UNIVERSITY OF LJUBLJANA
FACULTY OF ECONOMICS

KIR KUŠČER

MODELLING MOUNTAIN TOURISM DESTINATION DEVELOPMENT WITH FOCUS ON INNOVATIVENESS (OBLIKOVANJE MODELA RAZVOJA GORSKIH TURISTIČNIH DESTINACIJ S POUDARKOM NA INOVATIVNOSTI)

DOCTORAL DISSERTATION

LJUBLJANA, 2012

AUTHORSHIP STATEMENT

The undersigned Kir Kuščer, a student at the University of Ljubljana, Faculty of Economics, (hereafter: FELU), declare that I am the author of the doctoral dissertation entitled Modelling mountain tourism destination development with focus on innovativeness, written under supervision of Prof. Tanja Mihalič and co-supervision of Prof. Harald Pechlaner.

In accordance with the Copyright and Related Rights Act (Official Gazette of the Republic of Slovenia, Nr. 21/1995 with changes and amendments) I allow the text of my doctoral dissertation to be published on the FELU website.

I further declare

- the text of my doctoral dissertation to be based on the results of my own research;
- the text of my doctoral dissertation to be language-edited and technically in adherence with the FELU's Technical Guidelines for Written Works which means that I
    - cited and / or quoted works and opinions of other authors in my doctoral dissertation in accordance with the FELU's Technical Guidelines for Written Works and
    - obtained (and referred to in my doctoral dissertation) all the necessary permits to use the works of other authors which are entirely (in written or graphical form) used in my text;
- to be aware of the fact that plagiarism (in written or graphical form) is a criminal offence and can be prosecuted in accordance with the Copyright and Related Rights Act (Official Gazette of the Republic of Slovenia, Nr. 21/1995 with changes and amendments);
- to be aware of the consequences a proven plagiarism charge based on the submitted doctoral dissertation could have for my status at the FELU in accordance with the relevant FELU Rules on Doctoral Dissertation.

Date of public defence:
Committee Chair: Associate Prof. dr. Marko Pahor
Supervisor: Prof. dr. Tanja Mihalič
Co-supervisor: Prof. dr. Harald Pechlaner
Member: Prof. dr. Larry Dwyer

Ljubljana, November 5th, 2012 Author's signature: _____

OBLIKOVANJE MODELA RAZVOJA GORSKIH TURISTIČNIH DESTINACIJ S POUDARKOM NA INOVATIVNOSTI

POVZETEK

Disertacija se osredotoča na gorske turistične destinacije, ki so raziskane z vidika konstrukta okolij gorskih destinacij, konstrukta inovativnosti gorskih destinacij in konstrukta razvoja gorskih destinacij; raziskani so tudi elementi in faktorji znotraj teh konstruktov. Nadalje so raziskani tudi odnosi med konstrukti, kot so učinki okolij in inovativnosti na razvoj gorskih destinacij. Raziskava je zasnovana na temeljitem pregledu literature o turističnih destinacijah, posebno o gorskih destinacijah. Teoretična zasnova turističnih okolij, inovativnosti in razvoja destinacij je aplicirana na gorske destinacije in predstavlja podlago za razvoj elementov. Gorske destinacije vedno bolj iščejo priložnosti za razvoj v turizmu. Da bi ostali v koraku s hitro spreminjajočimi se situacijami, je treba določiti okolja, ki prispevajo k trajnostnemu turističnemu razvoju. Hitro spreminjajoče se poslovno okolje prisili destinacije k inovativnosti, da ostanejo konkurenčne. Inovativnost postaja vedno bolj pomembna za razvoj destinacij. V času gospodarske negotovosti lahko izčrpen pregled elementov in faktorjev, ki so ključni za inovativnost gorskih destinacij, prispeva k boljšemu razvoju le-teh. Da bi lahko določili stopnjo razvoja gorske destinacije, je treba razviti orodje za merjenje le-tega. Treba je ugotoviti pomembne elemente in faktorje, ki vključujejo vse vidike trajnostnega razvoja gorskih destinacij. Opaziti je pomanjkanje celostne literature, ki bi obravnavala okolja gorskih destinacij, inovativnost in trajnostni razvoj gorskih destinacij.

