enabling the average user to contribute her ideas, knowledge and opinions. Blogging communities, like Blogger ([www.blogger.com](http://www.blogger.com)) are used to write about life and to state personal opinions. Entries in Blogs are highly personal and this subjectivity is essentially what makes a Blog a Blog. In contrast, Wikis are used to generate a common knowledge base with objective and informative entries. The most famous among these Wikis, the Wikipedia, has the goal of creating an online encyclopedia that is created collaboratively by volunteers. The quality of the information is the central aspect and studies have already shown that Wikipedia surpasses written encyclopedias in terms of accuracy and correctness (Giles, 2005). Another phenomenon is social networking sites where users

create personal profiles, share personal information such as pictures and communicate with each other. MySpace is an example of such a platform. On MySpace a user can easily create a personal Web site consisting of Blog entries, user information, audio and video content. Users can form groups, discuss topics of interest, share music and videos and are able to interact with their friends through different communication channels.

## Evaluation

### Overview of evaluated online communities

For this evaluation we selected eleven online travel communities. Our selection includes a) long-established online communities in order to explore the quantity of provided features; b) recently established ones that were developed based on the Web 2.0 paradigm and c) online communities for a certain destination to investigate if they provide region-specific features. Three communities, Lonely Planet Thorn Tree, Travepod and Virtualtourist are key players in this sector with tens of thousands of users and were all established before the millennium. They are the long-established communities in our evaluation and are based on traditional user interface metaphors. In contrast, the next five communities Travelistic, Wikitravel, Couchsurfing, Travelblog and the Yahoo Trip Planner employ advanced Web 2.0 principles and technologies. The last two communities Bergfex and Cool Austria are smaller in size, are related to Austria and have been initiated recently as well. They are different from each other: Bergfex is based on a traditional forum whereas Cool Austria is a dedicated Web 2.0 site. An overview of the evaluated communities can be found in Table 1. In the following a description is given for each community together with a screenshot of the main page. Instead of depicting screenshots of single outstanding features, which may not vary much between the communities, we decided to present a screenshot of the whole starting page in order to give the reader an impression of the look and feel of the web site.

Online Community Site	Description	Initiation Date	Number of Members (April 08)	Traffic <sup>1</sup> as of 2 <sup>nd</sup> April 08	Links <sup>2</sup>
Lonely Planet Thorn Tree www.lonelyplanet.com	The Thorn Tree forum is the online travel community of Lonely Planet.	1996 (Community)	441,506	1,158,800	630
Travepod www.travepod.com	A service that lets you share your travels online; also includes resources, chats and links.	1997	Not available <sup>3</sup>	657,000	991
Virtualtourist www.virtualtourist.com	A travel community site with user generated travel guides, a trip planner, forums and booking portals	1999	1,003,175	1,154,400	3,277
Travelistic www.travelistic.com	A video portal for travellers.	October 2006	Not available <sup>3</sup>	89,300	170
Wikitravel www.wikitravel.org	Inspired by Wikipedia, this project aims to create a free, complete, up-to-date, and reliable worldwide travel guide.	July 2003	27,000	723,400	2,036

Yahoo Trip Planner travel.yahoo.com/trip	Users can create custom trips based on user provided and reviewed information.	October 2005	Not available	Not available <sup>4</sup>	Not available <sup>5</sup>
Bergfex www.bergfex.at	Information Platform for winter and summer sports as well as a community area.	January 2006 (Community)	5,108	304,900	171
Cool Austria www.coolaustria.com	Web 2.0 Platform, Onlinecommunity for Travel and Tourism in Austria, Travellers give insider-tips for cool locations, parties, places to be, etc.	April 2007	448	Not available <sup>6</sup>	Not available <sup>7</sup>
Couchsurfing www.couchsurfing.com	Web 2.0 Social Network Platform, Onlinecommunity for Travel and Tourism Worldwide, the main point is offering private accommodation to travellers within the network.	January 2004	475,451	900,400	539
Tripadvisor www.tripadvisor.com	Travel planning web site supported by a community that provides reviews and unbiased information. The motto is: "get the truth. then go. ®"	February 2000	> 5,000,000	4,413,200	7,070
Travelblog www.travelblog.org	Shows travel journals, diaries and images from around the world.	March 2002	> 50,000	575,800	1,101

*Table 1: General Community Information*

<sup>1</sup> Measured through www.trafficestimate.com, estimated number of visits in the previous thirty days

<sup>2</sup> Number of sites that currently link to the community, measured through www.alexa.com

<sup>3</sup> Member numbers are not made public by the company

<sup>4</sup> www.trafficestimate.com only measures top level domains

<sup>5</sup> www.alexa.com has no separate "linking-in" information for sub directories

<sup>6</sup> www.trafficestimate.com does not have any information for www.coolaustria.com

<sup>7</sup> www.alexa.com does not provide detailed information for pages that are not in the "top 100,000" and www.coolaustria.com is not in the ranking

## **Lonely Planet**

The Australian travel guide Lonely Planet (see Figure 1), which has recently been bought by BBC World, publishes the Lonely Planet travel guides. In 1996, the community forum Thorn Tree was launched. The aim is to provide a platform for travellers to discuss their travel experiences and share travel-related information. The forum is structured in four headings, whereby each heading links to further branches that list the entries to a specific topic. Apart from the content provided by the user, links to tourism service providers are given as well. Additionally there is a personal section with Blogs, but these are usually written by professional authors. Lonely Planet offers mobile services in the form of city guides for mobile phones that provide information about points of interests including reviews in a city.

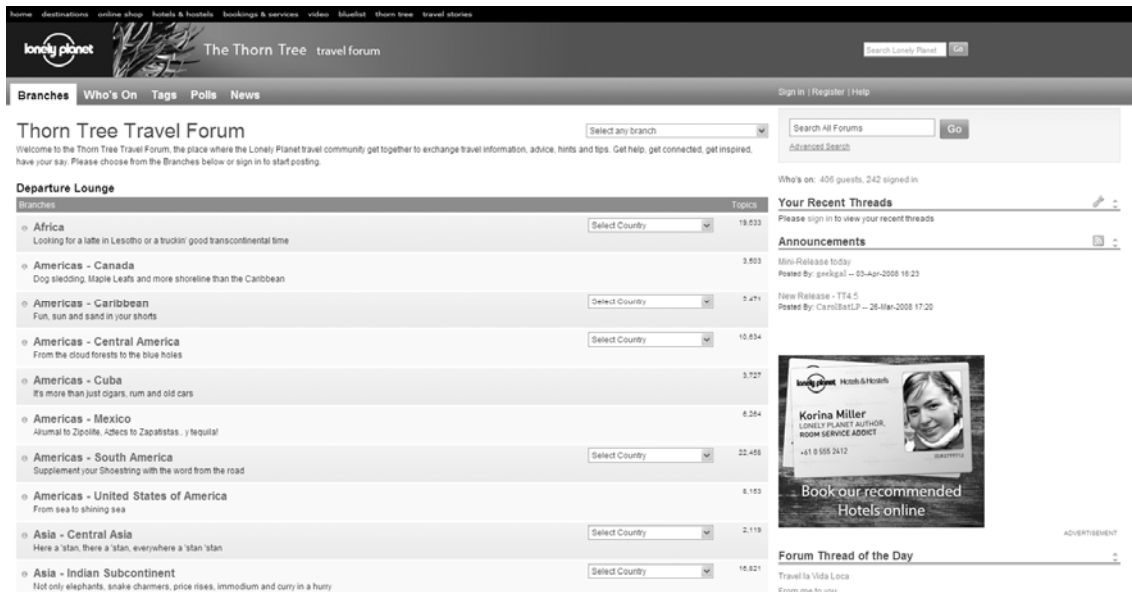


Figure 1: [thorntree.lonelyplanet.com](http://thorntree.lonelyplanet.com)

