STI INNSBRUCK

TOURISMUSVERBAND HANDBOOK

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Contents

1. Introduction

This document presents a description of the Tourismusverband Innsbruck (TVb) ontology. This ontology models related information for the dissemination activities conducted by TVb through different online communication channels such as Facebook, Twitter, Youtube, and its website. It includes hotel's descriptions, restaurants, news, and in general information of interest for tourists in Innsbruck. This ontology will be used as an integration framework and will unify the disseminated content.

The remainder of the document is organized as follows: Section 2 specifies the information model providing also a detailed example of the formal description of the ontology. Finally, a complete description of the analysis conducted can be found in the appendix A and B.

2. Information Model

Section 2 provides the details involved in the definition of the ontology. First, methods used to derive the identified concepts are presented (section 2.1). Then, the results of the analysis are described, thus the identified concepts (section 2.2). Finally, main classes of the ontology are explained (section 2.3) and a detailed description of the Event class is provided in section 2.4.

2.1 Methods: Analysis Tasks

In order to derive the main concepts that will be modeled in the ontology and consequently be disseminated through different channels we planned the following activities:

1) Analysis of the TVb's Website (http://www.innsbruck.info).

2) Analysis of the TVb's Facebook Channel (https://www.facebook.com/Innsbruck).

3) Analysis of other tourism agencies and related organizations dissemination channels.

4) Interviews and discussion session with TVb's personnel.

2.2 Results: Concepts

The results provided in this document have been derived after the analysis of the TVb's website and TVb's Facebook. On the one hand, relevant information for dissemination through different channels and available in the TVb's website can be classified according to the following categories: 1) Hotels, 2) Food and Drink Establishments, 3) Events, 4) Trips, 5) Place of Interest and 6) News. On the other hand, it was found that the TVb's Facebook page offers short textual

descriptions, photos and videos about the following topics: 1) Events, 2) Place of Interest, 3) News and 4) Food and Drink Establishments. It is worth to mention that most of the information posted on Facebook is related to events, places of interests and news. Few posts relate to food establishments and none of them explicitly mention hotels information.

These concepts identified in the analysis were initially used as main concepts to be modeled in the ontology. All the details of the analysis conducted can be found in Appendix A (analysis of the TVb's website) and Appendix B (analysis of TVb's Facebook page). Future work will include a deep analysis of other organization's channels and interviews and discussion sessions with TVb's personnel. These tasks will be used to do a further refinement of the ontology.

2.3 Results: The Tourismusverband Ontology

Following best practices and recommendations from ontology engineering methodologies available in the literature (Hepp, De Leenheer, De Moor, & Sure, 2008), (Staab & Studer, 2009), the followed approach for the design of the TVb's ontology included to reuse as many as possible concepts and properties from already existing vocabularies such as schema.org, FOAF or Dublic Core (Google, 2011), (FOAF, 2013), (Metadata Basics, 2013). Schema.org was selected as a primary vocabulary for mapping the content from Tourismusverband online channels to the ontology. The reason for choosing schema.org is that the vocabulary is supported by the major search engines (Google, Yahoo!, Bing and Yandex) providing unified vocabulary for annotating people, events, places, offers, reviews, recipes on the Web. Schema.org is intended to help site owners and developers to improve how their sites appear in major search engines as well as unify the process of adding structured data to the webpages.

Schema.org covers travel domain to a large extent and introduces such concepts as schema:TravelEvent, schema:Place, schema:TouristAttraction etc. In addition, the markup implemented using schema.org is recognized by major search engines, hence, the ontology could be reused for automatic annotations as well. Hence, this is no doubt an additional advantage of the selected vocabularies usage.

After finalizing the analysis activities and as a first step of the ontology definition, 6 main concepts were identified: 1) Place, 2) Event 3) Organization 4) Trip (Action) 5) Creative Work and 6) Person. Figure 1 depicts in a graphical manner these main classes of the ontology.