Na podlagi obširnega pregleda literature so bili sestavljeni seznami elementov okolij, inovativnosti in razvoja gorskih destinacij. Da bi določili pomembne elemente, so bili seznami poslani mednarodnemu panelu vseh deležnikov v gorskih destinacijah in raziskovalcem s področja turizma. Izvedene so bile eksplorativne faktorske analize, v katerih so bili uporabjenil samo bolj pomembni prepoznani elementi. S pomočjo analiz so bili ugotovljeni faktorji znotraj konstrukta okolij gorskih destinacij, konstrukta inovativnosti gorskih destinacij in konstrukta razvoja gorskih destinacij. Na podlagi teh faktorjev in ustreznih elementov je bil razvit raziskovalni model inovativnosti gorskih destinacij. Model služi kot orodje za ugotavljanje odnosov med okolji, inovativnostjo in razvojem gorskih destinacij. Za testiranje odnosov v modelu je bil uporabljen model linearnih strukturnih povezav, ki analizira kovariančne strukture.

Prvi del raziskave določa elemente in faktorje okolij gorskih destinacij, ki so pomembni za razvoj gorskih destinacij. Ugotovljeni faktorji so: tehnološko okolje, družbeno-kulturno okolje, naravno okolje in politično ter pravno okolje. Ker med temi faktorji ni bilo ekonomskega okolja, disertacija išče razloge za odsotnost le-tega. V raziskavi so bili ugotovljeni pomembni elementi inovativnosti, ki prispevajo k razvoju gorskih destinacij, in določeni so bili faktorji, ki te elemente vsebujejo. Rezultati kažejo na to, da inovativnost gorskih destinacij vključuje faktorje družbeno-kulturna trajnost in sodelovanje deležnikov, okoljska trajnost (naravno okolje) in proaktivnost. Raziskava je pokazala tudi na pomembne elemente za merjenje razvoja gorskih destinacij, ki so bili nato razvrščeni v faktorje. Izoblikovana je bila rešitev s štirimi faktorji, ki so bili poimenovani glede na sestavne elemente. Ugotovljena faktorja v razvoju gorskih destinacij, ki ustrezata trajnostnim dimenzijam elementov za merjenje razvoja gorskih destinacij, sta družbeno-kulturni napredek in varovanje naravnega okolja. Druga dva ugotovljena faktorja sta turistični promet in potrošnja ter zadovoljstvo obiskovalcev, predstavljata pa bolj klasičen pogled na to, kako se meri razvoj gorskih destinacij.

Drugi del raziskave opisuje vpliv okolij in inovativnosti na razvoj gorskih destinacij in analizira vpliv okolij na inovativnost gorskih destinacij. Ugotovljeno je bilo, da boljše stanje konstrukta okolij gorskih destinacij pozitivno vpliva na konstrukt inovativnosti gorskih destinacij. Na konstrukt razvoja gorskih destinacij prav tako pozitivno vpliva boljše stanje v okoljih gorskih destinacij. Nadalje na razvoj gorskih destinacij pozitivno vpliva povečana inovativnost gorskih destinacij; zaključimo lahko, da inovativnost gorskih destinacij delno posreduje pri odnosu med okolji gorskih destinacij in razvojem gorskih destinacij.

Disertacija posreduje poglobljeno znanje tako akademikom kot tudi deležnikom v gorskih destinacijah. Prvi del raziskave lahko gorskim destinacijam pomaga, da se hitreje in primerneje odzovejo izzivom, ki jim jih zastavlja poslovno okolje. Menedžerjem v gorskih destinacijah nudi informacije o tem, kateri dejavniki okolij pomagajo izboljšati trajnostni razvoj destinacij. Prav tako bodo tudi znali prepoznati, na katere dejavnike inovativnosti gorskih destinacij naj se osredotočijo, da povečajo inovativnost in izboljšajo razvoj destinacij. Poleg tega lahko ugotovljeni dejavniki razvoja gorskih destinacij pomagajo destinacijam ugotoviti področja, na katerih so uspešne, in področja, ki jih morajo izboljšati, če hočejo doseči trajnostni razvoj destinacije.