## Travelpod

Travelpod is a Web site providing Blogs for travellers. It was established in 1997 and therefore the advertising slogan of this site is “The Web’s Original Travel Blog”. As the features of travel communities have changed in recent years, Travelpod, a well established “traditional” Web site has tried to integrate new features and technologies, such as Blogs and geographical maps which are linked in a mashup.

Blogs are the most important feature of this Web site. The travel blogs on Travelpod are called Travelogues, and are based on a specific trip the user has made or is currently making. The entries are associated with a geographical region and sorted by date. With these features the trip is displayed on a geographical map.

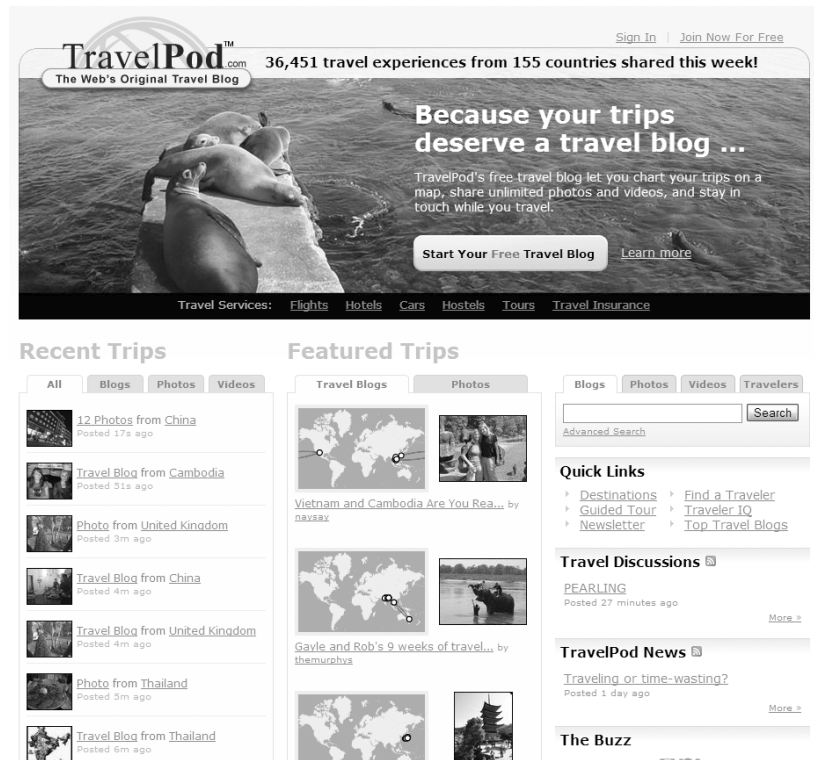


Figure 2: www.travelpod.com

Figure 2 shows the start site of Travelpod. This site is structured like Travelistic, but it has more content on the site itself, making it hard to find information. In the middle of the site there are lists of the latest posts in the forum and the latest travel Blog entries. On the bottom up of the site there is a ranking of the top 5 travel Blogs for the month and a destination cloud of where users are currently blogging from.

Some of the most interesting features of Travelpod are the mobile ones. Travelpod provides support for rabble mobile and for updating one's travel blog from the user's mobile phone. Rabble (www.rabble.com) is a mobile blogging application that offers its subscribers the abilities to post blog entries and photos from their mobile phones on selected mobile networks.

### **Virtualtourist**

Established in 1999, Virtualtourist is a traditional community platform and meeting place for travellers. The start page of the community is shown in Figure 3. The portal offers user-provided travel guides and the motive of the Web site is "Real Travellers – Real Info". Travel guides are descriptions and reviews of travel locations written by users. The travel locations can be browsed by destination and are rated and reviewed by the community. Each review itself can also be rated and helps to assess whether a review is helpful or not. The reviews can be saved and compiled into a custom travel guide, downloadable in PDF format.

Figure 3: www.virtualtourist.com

Besides the travel guides there is also a community space to meet other members. Several forums aid in clarifying personal travel related questions. An interesting aspect of the forum is the naming for the creation of a new thread. Usually this action is called “Create a new thread” or similar, but in the Virtualtourist forums it is called “Post a question”. Thus, the main objective of the forum is to help travellers with personal travel related questions and using this name also encourages members to post questions.

The Web site also allows members to book trips. There is a traditional booking service where hotels, flights, cars and cruises can be booked, and there is a travel deals section where members post cheap travel offers and make them available to the whole community. The shared goal in this area is to find the cheapest travel offers and to let other members profit from the deals they have found. Besides the answering of requests and the reviewing of locations this is another way in which members can give back to the community.

## Travelistic

Travelistic is a site on which travellers host their travel videos. It is owned by Diversion Media, LLC, a company based in New York City. Travelistic was launched in October 2006 and was built with the programming language Ruby, with Flash player functionality and a MySQL database.

The uploaded video content is combined with geographical information and presented on a map. The site offers a mixture of personally generated videos, which vary from simple homemade videos to more sophisticated ones that feature commentaries and better cinematography, as well as professionally produced clips. Some of these are contributed by professional companies, including national tourism federations.

The design of this Web site is similar to YouTube. Users are able to upload, tag, comment or rate videos. Furthermore, Travelistic contains travel related blogs written by selected authors and provides popularity lists and user ratings for videos.

Figure 4: [www.travelistic.com](http://www.travelistic.com)

Figure 4 shows a screenshot of the start page of Travelistic, which shows that this site has a comfortable and self-descriptive user interface. On the lower left-hand side there is a list of the most popular products of the day. On the right-hand side popular places are listed and on the bottom of the site the most popular tags are listed.

## Wikitravel

Wikitravel (Figure 5) aims at creating a free, comprehensive and up-to-date worldwide travel guide. The project is based on the concept of Wikipedia. Community members can create and edit Wiki pages to establish a common knowledge database of tourism-related information. If a Wiki page lacks important information users can easily review this page to keep it up-to-date or provide additional information. Users can browse for travel related information by destinations or by travel related topics. There is also a personal section called “Wikitravel Shared” that contains a repository of images and other media that can be shared among users or used in Wiki pages. “Wikitravel Extra” is another section that offers more personalised features: it can be used to share travel experiences, ask travel-related questions or find travel partners. This section integrates Web 2.0 technologies such as Tag clouds, Blogs and RSS feeds.