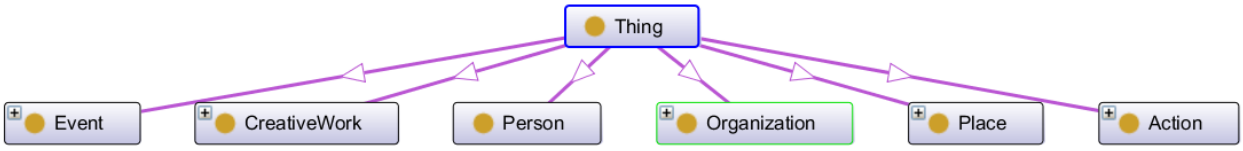

Figure 1*: Hierarchy of top-level concepts*

- **Places**: This class describes any physical location relevant to the touristic sector and of interest for travelers.
- **Event**: This class models touristic events.
- **Organization**: This class defines legal entities.
- **Trip**: This class describes travel actions.
- **Creative Work**: This class models descriptive objects relevant to the touristic domain.
- **Person**: This class describes human agents.

These are the main classes included in the ontology. The subsections provided below in the document describe each class in detail and explain its relation and usage through examples based on the aforementioned analysis.

2.3.1 Place

Places usually refer to any physical entity. In the touristic context it is important for a traveler to obtain precise information about any place he or she is interested in clear and effective manner. From the touristic perspective a person might be interested both in civic places such as bus stops and taxi stands as well as in different touristic attractions. In many cases the touristic decision of visiting a specific place is determined by the information that is available for that certain place, hence the ontology should provide an appropriate classification of places so that search engines consume structured data and present the output in a precise form to a customer and also a rich description of such places.

A) SubClasses

The following subcategories of Place class have been identified: 1) Civic Structures, 2) Local Business and 3) Landform.

Civic Structures, includes the following subclasses:

- Airport
- Beach
- Bus Station
- Campground
- Event Venue
- Movie Theatre
- Museum
- Music Venue
- Park
- Parking Facility
- Performing Arts Theater
- Places of Worship
- Stadium or Arena
- Taxi Stand
- Train Station
- Zoo

Local Business subclass incorporates the following subclasses:

- Entertainment Business
- Food Establishment
- Lodging Business
- Sports Activity Location
- Tourist Information Center
- Travel Agency

The objective of Local Business is to categorize business entities such as hotels and hostels (Lodging Business class); bar, pubs, cafes, fastfood restaurant, restaurants, ice cream shops and wineries (FoodEstablishment class); exercise gyms, goal courses, swimming pools, ski resorts, sports clubs etc (Sports Activity Location).

Additionally, Landform class was introduced to model environmental information items which could be also considered as point of interests such as waterfalls, rivers, ponds, lakes, canals.

Thanks to the properties included in the ontology, any of these places can be marked as a point of interest. In addition, the TouristicAttraction class has been included to be used as a container of all uncategorized individuals.

B) Examples

The class Place represents any object that can be identified by its locations or area on the earth, for example museum, building, etc. TVb's website collects various places, such as the Natural Science Landesmuseum, City Tower, Alpine Zoo, etc.

As can be seen in the analysis conducted and presented in the appendix A and B, this information has been categorized as "Sights and Attractions" in the TVb's website while no categorization exists for Facebook. In the analysis, this information has been tagged as Place of Interest for both TVb's website (see appendix A5) and Facebook page (see appendix B2). A collection of Food and Drink Establishments have been identified in the website (see appendix A2) and Facebook page (see appendix B4) which can also be represented by this class. Hotels, Rooms or Apartment (also identified from the website (see appendix A1)) can be represented with this class.

2.3.2 Event

The class defines occurrences which could be interested for tourists and interactions between them.

A) SubClasses

Event class models event hierarchy, which include the following subclasses:

- Business Event
- Children's Event
- Comedy Event

- Dance Event
- Education Event
- Festival
- Food Event
- Music Event
- Publication Event
- Sale Event
- Social Event
- Sports Event
- Theater Event

B) Examples

The main examples for class Event are exhibitions and concerts. On the one hand, an exhibition is an activity to show and display selected items that commonly takes place in museums or galleries. On the other hand, a concert is a live music performance offered to the audience. TVb's website has various entries related to these events, such as the information about a special exhibition in the "Tiroler Landesmuseen" or the announcement about the "New Year's Concert by InnStrumenti" in the City Hall.