Ugotovitve drugega dela raziskave, ki kažejo na to, da boljše razmere v okoljih in inovativnost v gorskih destinacijah pripomoreta k razvoju gorskih destinacij in da boljše stanje v okoljih tudi pozitivno vpliva na inovativnost gorskih destinacij, so uporabne tako za raziskovalce kot tudi menedžerje v gorskih destinacijah. Raziskava namreč določi merilno orodje, ki pomaga ugotoviti problematična področja in pospešiti razvoj gorskih destinacij. Lahko odkrijemo prednosti, slabosti, priložnosti in nevarnosti v gorskih destinacijah, kar destinacijam omogoča, da se lažje spopadejo s spreminjajočim se okoljem in podprejo trajnostni razvoj destinacije.

Ključne besede: gorska destinacija, okolja, inovativnost, razvoj, trajnost, mere pomembnosti, faktorska analiza, LISREL.

MODELLING MOUNTAIN TOURISM DESTINATION DEVELOPMENT WITH FOCUS ON INNOVATIVENESS

SUMMARY

This dissertation focuses on mountain tourism destinations, which are researched in terms of the constructs mountain destination environments, mountain destination innovativeness and mountain destination development; elements and factors within these constructs are also explored. Furthermore, the relationships between the constructs are tested, such as the effects of environments and innovativeness on mountain destination development. A thorough review of tourism destination literature, focusing on mountain destinations, represents the grounds for the research. Theoretical underpinnings of tourism environments, innovativeness and destination development are applied to mountain destinations and represent the basis for the development of the elements. Mountain destinations are increasingly seeking development opportunities in tourism. In order to keep pace with quickly changing situations, it is necessary to determine the environments that contribute to sustainable tourism development. The rapidly changing business environment is forcing destinations to innovate in order to remain competitive. Innovation is increasingly recognised as being important for destination development. In times of economic uncertainty, a comprehensive overview of the elements and factors of mountain destination innovativeness can contribute to the better development of mountain destinations. In order to determine the stage of mountain destination development, a tool for its measurement should be put in place. It is necessary to identify the important elements and factors that comprise all aspects of sustainable mountain destination development. There is a lack of integral literature regarding mountain destination environments, innovativeness and sustainable development of mountain destinations.

Based on an extensive review of literature, comprehensive lists of elements of mountain destination environments, innovativeness and development were formed. In order to determine the important elements, surveys have been sent to international samples of all stakeholders in mountain destinations and tourism researchers. Exploratory factor analyses have been conducted using only the more important identified elements to determine the coherent factors that represent the underlying dimensions of mountain destination environments, innovativeness and development. Based on these factors and the corresponding elements, the research-based mountain destination innovativeness model is developed. This model serves as a tool for the identification of the relationships between the constructs mountain destination environments, innovativeness and development. A linear structural relations model that analyses covariance structures is used for testing the mountain destination innovativeness model.

The first part of the research determines the elements and factors of mountain destination environments that are important for mountain destination development. The identified factors are: technological environment, socio-cultural environment, natural environment, and political and legal environment. The economic environment has not been identified among these factors, and the reasons for its absence are examined. The research also identifies important elements of innovativeness that contribute to mountain destination development, and determines the factors that comprise these elements. The results show that mountain destination innovativeness incorporates the factors socio-cultural sustainability and stakeholder participation, environmental sustainability (natural environment) and proactiveness. Furthermore, the research identifies the important elements for measuring mountain destination development and groups them into factors. A four-factor solution has

been produced and the factors have been labelled based on the elements that constituted them. The factors for measuring mountain destination development that have been discovered are socio-economic prosperity and preservation of the natural environment, which correspond to the sustainability dimensions of the elements for measuring mountain destination development. The other two factors that have been found are tourist traffic and expenditure, and visitor satisfaction, which provide a more typical view on how to measure mountain destination development.

The second part of the research describes the influence of environments and innovativeness on mountain destination development, and analyses the influence of environments on innovativeness in mountain destinations. The mountain destination environments construct has been found to positively influence the mountain destination innovativeness construct. The mountain destination development construct has been found to have been positively affected by its different environments. Furthermore, mountain destination development has also been positively influenced by mountain destination innovativeness; it can be concluded that mountain destination innovativeness has partially mediated the relationship between mountain destination environments and mountain destination development.