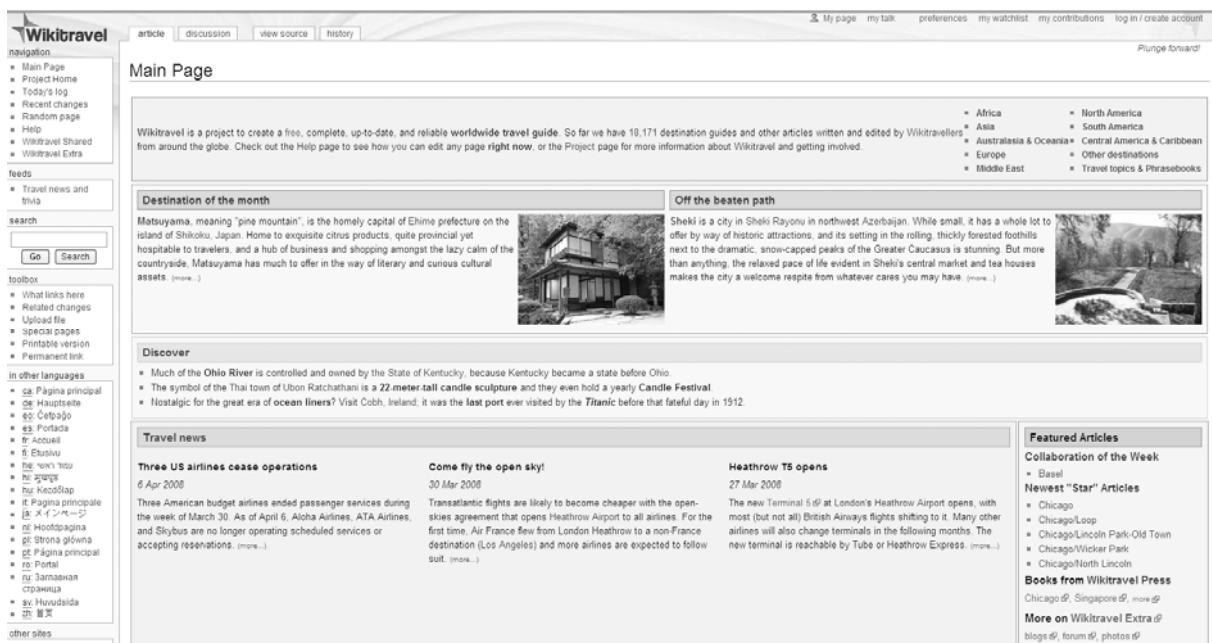


Figure 5: [www.wikitravel.org](http://www.wikitravel.org)

## Yahoo Trip Planner

The Yahoo Trip Planner, illustrated in Figure 6, is a service of Yahoo’s travel portal and was launched in 2005. The main purpose is to provide a service that allows travellers to create custom trip plans and share these plans with other users. The idea is that a tourist travelling to a certain area can start his/her travel planning based on someone else’s experience and does not have to research all information from scratch. Entries are reviewed by users containing information from other travellers.

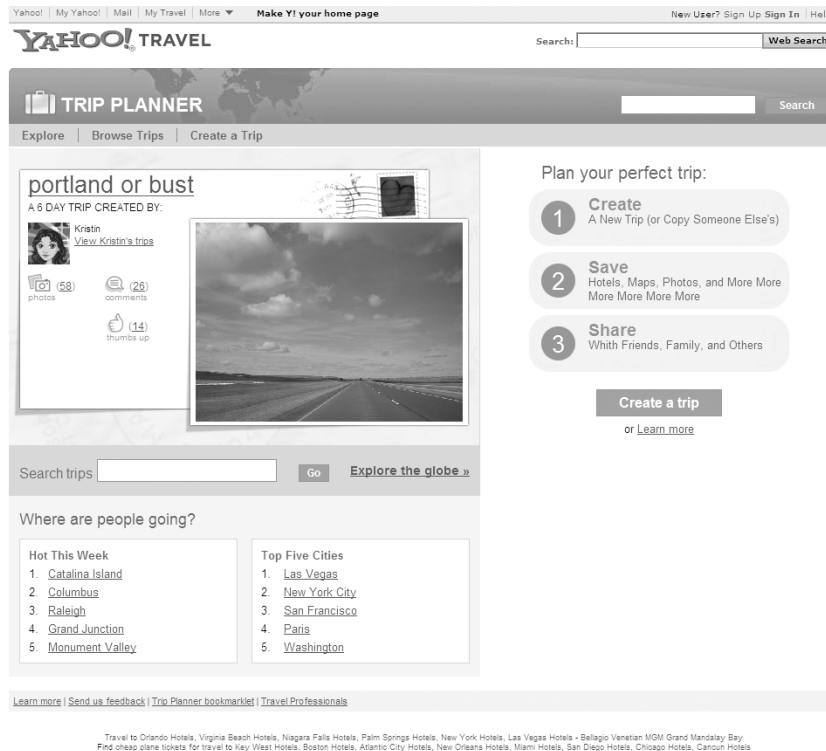


Figure 6: [travel.yahoo.com/trip](http://travel.yahoo.com/trip)

The Web site is composed of three main sections: a schedule view of the trip, a trip journal and a map view of the trip. In the schedule view the user selects the destinations he/she is going to visit and is able to schedule them based on a timeline. For each destination sights and places of interest like hotels or restaurants can be added and scheduled as well. Most of these places and sights were added by a third party content provider and are mostly rated and reviewed by community members. Hence, the user can easily assess the most popular places and those that should be avoided. The map view shows all these places on an integrated geographical map that can be zoomed and panned. In the trip journal the user can add an entry for each day of the trip and may also attach photographs. The scheduled trip including the geographical maps can be printed and taken on the journey. The presentation and the handling of the Web site is Web 2.0. The interaction with the site feels like a native application. Instead of site reloads after every action, new windows appear within the site and greatly contribute to the usability and the responsiveness of the Web site. The Web site integrates Yahoo Maps for map support and a Flickr ([www.flickr.com](http://www.flickr.com)) interface which users can utilize to add their Flickr photos to trip journals. These attributes and other features like tagging support identify the Yahoo Trip Planner as a Web 2.0 application.

## Bergfex

The intention of Bergfex, established in 1999, is to provide an information-platform as a service for tourism, economy and winter sport enthusiasts. It turned out that the demand for a well-arranged and overarching

presentation of tourism regions and their services was very high. This portal is unique with regard to completeness and clearness of the provided information for winter and summer sports in Austria. The revenue-model includes fees of tourism-companies for their presentation on the platform, content-provision and advertising on the site. The founders of Bergfex initiated the community in January 2006. At the time of writing, there were 5108 members, a small number as compared to the 8.3 million visitors to the information platform in winter 2005/2006.