Since the website has categorized the entries as Events/Happenings or Exhibitions, while no explicit categorizations for similar entries on Facebook, an uniform categorization namely Event has been adopted to represent related entries from both sources; the website (see appendix A3) and Facebook page (see appendix B1).

2.3.3 Organization

Organization class models legal entities and enriches Places class with extra properties such as contactPoint, email, accepts Reservations and others.

A) SubClasses

Regarding Tourismusverband ontology Organization class includes Local Businesses as described in Place class section.

B) Examples

The class Organization is a generic class to represent the groups of people who manage places, for example restaurant's owner, museum's administrator, etc. In TVb's website, the organizations were not described explicitly as independent instances, but dissolved into related class (Place). For example, a restaurant (an instance of class Place) might has an email property which is belongs to the management (an instance of class Organization).

Related information found in the analysis of the website and used for the definition of properties can be seen in appendix A1 (Hotel), appendix A2 (Food and Drink Establishment), appendix A5 (Place of Interest). See appendix B2 and B4 for related information found in Facebook.

2.3.4 Trip (Action)

The concept of trip refers to a travel action.

A) SubClasses

In Tourismusverband ontology the Trip class is considered as a part of the Action class. Precisely, the following hierarchy is used:

Action → MoveAction → TravelAction

This approach towards trips categorization increases modelling flexibility in case any other actions has to be modelled in future.

In particular, a trip shares basic properties common for each class in an ontology such as name, description, url and image as well as introduces its own properties such as location, startTime, endTime, startDate, endDate, fromLocation, toLocation and distance.

B) Examples

An example for this class is excursion, a trip to particular places, on particular times by a group of people. TVb's website offers various packages to visit interesting places on specific days, for example to cycling around Innsbruck and its holiday villages.

As shown in appendix A4, various entries from the TVb's website were identified and categorized as Trips. Information related to trips in Facebook was categorized as News (see appendix B3).

2.3.5 Creative Work

Creative work class models descriptive objects that usually require human involvement in its creation and editing.

A) SubClasses

The Tourismusverband ontology models the following subclasses of CreativeWork:

1) Article, 2) MediaObject, 3) Review and 4) Software Application

Article class includes blog posts as well as generic news articles (web or paper-based) described by such properties as keywords, articleTile, articleBody, author, editor, review, as well as generic properties such as name, description, url and image.

MediaObjects were separated as a special subclass of CreativeWork and incorporates its own taxonomy as follows:

- AudioObject - ImageObject - VideoObject

In some cases, it is important to disseminate information about specific video, audio or image information item, hence Tourismumsverband ontology introduced specific properties for these classes such as extension type, contentUrl, installUrl.

The **Review** class describes the item which is reviewed and ranking given to that particular review.

Finally, **Software Application** class was added to Creative work to describe Web and mobile applications in the context of touristic business. Precisely, it is important to model if there are any software and mobile requirements of such kind of applications.

B) Examples

An example for class CreativeWork are articles, meaning written works published in a communication medium. The TVb's blog is a communication medium that contains various creative works (text, pictures, videos, animation, etc.) from its authors. The pictures shared on TVb's facebook page are proper examples for this class. See appendix A6 and B3 to find further related details extracted from the analysis of the website and Facebook page respectively.

2.3.6 Person

Person class models human agents with the help of such properties as first and last names, their content information and others.

An example for class Person is author, a person who create and edit a written work, for example an author of an article on a blog. In TVb's website, the authors are the person who responsible to create a content directly or indirectly, for example the person who wrote a blog.

2.4 Example: Event Sub Concepts details example

In this section, a detailed example of the "Event" information item is presented for preliminary discussion and analysis. Note that in future versions of this document this section will be extended to cover all the concepts and properties of the ontology and provide mappings with existing vocabularies.

In the tourism domain an event acts as a linking activity between places, organizations and travellers. Most of the events are objective-specific and serve a recreational or business purpose. From the Web perspective having relevant taxonomy increases the preciseness of the search and would lead to high search engine results of certain event. Noteworthy, as semantic vocabularies support the event hierarchy, it has been also modelled in Tourismusverband ontology. Following the best practices in ontology modelling the event class has been divided into the following categories such as business event, children event, comedy event, dance event, education event, festival, food event, music event, publication event, sale event, social event, sports event, theater event.