This dissertation provides in-depth knowledge to both academics and stakeholders in mountain destinations. The first part of the research can help mountain destinations in their ability to respond quickly and properly to the challenges posed by the business environment. It provides information to mountain destination managers about which factors of environments help advance sustainable destination development. It also identifies the factors of mountain destination innovativeness to focus on in order to increase destination innovativeness and development. Moreover, the identified factors for measuring mountain destination development can help destinations to identify areas in which they excel and areas they need to improve in order to achieve sustainable destination development.

The findings of the second part of the research, which show that better states of environments and innovativeness in mountain destinations contribute to improved mountain destination development and that a better state of environments also positively influences mountain destination innovativeness are useful for both the researchers and mountain destination managers, since the research provides the measurement tool that helps to identify the problematic areas and increase mountain destination development. Strengths, weaknesses, opportunities and threats at a mountain destination can be discovered, which can enable destinations to better cope with the changing environment and support sustainable destination development.

Keywords: mountain destinations, environments, innovativeness, development, sustainability, measures of importance, factor analysis, LISREL.

TABLE OF CONTENTS

LIST OF TABLES

TABLE OF FIGURES

INTRODUCTION

Mountain ecosystems are essential for the survival of the global ecosystem. They represent an important source of water, energy and biological diversity. Mountains not only provide minerals, forest products and agricultural products, but represent an important source of recreation, which has contributed to the rapid popularisation of mountain tourism. However, in recent decades, significant changes have taken place, such as accelerated soil erosion, landslides and rapid loss of habitat and genetic diversity. Besides these negative effects, many mountain inhabitants are experiencing poverty and a loss of indigenous knowledge. Therefore, mountain destinations are in dire need of the proper management of mountain resources and the adequate socio-economic development of mountain communities. About 10% of the world's population depends on mountain resources (United Nations, 1992). Furthermore, mountain resources represent an important resource for over 50% of the world's population; mountains cover over 20% of the Earth's land surface (Ives, 1992). In Europe, for instance, the Alps cover 190,959 km²; they cover 28.7% of the overall area of Austria, 27.2% of Italy, 21.4% of France, 13.2% of Switzerland, 5.8% of Germany, 3.6% of Slovenia, 0.08% of Liechtenstein and 0.001% of Monaco. Human beings have been living in the Alpine area for millennia; nowadays, this area represents a living environment for 14 million people (from many linguistic groups and from 5,867 municipalities), for around 30,000 animal species and for 13,000 plant species, 388 of which are endemic. The Alps have been recognised as a popular tourism destination for over 150 years; in the recent times, around 100 million tourists visit the Alps each year. An average tourist spends four nights per visit. Five million beds are available; in one third of the Alpine municipalities there are no tourist beds, but in 135, there are more tourist beds than there are inhabitants. Another specific of the Alpine area is the higher importance of the winter season in terms of nights spent and the creation of value; however, climate change might alter that and summer season might become more important for numerous Alpine destinations (Alpine Convention, 2009a).

Economic development of the Alps in recent decades has put tremendous pressure on the natural, social and cultural environments. There is a need for sustainable development of the Alps; development of tourism in the Alps is no exception. The Alpine Convention has set the objective of sustainable tourism development and the promotion of innovation in Alpine tourism (Alpine Convention, 2009a). In order to achieve such sustainable and innovative mountain destination development, there is a need for in-depth research of mountain destination environments, innovativeness and development, and to explore the impacts of environments and innovativeness on mountain destination development. Elements that could improve destination environments, innovativeness and development should be researched and a mountain destination innovativeness model (MDIM) should be developed, since mountain tourism destinations are currently experiencing pressure, uncertainty and crisis (Bourdeau, 2009). Despite the comprehensive body of literature dedicated to each of the various aspects of tourism destinations in recent years, there is still a lack of destination research that encompasses all the different factors of destination development. The need for a