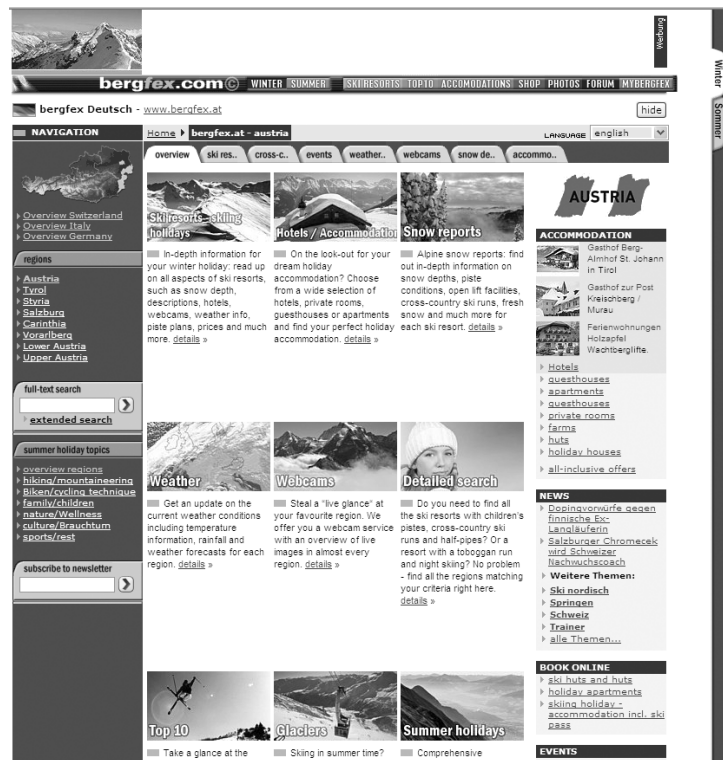


Figure 7: www.bergfex.at

Figure 7 shows the entry page. The visitor can choose between summer- and winter sports information with respect to the countries Austria, Germany, Switzerland and their specific regions. The main part of the community area, called “My Bergfex”, is the forum. Registered members can choose between several topics for instance “Wintersports in Austria”. A Web 2.0 feature represents the mashup for hiking- or mountain biking tours. The members of the community are able to upload their personal tours by GPS data input on a map.

## Cool Austria

Cool Austria was started in spring 2007 as a Web 2.0 project. The travel platform is developed as a facebook, where Austrians and Austrian tourists provide insider tips about travelling Austria, general information and personal advice about places to be. The platform integrates Blogging, travel reports, profiling and networking. At the time of writing the community consisted of 250 members.

**Best of coolAustria.com**

**Nightlife (37)**

1. Cafe Berino
2. Donau
3. La Boule
4. Spumante
5. Bar und Kitchin in
6. Hard Facts von Lin

read more »

**Restaurants (46)**

1. Eat cheap and reib
2. Durst wegwaschen
3. Naschmarkt - der S
4. Hard Facts von Lin
5. Enns
6. Steyr

read more »

**Accommodation (28)**

1. Hundertwasser Well
2. Esprit und Energie
3. Hard Facts von Lin
4. Steyr
5. Old castles in Upp

**Active Life (14)**

1. Dachstein - Tauern
2. Klettersteig Tirol
3. Int. Volksklauf
4. Naturpark Niederö
5. Neusiedler See

**Categories**

- Accommodation (28) »
- Active Life (14) »
- Beauty & Spa (0) »
- Culture & Entertainment (5) »
- Nightlife (37) »
- Other (50) »
- Restaurants (46) »
- Shopping (1) »
- Travel & Service (1) »

**Advertisement**

but perfect for you

**Top Contest Ranking**

Rang	User	Votes
1	fun, fun, fun veri	10
2	ice ice baby iceman	8
3	Vienna Christmasmarket 2002 leno	7
4	st. wolfgang josch	5

» View the Ranking List

**Top Photo Tags**

Figure 8: *www.coolaustria.com*

Figure 8 shows the entry page. The travel locations can be browsed by regions or on a map where information about several destinations is integrated. The map view shows all these places on an integrated geographical map that can be zoomed and panned. For direct communication, registered members can use the forum. The information provided can be rated by community members. Furthermore, there is the possibility to navigate the community by pictures or travellers. All the produced information by the members is stored in the individual profile-section.

## Couchsurfing

The intention of Couchsurfing, Version 1.0 was launched in January 2005, is to provide a worldwide non-profit hospitality-network for all registered users called 'couchsurfers'. The idea solidified when founder Casey Fenton

got a ticket to Iceland but he did not want to stay in a hotel like all the other tourists. He spammed about 1500 Icelandic students in Reykjavik asking them if he could sleep on one of their couches. After exchanging emails he had several groups of friends who showed him Reykjavik. The idea behind that social network stands till this day. After Version 1.0 crashed in 2006, Version 2.0 followed through the ‘Montreal Collective 2006’ in July 2006.



Figure 9: www.couchsurfing.com

Figure 9 shows the entry page of Couchsurfing.com. Couchsurfers can be browsed by countries. After the registration procedure users are full members so-called ‘couchsurfers’ and can utilize all the functionality Couchsurfing.com provides. The profilepage shows the received messages, contact list and groups. The platform integrates Web 2.0 technologies such as destination browsing, blogging, travel reports, profiling, networking, wiki section, asynchronous as well as synchronous communication.

## Tripadvisor

Tripadvisor has been established in February 2000 and has, since then, become a major tourism community and travel information site. The credo of the web site is “get the truth. then go.®” and reflects the main motivation behind Tripadvisor: to provide unbiased information from fellow travellers. As can be seen on the home page in Figure 10, Tripadvisor features more than 10,000,000 traveller reviews which have been used by members to plan nearly 17,000,000 trips within one week. In order to create a custom trip, the user is able to search the web

site through different search masks or can browse the content by destination. Most of the information, such as hotels, attractions or bars can be reviewed by the users. Based on these reviews a popularity index is created that is used to list the most popular hotels, attractions or bars in every destination. A user can also provide more information on a certain location by creating so called Traveller Articles. These are Wiki pages that can be created and edited by every user.

The personal user space is comprised of standard community features such as a private messaging system, the creation of friends' lists and the possibility to share pictures or even videos. One feature that is unique to Tripadvisor is the so called Travel IQ. The Travel IQ is measured through the World Travel Challenge game, a game where the player has to locate cities and attractions on a world map. The closer the player is to the real location, the more points he gets. The Travel IQ is then calculated out of the achieved points and is scaled similar to the intelligence quotient – the highest Travel IQs are around 170 points. The Travel IQ is heavily used in the forum, as it is displayed underneath the username for every posting. The forum itself is also the main mechanism for community members to exchange ideas and to engage in the community. Several thousands posts are created every day and more than two thirds of all posted topics are replied to within 24 hours.