Figure 2 illustrates the taxonomy according to Tourismusverband ontology:

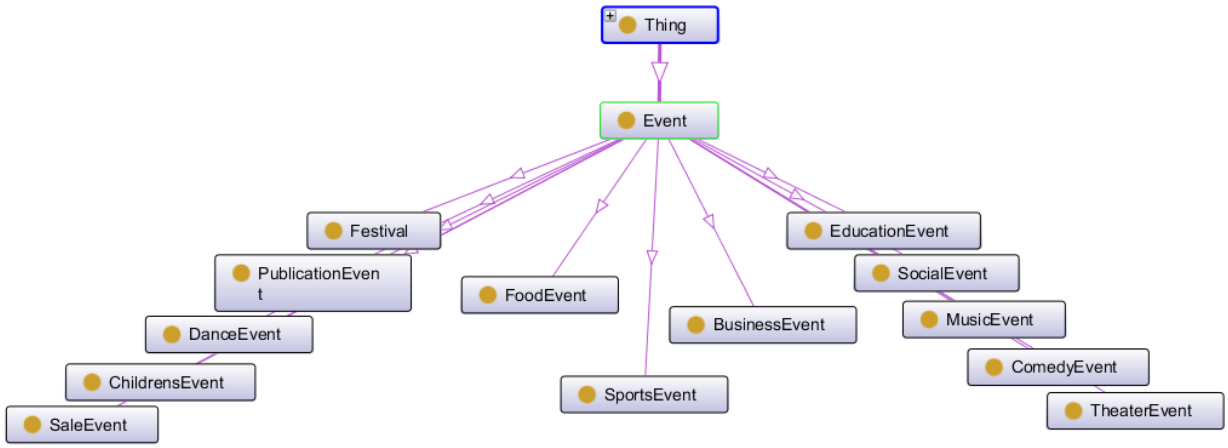

Figure 2: *Events Hierarchy*.

Firstly, as shown in Table 1 selected concepts were modeled and mapped with existing vocabularies.

Table 1: Tourismusverband Ontology: Event Concepts

No	Concept	Mapping
1	Event	schema:Event (rdfs:subClassOf schema:Thing)

2	BusinessEvent	schema:BusinessEvent (rdfs:subClassOf schema:Event)
3	ChildrensEvent	schema:ChildrensEvent (rdfs:subClassOf schema:ChildrensEvent)
4	ComedyEvent	schema:ComedyEvent (rdfs:subClassOf schema:ComedyEvent)
5	DanceEvent	schema:DanceEvent (rdfs:subClassOf schema:DanceEvent)
6	EducationEvent	schema:EducationEvent (rdfs:subClassOf schema:EducationEvent)
7	Festival	schema:Festival (rdfs:subClassOf schema:Festival)
8	FoodEvent	schema:FoodEvent (rdfs:subClassOf schema:FoodEvent)
9	MusicEvent	schema:MusicEvent (rdfs:subClassOf schema:MusicEvent)
10	PublicationEvent	schema:PublicationEvent (rdfs:subClassOf schema:PublicationEvent)
11	SaleEvent	schema:SaleEvent (rdfs:subClassOf schema:SaleEvent)
12	SocialEvent	schema:SocialEvent (rdfs:subClassOf schema:SocialEvent)
13	SportsEvent	schema:SportsEvent (rdfs:subClassOf schema:SportsEvent)
14	TheaterEvent	schema:TheaterEvent (rdfs:subClassOf schema:TheaterEvent)

Afterwards, as depicted in Table 2 properties for events were defined:

Table 2: Tourismusverband Ontology: Event Properties

No	schema:Event	Type
1	tv:name	String
2	tv::image	URL
3	tv::url	URL
4	tv::description	String
5	tv:hasAttendees	Person or Organization
6	tv:hasLocation	Place
7	tv:duration	String
8	tv:startDate	
9	tv:endDate	
10	tv:startTime	
11	tv:endTime	
12	tv:hasSubEvent	Event
13	tv:hasSuperEvent	Event

As can be seen from tables 1 and 2, schema:Event class specify its own properties as well as share common basic properties with the Thing class. Sub-events do not create properties on their own rather inherit from Event class, which acts as a container.