comprehensive overview of important environments for destination development has become evident. Such a focus can provide an integrated perspective that enables the efficient management of the factors of a destination's success (J. R. B. Ritchie & Crouch, 2003) and can help battle economic uncertainty, which substantiates the need for measurement of important environments for destination development. Although innovativeness can contribute to destination competitiveness and development, not much research has been done regarding the stage of innovative activities, their influence and meaning for destinations (Flagestad, Hope, Nordin, & Svensson, 2005; Hjalager, 2010). Reviewing the literature reveals the need for a comprehensive overview of important factors of innovativeness on a destination level; such a focus can accelerate destination development. There is still a lack of information regarding destination development and the important factors affecting it. The European Commission (2009) called for the development of elements for measuring sustainable development. Recent findings call for different measurements of destination development, ones that are not based solely on economic foundations. This issue should be addressed by developing a list of elements that comprises all aspects of destination development, which includes economic, social, cultural and natural dimensions of destinations, as well as visitor satisfaction. Taking into account all stakeholders and aspects of destination development could provide a strong foundation for the identification of elements and consequential factors that do not only measure the economic success of destinations, but also the sustainable development of these destinations.

Purpose and goals of the research

The goals of the first part of the research are to explore elements of mountain destination environments, innovativeness and development in terms of their importance, and to search for coherent factors within mountain destination environments, innovativeness and development. Dwyer, Knežević Cvelbar, Edwards and Mihalič (2012) acknowledged that competitiveness attributes vary across locations. To standardise this research and compare only similar destinations, the focus is placed on mountain destinations. Dwyer and Kim (2003) identified the need for more research on the relative importance of different dimensions of destinations. Multiple authors have discussed the importance of different factors concerning the destination (Crouch, 2007, 2011; Enright & Newton, 2004, 2005; Lam, 2006; Macchiavelli, 2009); however, mountain destinations are still under-researched in this area. Development of a comprehensive MDIM provides an overview and different aspects of mountain destination environments, innovativeness and development; the purpose of the research is therefore to provide a useful tool for further research in the field of mountain tourism, as well as to provide an aid for decision making in mountain destinations.

The goals of the second part of the research are to examine whether higher performance of mountain destination innovativeness contributes to mountain destination development, and whether innovativeness can be regarded as a mediator between environments and destination development. It is expected that innovativeness affects destination development (Dobni, 2008; Haugland, Ness, Grønseth, & Aarstad, 2011; Volo, 2005; Zach & Fesenmaier, 2009).

Destination competitiveness and development is also influenced by the performance of its environments (Crouch & Ritchie, 1999). Therefore, it is also researched whether higher performance of mountain destination environments positively impacts mountain destination innovativeness and development. The purpose of this part of the research is thus to increase knowledge in regard to the relationships between different aspects of mountain destinations and to provide guidance on improving mountain destination development.

Data and methodology

The researched model, based on a literature review, is guided by the opinions of the panel of experts. The first part of the research is based on the data gathered from three separate surveys, which covered the importance of mountain destination environments, innovativeness and development. The surveys were sent to tourism researchers, consultants and different stakeholders at mountain destinations (destination management organisations, local tourism organisations, ski area operators, hotel managers, local governments, event managers, incoming agencies, non-governmental organisations, attraction managers, and representatives from transport sectors, international organisations, chambers of commerce, convention centre management, catering, and other organisations) in order to determine the elements that are perceived as important from the widest point of view. The important elements are kept and factors that represent the underlying dimensions of mountain destination environments, innovativeness and development are determined with the help of exploratory factor analyses (EFAs).

Destinations have to be somewhat similar to enable the efficient measurement of the relationships between the constructs, which are analysed in the second part of the research. Therefore, only mountain destinations in Europe have been chosen for the second part of the analysis, which is based on data from the fourth and final survey performed in the course of the doctoral research. The questions were aimed at measuring the performance at the destination level; mountain destination managers were surveyed and asked to grade the performance of environments, innovativeness and development in their own destinations, in comparison to an average mountain destination. The relationships between the constructs are tested with the linear structural relations (LISREL) software package that analyses the covariance structures. Previous research indicates that structural equation modelling (SEM) is an appropriate tool for measuring the relationships between mountain destination environments, innovativeness and development. SEM establishes the path coefficients of mountain destination innovativeness and mountain destination environments, which allows us to determine the contribution of these latent constructs to mountain destination development. The contribution of mountain destination environments to mountain destination innovativeness can also be measured.