Figure 10: www.tripadvisor.com

Another feature that is unique to Tripadvisor is the “Right Now” section on the front page. It can be seen in Figure 10 and is a list of current community events that are taking place on Tripadvisor. The list is dynamic and new events are added to the top of the list in a one second interval while the last event on the list vanishes. An

event can be any action within the community. Examples are the registration of a new member, the creation of new forum postings or the score of a just completed World Travel Challenge game. The list provides a good overview of community activities and shows how vibrant the community is.

## Travelblog

Travelblog has been established in 2002 and is a travel blog community. On the website the slogan is “Travel blog is a collection of travel journals, diaries and photos for around the world”. Therefore, the main functionalities of travelblog are blogs, forum and photos (as you can see on Figure 10).

The blog entries are structured into continents and their countries (see Figure 10). For each country there exists a short written history as well as facts, highlights and tips. Also a travel forum, blog entries, a map and the listed provinces of each country are available.

The personal user space registration is very simple; you just have to write down a nickname, your personal name and your email address. After sending this information to travelblog, you get an email with your password.

Every person has his own page; users can add blog entries to a personal list, write messages to other community members and add other bloggers to their friend’s list. Users can also see some statistical data about their blog entries, for instance, how many times they have been read. For personal interest there are also functionalities like setting a route map where visited places are connected by lines.



Figure 11: www.travelblog.org

## Evaluation Criteria

A list of criteria was created to capture the features and characteristics of online communities. Our evaluation was based on several other community evaluation frameworks (Scott & Johnson, 2005; Lazar & Preece, 1998) and those criteria that were the most appropriate and useful for this evaluation were selected. The general information, already presented in the previous section, helps to identify and compare the sizes and popularity as well as the intended purpose of the community. Such general information is usually used in an evaluation and the information categories in Table 1 are based on another online community evaluation (Scott & Johnson, 2005).

Lazar and Preece (1998) identified in four different key characteristics for classification of online communities: the supporting software, the attributes, the relationship to physical communities and the sociological concept of boundedness. In our evaluation we adopted the first two of these classification characteristics. We refer to the supporting software by using the *technological classification* in order to give an overview of the technologies used and to see whether there is a technological difference between traditional and Web 2.0 communities. We renamed their “concept of attributes” to “motivation” which helps us understand how members can be motivated to join the community.

The *technological classification* is documented in Table 3 which lists technologies that are implemented on the corresponding community Web site. Besides the *technological classification*, the *sociability/usability classification* focuses on aspects such as the members’ motivation, communication among the members and the ease to search for information in the community’s knowledge base. The *sociability/usability classification* is grouped into five categories namely *motivation*, *browsing methods*, *community features*, *personalization* and *security*. The listing of each category and its criteria can be found in Table 2.

The following is a short explanation of why and in which way this classification contains each attribute or feature. The first of these attributes is taken from a SIGCHI Workshop Report on the Theory and Practice of Physical and Network Communities (Whittaker, Isaacs & O’Day, 1997). This includes more generic attributes like *shared goal* or *shared activities* and *languages* used. The remaining attributes are more personal and are related to how the members are stimulated to get into contact with each other or search for information by features such as *member profiles*, *friends’ lists* or *search functionalities*. Some of these criteria are taken from a competitive analysis of online community Web sites conducted by Silver (2006).

Category	Criteria in category
Motivation	Based on the work of (Whittaker et al., 1997). The <i>shared goal</i> identifies the primary reason for belonging to the community. The <i>shared activities between members</i> criterion captures how members can engage in mutual activities and <i>access to shared resources</i> describes how and if shared resources are supported by the community. The <i>support between members</i> describes the services and technologies that are used for communication inside the community. The last criterion <i>language</i> lists the languages that are supported by the community.
Browsing methods	Browsing methods is a category also used in (Silver, 2006). The <i>destination, time</i> and <i>author</i> criteria identify if the information in the community can be browsed based on the destination, time and author. The first criterion is especially related to the travel domain helping members to easily find information on a specific destination. The <i>simple search</i> criterion shows if there is a textual keyword search functionality within the community whereas the <i>advanced search</i> criterion identifies more advanced search techniques, like time based search, author search or tag search.
Community features	This section was also partly assembled from criteria used in (Silver, 2006). The <i>friends/contact list</i> criterion shows if there is a place in the community where all the friends of a member are displayed. The <i>message</i> criterion identifies the ways how the members can communicate and interact with each other directly. The <i>groups</i> criterion identifies if groups can be formed within the community. The <i>ratings</i> criterion is used to investigate whether and how entries can be rated. The <i>review</i> criterion captures if there are review facilities within the community.
Personalization	Again this section is also used in (Silver, 2006) and describes how and with which means the member space can be personalized within the community. The <i>personal space</i> criterion provides information on personal collections and how the member space can be customized. The <i>member profile</i> criterion shows which kind of information has to be provided and identifies the user.
Security	We also chose to include a security category to see how well the community and its members are protected from outside attacks. We investigate if <i>SSL</i> is used during the

	<p><i>registration</i> and <i>login</i> process. We also look at how the <i>user ID</i> and <i>passwords</i> are handled and if they are transmitted in plaintext.</p>
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Table 2: Description of sociability/usability evaluation criteria

### Evaluation Procedure

We evaluated the selected communities based on their *goal*, the *technology* used to provide the *features* and *services* to their members as well as the *sociability* and *usability criteria*. In order to evaluate the selected communities, we created user accounts on each of the community platforms and started to participate in the community. We observed community discussions, made information searches within the community and evaluated how each of the defined criteria was realised in the given community. This research was conducted during summer 2007.

### Evaluation Results

Table 3 presents the basic technologies that are integrated in the evaluated communities. It shows the different ways in which members can communicate and interact with each other within the community. This list represents Web 1.0 technologies like forum, email, newsletter, chat and mailing list as well as Web 2.0 technologies like Wiki, Blog, tagging, RSS, Podcast, pictures, video and maps. It shows that the classical communication utilities are still in use.

The new communication utilities, the so-called Web 2.0 technologies, are already integrated within the development process of online communities. As shown in Table 3, each community offers two or more of those technologies for its members.