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Appendix A: Analysis of the Tourismusverband's Website

As stated in Section 2, relevant information for dissemination through different channels and available in the TVb's website can be classified according to the following categories: 1) Hotels, 2) Food and Drink Establishments, 3) Events, 4) Trips, 5) Place of Interest and 6) News.

This appendix provides with a detailed description of these concepts in terms of sub-related categories and content published related main features of each one (properties).

For each identified topic this document provides 2 or 3 tables:

- Table type A: Lists the categories (sub-concepts) for each topics

- Table type B: Lists the information format (properties) for each topic

- Table type C: Lists additional categorization for each topic. Sometime this categorization is required to classify the content into more detail sub-concepts, such that an instance from a sub-concept could be belongs to other sub-concepts.

A1. Hotel

The website lists 85 entries for hotel/rooms, 21 entries for apartments, 8 entries for camping and the entries for farm houses were not available. The entries of hotel/rooms have been classified into 7 categories (see Table A1.A.1), the entries of apartments into 2 categories (see Table A1.A.2) and no further classification for entries of camping.

The entries share a common information format (properties) where some properties are optional (occur in an entry but hidden in other entry, including when the entries are in same category). The properties are shown at Table A1.B.

Table A1.A.1. The Categories of Hotel/Rooms

No	Category	Notes
1	Hotel	
2	Inn	
3	Pension	

4	Private Rooms	
5	Residential Hotel	
6	Youth Hotel	
7	Others	

Table A1.A.2. The Categories of Apartments

No	**Category**	**Notes**
1	Holiday Apartment	
2	Holiday Home/Cottage	

Table A1.B. The Information Format of Hotel/Rooms/Apartments

No	**Name**	**Type**
1	Name	Text
2	Star Rating	Text (5/4 Superior/4/3/2/1)
3	Star Sign	Image
4	Address	Text
5	Telephone	Text
6	Fax	Text
7	E-Mail	URL
8	Website	URL

9	Logo	Image
10	Best Price Sign	Image + URL
11	Description	Text
12	Availability	Calendar (Feratel)
13	Facilities (i.e. Languages, Sports, Meetings)	Text
14	How To Get There/Map	Text + Map
15	Pictures	Collection of Images
16	Request Now	URL (Feratel)
17	Book Now	URL (Feratel)

A2. Food and Drink Establishment

The website has been using 2 different formats to classify the related entries, namely category and theme. An entry could be classified into one or more categories and one or more themes. The categories are shown at Table A2.A. while themes at Table A2.C.

The properties of the entries are mainly about the opening times and location while the offers (i.e. what they serve, view) are implicitly mentioned in the general information. The detail properties are shown at Table A2.B.

Table A2.A. The Categories of Food and Drink Establishment

No	**Category**	**Notes**
1	Restaurant	

2	Cafes	
3	Bars & Pubs	
4	Mountain Restaurants/Huts	
5	Restaurant for Groups	
6	Internet Cafes	

Table A2.B. The Information Format of Food and Drink Establishments

No	**Name**	**Type**
1	Name	Text
2	Address	Text
3	Telephone	Text
4	Fax	Text
5	E-Mail	URL
6	Website	URL
7	Description	Text
8	Opening Times	Text
9	Arrival	Text + Map
10	Further Information	Text

Table A2.C. The Themes of Food and Drink Establishments

No	Category	Theme
1	Restaurant	Rated Gourmet Restaurant, Star-Rated Restaurant, Austrian Cuisine, Bar/Restaurant, Beer Garden/Pub, Bio Cuisine, Bistro, Cafe-Restaurant, Drive-in/Take-away, Fast Food Restaurant, Fish Cuisine, Gault Millau Restaurant Guide, Home Cooking, Home-style Atmosphere, International Cuisine, Lunch, Mediterranean Cuisine, Mexican Cuisine, Michelin Guide, Modern Ambience, Non-smoking Locale, Regional Cuisine, Snack Bar, Spanish Cuisine, Specialties, SS/Self-service, Traditional Cuisine, Upscale Ambience, Vegetarian Cuisine, Italian Cuisine, Pizzeria, Asian Cuisine, Chinese cuisine, Japanese Cuisine, Oriental Cuisine, Thai Cuisine, Turkish Cuisine, Drive-In/Take-Away, Fast Food Restaurant, Fast Food, Snack Bar, SS/Self-Service
2	Cafes	Cafe-restaurant, Coffee Shop/Pastry shop
3	Bars & Pubs	Bar/pub/lounge, Bar/restaurant, Pub/wine bar/wine tavern
4	Mountain Restaurants/Huts	Alpine dairy/Snack bar, Mountain hut/Mountain restaurant
5	Restaurant for Groups	
6	Internet Cafes	Internet Cafe, Internetzugang