Technology	Lonelyplanet	Travelpod	Virtualtourist	Travelistic	Wikitravel	Yahoo Trip Planner	Bergfex	Cool Austria	Couchsurfing	Tripadvisor	Travelblog
Forum	X	X	X		X		X	X	X	X	X
Email	X	X	X	X	X		X	X	X	X	X
Newsletter	X	X	X	X	X		X	X	X	X	
Chat	X	X							X		
Mailing list					X				X		
Wiki					X				X	X	
Blog		X		X	X	X		X	X		X
Tagging	X			X	X	X		X	X		
RSS	X	X		X	X		X	X	X	X	X
Podcast	X										
Pictures	X	X	X		X	X	X	X	X	X	X
Video		X		X					X	X	X
Interactive Map		X		X		X	X	X	X	X	X

Table 3: Technology Overview

	Lonely Planet	Travelpod	Travelistic	Virtuالتourist
<b>Motivation</b>				
Shared goal	Share travel information	Travel experiences	Share travel information	Create an information platform with "real" unbiased information provided by fellow travelers
Support between members	Forum	Chat, forum	Not available	Members interact in the several forums
Shared activities between members	Not available	Not available	Not available	Meeting and event calendar where members are planning physical meetings
Access to shared resources	Forum	Not available	Videos	Not available
Language	English	English	English	English
<b>Browsing methods</b>				
Destination	Countries, destinations	Countries	Countries, destinations	Destination browsing based on a schematic geographical map and link collections for continents, countries, regions and cities
Time	Not available	Search in time (1 day, 1 month)	Blogs in months	Not available
Author	Not available	Search for user ID	Not available	Meet members area: members online, today's birthdays, top members, top rookies, top deals experts and new members
Simple search	Keyword search	For text in travelblogs, photos & videos, photos, videos and members	Result is splitted into videos and Blogs	Not available
Advanced search	Author search	Search Blog by keyword and time, find a traveller by user ID and search by country	Not available	By area; there is a destination, a member, a keyword, a forum, a picture and a VT help search
<b>Community features</b>				
Friends / contact list	Online users are listed	Address book, list of friends	Not available	List of friends
Groups	Not available	In countries	Not available	Not available
Messages	available	Not available	Not available	E-mail system within the community, comments for personal homepage and travel deals
Ratings	Not available	Monthly top 5 travel Blogs; latest travel Blog entries; latest posts in forum	Most popular producers today, featured videos, popular tags	Places can be rated on a 5-star scale, reviews can be rated on a 5-point scale
Review	Comments to professional Blogs or forum entries	Like comments to an entry	Just comments	Each place can be reviewed by members, homepage of others can be commented
<b>Personalization</b>				
Personal space	Not available	Not available	Not available	Personal homepage, map with traveled locations
Member profile	Profile, preferences (setting forum customisation options)	Not available	Not available	Member photo, travel interests, member ranks ("Virtuالتourist deals", "Rookie"), basic information, login information
<b>Security</b>				
SSL during registration	No	No	No	No
SSL at login	No	No	No	No
User ID in plaintext	No	Yes (at the registration)	No	No
Password in plaintext	No	No	No	No

Table 4: Overview of the evaluated communities, part 1

	Wikitravel	Bergfex	Cool Austria	Yahoo Trip Planner
<b>Motivation</b>				
Shared goal	Create a comprehensive, up-to date, worldwide travel guide, which content is free available	Share travel information for winter and summer sports in Austria	Local people and tourists provide their insider tips about travelling in Austria, general information and personal advice about places to be	Create an illustrative and informative trip such that other users can profit from this information and use it for their own planning
Support between members	Members interact through Wiki pages, Wikitravel's pub for discussions	Forum	Forum, Blog	Users mainly communicate by commenting other trips or travel destinations
Shared activities between members	Members create and edit Wiki pages	Members are able to present their hiking and biking tours	Not available	Users are able to collectively create a trip
Access to shared resources	Shared repository for images and other media; place for sharing personal travel experience	Image section Forum, bike tours, hiking tours	Trip and photos	By public trips (view and edit)
Language	Several languages	17 supported languages	German, English	English
<b>Browsing Methods</b>				
Destination	Destination browsing	Countries, destinations, regions	Destinations, regions	Trips can be explored on a geographical map or by selecting a country and/or a city; each trip itself can then be browsed by the locations defined in this trip
Time	Not available	Not available	Not available	Not available
Member	Not available	Not available	Not available	Yes but not explicitly, one already has to view a trip and can then select to view all other trips from that person
Simple search	A simple textual search allows the user to search for text	Full-text search function	Search term, search by activity, sort by date, answers, rating	A simple textual search allows the user to search for text in trip journals, user names and locations
Advanced search	Not available	Author search	According to the user's preferences or region of interest	Not available
<b>Community features</b>				
Friends / contact list	Not available	Not available	Available	Trips that are shared with other users are displayed in a list called "My Friend's Trips"
Groups	Not available	Not available	Available; users can also be blocked or reported	Not available
Messages	Available	Available	Send a message to a member or write to guestbook	Not available
Ratings	Not available	Just for the information platform, not for threads in the forum	Travel experts, tips, photos, threads in the forum if the answer was helpful)	Users can indicate that they "like a trip"; travel locations can be rated on a 5-star scale
Review	Wiki pages can be reviewed or edited	Not available	Not available	Users can write textual reviews of travel locations, users can comment on other users' trips.
<b>Personalization</b>				
Personal space	Own discussion, own Wiki Blogs	"My Bergfex"	"My cool" with photos, friends	"My Trips" (trips someone has created), my friends' trips (shared trips with friends) and trips I like (other trips that the user found useful)
Member profile	Login information, watch list, "My Contributions", daybook	Short profile	Profile (guestbook, postings, tips)	Based on the Yahoo travel service; the user can select a home airport, flight preferences, preferred hotel chains and preferred car rental companies
<b>Security</b>				
SSL during registration	No	No	No	No
SSL at login	No	No	No	No
User ID in plaintext	Yes	No	From registration step 1 to registration step 2 username and password are displayed in the URL	No
password in plaintext	No	No	No mail activation available	No

Table 5: Overview of the evaluated communities, part 2

	Couchsurfing	Tripadvisor	Travelblog
<b>Motivation</b>			
Shared goal	Worldwide Social Network for private accommodation	Provide unbiased reviews, help other users in the forums	Share travel information and experiences
Support between members	Members interact through personal messages, forums or chat	Private messaging system, forums, travel networks	Members interact through forums, private messages and/or blogs
Shared activities between members	Members create their own profile	Traveler Articles which are Wiki entries that can be edited by all users	Members create their own profile
Access to shared resources	Shared repository for images and other media, place for sharing personal travel experience	Shared photos, videos, travel maps, travel IQ	Shared photos and blog entries
Language	Several languages	English, Italian, French, Spanish, German	English
<b>Browsing Methods</b>			
Destination	Destination browsing	Continents, popular destinations (countries, cities, regions)	Not available
Time	Not available	Not available	Not available
Member	Available	Not available	Possible search in simple search; and they are listed in alphabetic order
Simple search	A simple destination browsing method for searching couchsurfers of a specific destination	Full text search	A Google search in travelblog.org and Web or a Yahoo search in travelblog.org
Advanced search	Available	Not available	Not available
<b>Community features</b>			
Friends / contact list	Available	Traveler Network	available
Groups	Available	Traveler Network	Not available
Messages	Available	Available	available
Ratings	Available	Hotels, destinations and reviews itself can be rated	Not available
Review	Users can write textual reviews of travel locations/accommodation of a specific couchsurfer	Reviews can be written for hotels, restaurants, attractions, bars	Users can write public comments on a blog or a personal message to the blogger
<b>Personalization</b>			
Personal space	'My Profile' with friends, photos, location and	'My Trips'	Own page, private area
Member profile	Memberphoto, General Information, Couch Information, Languages, References	Member photo, travel preferences, user information, travel map, travel networks	Memberphoto, personal information
<b>Security</b>			
SSL during registration	No	No	No
SSL at login	No	No	No
User ID in plaintext	No	No	No
password in plaintext	No	No	No

Table 6: Overview of the evaluated communities, part 3

## Discussion

In this section we discuss the results of our evaluation based on the findings documented in Table 3, Table 4, Table 5 and Table 6.

The common goal of all evaluated communities is the provision of up-to-date tourism-related content that is freely available. Membership in these communities is free and it is easy for new users to join. From a security point of view none of the evaluated communities provide secure communications neither during the registration nor at the login phase. Some of the communities, Wikitravel, Cool Austria and Travelpod transmit the user name in plain text and in one case, between registration steps 2 and 3 for Cool Austria, even the password is transmitted in plain text. This clearly is a big security leak and shows that travel community providers need to become more aware of security issues and need to implement the necessary means to protect community members from attacks.

In the communities two types of interaction can be distinguished: 1) personal communication where members directly communicate and interact with each other and 2) information exchange where member interaction is based on the provision of information that is read and commented by other members. Examples of the latter case are Travelpod and Travelblog which are mainly used for Blogging, the Yahoo Trip Planner where travel locations are reviewed or Wikitravel where entries on travel locations can be found. The personal interaction takes place in forums which is still the predominant way to discuss personal travel issues like finding a bus route or questions about specific cultural traditions. This personal interaction is provided among others in the Lonely Planet Thorn Tree forum, the Virtualtourist forum space, the Travelblog forum and in the forum of Bergfex. The support of shared activities between members is integrated in four of the communities. The prime example is Wikitravel where multiple users collaboratively create entries for travel destinations. Tripadvisor contains a Wiki as well, where so called Traveller articles can be created and edited by all users. In the Yahoo Trip Planner members can create shared trip plans that can be edited by a selected number of members. Virtualtourist also includes a feature for shared activities, namely an event calendar where members are able to plan physical meetings together.

Tourists have different information requirements that can be represented by the tourist life cycle (Werthner & Klein, 1999). It is shown in **Fehler! Verweisquelle konnte nicht gefunden werden.** and consists of three phases, namely the pre-trip, on-site and after-trip phase. In the pre-trip phase, tourists collect tourism information for planning purposes and decision making. In the on-site phase the central aspect is the provision of up-to-date,

situation-specific information. During the after-trip phase, tourists need support to share their gained impressions and experiences which also have a big influence on the suppliers' process to improve their service delivery within the whole process.

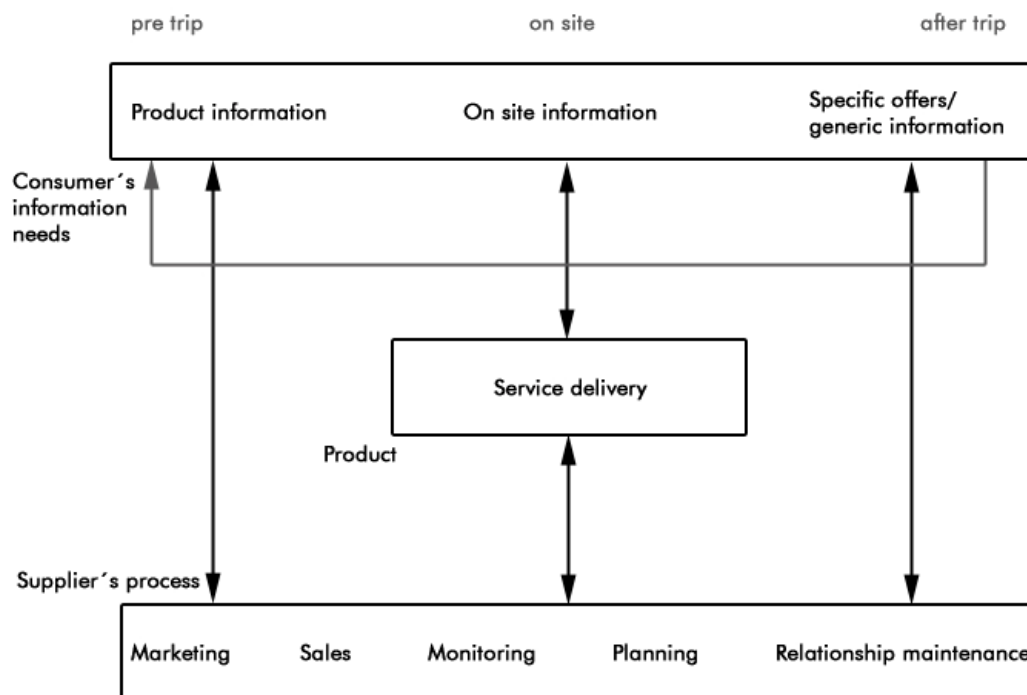


Figure 12: The tourist life cycle (Werthner & Klein, 1999)

In the *pre-trip phase*, tourists seek to satisfy their information needs but are confronted with a huge amount of unstructured information. This is especially the case within Blogging communities like Travepod or Travelblog where the relevant information is split across several Blogs. In addition, each Blog comprises a list of entries that each contains potentially necessary information. In order to decide if an entry contains useful information, the whole entry must be read. For example, suppose a tourist wants to find information about hostels in San Jose, California on Travepod. First, Travepod does not integrate location-aware search functionalities and thus the user has to filter out all the entries that are dealing with the more popular capital of Costa Rica. Second, the user has to find out which entries contain detailed enough information that go beyond an “I arrived at the hostel” or “I did make lots of new friends in the hostel”. Clearly, such information requests can be solved more easily with more structured communities like the Yahoo Trip Planner or Virtualtourist. In a similar way Wiki pages also aggregate the content to specific topics within a single page.

The main features to assist the traveller during the information search are browsing methods and search functions. Especially in the tourism domain, destination browsing is of high importance. In its basic form,

destinations can be browsed through a collection of links representing the specific locations. Advanced forms of destination browsing, like interactive navigation on geographical maps, have been enabled through Web 2.0 technologies. This more advanced feature can only be found on Tipadvisor, Cool Austria, Travelblog and Couchsurfing whereas the other communities still offer a linked list or static maps. Couchsurfing implemented a nice feature called 'CouchSearch!'. Users have on the one side the possibility to search by country or name for instance and on the other side to search on the google map by populating it with couchsurfers. If a user clicks on a town where a couchsurfer is registered he can see a small profile. Travelblog has a google map where blog entries are shown. If a user clicks on an entry, the main information (when, who, where and an abstract) of this blog are shown. The evaluated communities all implement basic search functionalities such as keyword or full-text search. In the case of a large knowledge base, such basic search functionalities yield a huge number of results and don't necessarily help the user in finding the desired information. As mentioned previously, this is the case with Blog entries like on Travepod. A search results in a list of numerous Blog entries that might or might not contain the desired information. Another example is the Bergfex community. Since the community was attached to an existing information system, the search functionality covers both areas. In a search result there is no clear separation between content stemming from the information system and content from the community. This makes it hard to find and filter the user contributed information.