(*) The list of themes is possibly incomplete and or redundant

A3. Events

The website has 2 entry formats for the events, structured (which is supported by Feratel) and unstructured ones (there is no uniform format, i.e. free text). After reviewing the unstructured entries which are mainly contain some general descriptions about the events, dates, location,

pictures and links to other pages (for more information or registration), we have concluded that their properties are covered by the properties from the structured ones as shown at Table A3.B.

The related entries have been classified with rich categories and themes as shown at Table A3.A. and Table A3.C. respectively.

Table A3.A. The Categories of Events

No	**Category**	**Notes**
1	Advent/Christmas/New Year's	
2	Congresses	
3	Courses/seminar	
4	Culture/customs/markets	
5	Easter/spring Feast	
6	Excursions/trips/tours	
7	Exhibitions	
8	Fairs	
9	Family	
10	Festivals & Celebrations	
11	Health & Wellness	
12	Miscellaneous Events	
13	Music	

14	Religious Events	
15	Sports	
16	Theatre/shows/dancing/films	

Table A3.B. The Information Format of Events

No	**Name**	**Type**
1	Name	Text
2	Area	Text
3	Dates	
	- Start	DateTime
	- End	DateTime
4	Times	DateTime
	- Day (i.e. Mo-Sa, Wed-Fr)	DateTime
	- Time (i.e. 07.00)	DateTime
5	Duration (i.e. 5 h)	Number
6	Location	Text
7	Description	Text
8	Links	Collection of URLs
9	Documents	Collection of Files

10	Holiday Themes (See Table 3.C)	Collection of Choices
11	Pictures	Collection of Images
12	Arrival/Location	Text + Map

Table A3.C. The Holiday Themes of Events

No	**Theme**	**Notes**
1	Winter	
2	Family	
3	Easter	
4	Children	
5	Golfing	
6	Romantic Stay	
7	Bicycling	
8	Event	
9	Hiking	
10	Concert	
11	Alpine	
12	City	
13	Adventure	

14	Advent/Weihnachten/Neujahr	

A4. Trips

The information about trips is provided by a different website (http://www.innsbruck-pauschalen.com/).

The website has various related entries which are presented in the format packages. The packages could be related to particular events, seasons, or locations and have been classified as shown at Table A4.A.

The website presents general information about a package such as the items in the package, the whole price, etc. while the booking is handled by Feratel. Although the format of entries is so flexible, several common properties were extracted as shown at Table A4.B.

Table A4.A. The Categories of Packages

No	**Category**	**Notes**
1	Events	
2	City	
3	Winter	
4	Summer	
5	Wellbeing	
6	Family	
7	Camping	

Table A4.B. The Information Format of Trips

No	**Name**	**Type**

1	Name	Text
2	Description	Text
3	Price	Number
4	Offers Available	Collection
	- Start	DateTime
	- End	DateTime
5	Arrival	Collection
	- Day (i.e. Monday-Friday, Monday-Tuesday)	DateTime
6	Pictures	Collection of Images
7	Video	Embedded Video
8	Live Support (Chat)	URL
9	Non-Binding Request	URL
10	Book Now	URL (Feratel)
11	Package Content (Feratel)	Text
12	Telepon (Feratel)	Text
13	Email (Feratel)	URL

(*) The properties were extracted from the website and the Feratel booking widget

A5. Place of Interest

The website has been classified related entries into various themes as shown at Table A5.A. The information format is mainly presenting the general description about a place and how to reach the place. Table A5.B. shows the detail properties of a place of interest.