The presentation of information is different in the various communities and depends on the technologies used. In the most basic form, such as in the Lonely Planet Thorn Tree forum or in the Bergfex forums, the information is presented as plain text. This presentation format is extended through photos and pictures in the remaining online communities. Pictures are integrated as separate galleries or can be directly linked to individual entries. In the case of Cool Austria a separate photo sharing space is provided. The Yahoo Trip Planner allows users to enrich entries with pictures and on Travepod pictures can be linked to single Blog entries or presented separately in a gallery. The most advanced form of presentation is provided by the travel video portal Travelistic and the Tripadvisor video space. The impression of the destination is conveyed through video clips that contain ambient music and narrated information about the destination. The tourist is able to get a quick and accurate impression of the location helping to identify destinations the user likes and finds attractive. The quality of the video clips on Travelistic and Tripadvisor is diversified and ranges from professionally produced and narrated clips to personal video material such as car rides on the motorway. In some cases the same videos can be found on both platforms. Besides poorly produced videos, another disadvantage of Travelistic is the underlying business model. The providers make a profit through commercials that have to be watched before the actual video clip is shown.

This leads to user frustration and contradicts the spirit of Web 2.0 where a Web site should be designed to be as non intrusive as possible.

Apart from the search and presentation of information, it is also important to aggregate the relevant trip information for later on-trip assistance. The Virtualtourist platform, the Tripadvisor community and the Yahoo Trip Planner are the only communities that allow the user to create a personal trip plan. In the case of the Yahoo Trip Planner there is a single entry for each travel location that is provided by a third party. This entry can be added to the personal trip plan. In contrast, on Virtualtourist each user can write an entry for a travel location. It is up to the traveller to read all these entries and select which entry should be added to the personal trip plan. Although the entries are rated by helpfulness, this still leads to an information overload making it hard for the user to assemble a trip plan of good quality. In the Tripadvisor community, the entry for a location is a Wiki entry and can be edited by every user. Additionally users can write reviews and rate the location. In all three communities, the created trip plan can be printed. The Yahoo Trip Planner even offers the possibility to include geographical maps helping the tourist to navigate within the destination. Instead of having to buy a general travel guide, which usually contains lots of information that is not used, the traveller gets a personal travel guide that exactly contains those locations the traveller is interested in. This personal travel guide is then used in the *on-trip phase*. However, besides such precompiled information, there are currently only a few services that are accessible during the trip. One example is Lonely Planet, which offers the functionality of downloading selected, relevant tourism information to the mobile device. Another example is Travelpod which supports mobile travel through a mobile Blogging application. This allows users to post Blog entries as well as images and videos from their mobile devices. To get an impression of how tourists can further be supported through mobile services, we provide an outlook of possible applications in the conclusion. In the *after-trip phase* it is essential to motivate the members to transfer all the gained travel experience back into the community, since this information is of great value to the other members. Business-sponsored communities such as Lonely Planet also use the travel memories and reports of the individuals to keep their travel products up-to-date. All communities provide some tools to help the users share their travel experience. For example, Yahoo Trip Planner offers the possibility to upload the pictures or to display the travel route on a map, such as Travelblog. Another example is the integration of other Web 2.0 platforms. One example is Travelpod that lets users share their trip on Facebook or MySpace.

## **Conclusion & Outlook**

The goal of all evaluated online communities is to provide tourism information based on different technologies, such as a forum or a newsletter, which have already been in common use for a “long” time. Along these traditional technologies, new features like Blogs or Wikis are integrated into most communities as well. What possible upgrades could improve these communities? There are lots of different ways to adapt existing communities: For example, the security side of the communities is a very simple but also a very important part, which is still missing in the most evaluated communities. With a simple SSL encryption and hashed user-id and password the security of the personal information gets dramatically increased. The communities can be enhanced with “new” technologies, such as mobile or semantic features. There are already communities which use mobile vantages, such as Travepod, where users can upgrade their Blogs with their mobile phones during their on-trip phase. But there are lots of other options with mobile devices as well.

Online tourism communities provide a broad range of services to their users. The majority of those services focus on supporting the users during the pre-trip phase of the tourist life cycle. The support of the on-site phase, however, is still in its infancy. Especially in this situation mobile users (tourists) act in unknown environments and would need personalized on-trip assistance in the form of information about accommodation, points of interest (POIs) (e.g., environmental and landscape attractions or gastronomy), weather forecasts, news or safety issues. With the emergence of mobile technology, removing this gap seems to be feasible. This could be done by providing mobile users with the ability to fetch travel related information (e.g., trip schedule) from the community while being on the move and transfer it to their mobile device. But even more personalized services seem to be possible when they are matched to the individual situations of the users (e.g., by sensing their context). Those mobile services offer additional value proposition and pave the way for new business models. Indeed, a range of mobile communities have been established that focus especially on mobile communication and interaction possibilities. According to Tasch & Brakel (2004), mobile communities differ in several aspects from the traditional online communities. Mobile communities can be accessed by mobile devices, which provide ubiquitous access to the community without time and place constraints. This may result in a more spontaneous communication within the community. Mobile devices can act as personal, trusted devices and ease the identification process of users by providing security mechanisms such as SIM-CARD or phone number. With the usage of location-sensing technology, the location of the mobile device and its user can be calculated and can be used to offer location-based services such as getting an alert when friends are approaching (e.g., community aka-aki, [www.aka-aki.com](http://www.aka-aki.com)), chatting with other community members in the vicinity or leaving virtual notes at

different places. They also argue that different usage patterns will be established and that mobile communities will rather be established around single users rather than around specific topics or interests like the existing online communities.

This paper provided an overview of eight online tourism communities. First, the features and functionalities of these communities were introduced and described in separate sections. Second, the communities were evaluated based on a criteria catalogue. This catalogue was created on the basis of other online community studies and included aspects concerning technological functionalities, motivation to contribute, browsing methods, community features, personalization and security. The results of this evaluation were presented in Tables that showed the key characteristic and differences between the single communities. Additionally, these results are discussed on the basis of the tourist life cycle and the value of the communities for each phase is highlighted. It is interesting to see that the communities don't implement additional security features, that forums are still the predominant way to discuss personal travel related questions and that Web 2.0 technologies like interactive geographic maps are not widely supported. At the end, the missing support of on-trip assistance for tourists is addressed by pointing out how travel communities can further be enriched through mobile services.

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