Table A5.A. The Categories/Themes of Place of Interest

No	Theme	Notes
1	Basilica	
2	Castles/Fortresses	
3	Cemetery	
4	City Tower	
5	Cross Road	
6	Churches/Monasteries/Convents	
7	Excursion	
8	Excursion/Trip for Children	
9	Handicraft Demonstration	
10	Historical	
11	Historical Building	
12	Historical Square/Town Center	
13	Monument/Memorial	
14	Palace	

15	Renaissance	
16	Residential Buildings	
17	Scientific	
18	Sightseeing/Guided Tour	
19	Spiritual	
20	Study Trip	
21	Technical Building	
22	Various Sights	
23	Viewpoints/Viewing Platforms	

Table A5.B. The Information Format of Place of Interest

No	**Name**	**Type**
1	Name	Text
2	Address	Text
3	Telephone	Text
4	Fax	Text
5	E-Mail	URL
6	Website	URL
7	Description	Text

8	Opening Times	Text
9	Arrival	Text + Map
10	Further Information	Text
11	Pictures	Collection of Images

A6. News

The website has various information and available from different sources (Daily News, News Forum, Blog) which can be categorized as news. The entries in this category contain more generic information about Innsbruck, for example time table of what currently happening, highlight, weather, etc.

Each entry from each source has different format and mostly presented as free texts. The properties for Daily News, News Forum, and Blog are shown at Table A6.B.1, A6.B.2. and A6.B.3 respectively.

(1) Daily News (http://www3.innsbruck.info/daily/)

Table A6.B.1. The Information Format of Daily News

No	**Name**	**Type**
1	Day	Day
2	Date	DateTime
3	Temperature	Widget (Text, Image, Number)
4	Today Events	Collection
	- Title	Text

	- Name	Text
	- Location	Text
5	Tips	Collection
	- Title	Text
	- Body	Text
6	Permanent Events	Collection
	- Time	DateTime
	- Name	Text
	- Location	Text
7	Highlights	Collection
	- Title	Text
	- Body	Text

(2) News Forum (http://www3.innsbruck.info/newsforum)

Table A6.B.2. The Information Format of News Forum

No	**Name**	**Type**
1	Date	DateTime
2	Time	DateTime
3	Title	Text

4	Body	Text

(3) Blog ()

The blog built on Wordpress CMS.

Table A6.B.3. The Information Format of Blog

No	**Name**	**Type**
1	Title	Text
2	Author	Text + URL
3	Categories	Collection of Text + URL
4	Date	DateTime
5	Body	Text + Images + Embedded Videos
6	# Comments	Number
7	# Views	Number
8	Tags	Collections of Text
9	Share Buttons	Widget
10	Next	URL
11	Previous	URL

Appendix B: Analysis of the Tourismusverband's Facebook Channel

To analysis the facebook contents, the postings were examined to identify the main intention of each post. Obviously, this approach is very subjective since the text on Facebook are in the format of natural language. Therefore, the analysis performed not only to the post's text but also the content of pictures or videos (if any).

B1. Event

The contents are emphasize about the activities which are currently or used to be happening in Innsbruck or its Holiday Villages.

For example:

- An invitation to visit one of the Christmas Markets in Innsbruck
- A picture from a Christmas Market
- Tips for the Festive Season
- Pictures from Advent Weekend
- Pictures from Nikolaus dan Krampus
- Information about Snow Festival

B2. Place of Interest

The contents explain the interesting places to visit.

For example:

- A video or picture of Innsbruck from the air
- Pictures from the Holiday Villages
- Winter season opening in the Axamer Lizum
- Invitation to enjoy shopping experience in the Kaufhaus Tyrol in the center of Innsbruck

B3. News

The contents are mostly are about Innsbruck in general.

For example:

- Information about Innsbruck 100 years ago
- Information about the winner of the Innsbruck-Trails
- Information about a Video Contest

B4. Food and Drink

The contents contain information about the food and drink services.

For example:

- Pictures of several Cafes

Table B1: Typical content types of a post on the Facebook.

No	Type	Note
1	Text	Short
2	Pictures	4-8 Images
3	URL	Share the URL from original posting
4	Video	Embedded