Theoretical and practical contributions

The first part of the research increases knowledge in the sector of mountain tourism with the provision of the comprehensive analysis of all important areas in mountain destinations. Information on environments, innovativeness and development in mountain destinations is provided by all stakeholders in mountain destinations as well as researchers from the fields of destination management, mountain destinations and innovativeness. The results based on their opinions provide material for study for both the academics and practitioners in the private and public sectors. The beneficiaries are the researchers as well as the consultants, destination management organisations, local tourism organisations, ski area operators, hotel managers, local governments, event managers, incoming agencies, non-governmental organisations, attraction managers and other sectors (transport, international organisations, chambers of commerce, convention centre management, catering, and other organisations). The research provides productive findings for researchers of mountain tourism, tourism destinations and innovativeness. It fills the gap in the current literature with identification of important elements of environments, innovativeness and development, and by grouping them into factors. Research indicates that the existing destination competitiveness models can be enhanced by including innovativeness and more clearly defined tourism environments at destinations. The results also have practical implications, as they provide knowledge for destination managers and other stakeholders in mountain destinations. They can be used as an aid to identify a destination's strong and weak points, and consequently through addressing the issues, help achieve growth and sustainability. Destinations can use the results when determining practices and policies to accomplish synergies through improved cooperation and decision making.

Second part of the analysis provides information to researchers and destination managers regarding the relationships between important determinants of destination development. The answers regarding the states of the environments, innovativeness and development in mountain destinations are provided from mountain destination managers in Austria, France, Germany, Italy, Slovenia and Switzerland. Therefore, the research provides knowledge regarding the impacts of improved environments and innovativeness on mountain destination development in these countries, which is valuable for researchers in the fields of destination management, mountain destinations and innovativeness, since these relationships have been under-researched. This research therefore delivers foundations for increasing knowledge regarding the effects of environments and innovativeness on destination development, which is a welcome addition to the existing destination competitiveness models. Perhaps even more valuable is the ability of mountain destination managers to use the determined connections between the constructs to steer the decision making in the proper direction, properly respond to mountain destination environments and foster innovativeness, which will consequently contribute to sustainable mountain destination development.

Structure of the dissertation

This doctoral dissertation is divided into six sections. After the introduction, the second section presents a theoretical overview of tourism destinations. This section comprises a theoretical definition of tourism destination environments, tourism destination management and presents tourism destination competitiveness models; innovativeness in these models is also discussed. The last part of this section describes mountain destinations. Furthermore, the theoretical underpinnings of mountain destination environments, innovativeness and development are presented.

The third section is concerned with the theoretical development of the MDIM. Theory-based elements of mountain destination environments, innovativeness and development are presented. Mountain destination environments comprise the political and legal environment, the economic environment, the socio-cultural environment, the natural environment and the technological environment. Therefore, the elements in these environments are discussed. The elements of mountain destination innovativeness are also discussed, which comprises innovative elements in mountain tourism attractors and innovative elements in mountain destination management. More specifically, innovative elements in mountain tourism attractors are composed of innovative elements in general infrastructure, innovative elements in tourism infrastructure, innovative elements in tourism superstructure, innovative elements in socio-cultural attractors and innovative elements in natural attractors. Moreover, innovative elements in mountain destination management are composed of innovative elements in destination policy, planning and research, innovation management of a destination, innovative elements in destination marketing and innovative elements in destination product development. At the end of this section, the elements for measuring mountain destination development are also presented. Mountain destination development is measured through tourist traffic, visitor expenditure, visitor satisfaction, economic prosperity, socio-cultural prosperity and preservation of natural environment.

These theoretically derived elements are then analysed in the fourth and fifth section, which deal with the empirical testing of the MDIM. In the fourth section, the elements and factors of the constructs of the mountain destination innovativeness model are determined. Theoretically derived elements of mountain destination environments, innovativeness and development are tested for their importance for mountain destination development and its measurement and grouped into factors. At the beginning of the section, problem definition, purpose and goals of research, research questions, and data and methods are presented. The three subsections that follow are concerned with determining the elements and factors of mountain destination environments, innovativeness and development, and all contain the findings regarding the importance of elements and how they group into factors. In the subsection that determines elements and factors of mountain destination environments, the reasons for the missing economic environment are also presented. This section concludes with the limitations and implications for theory, practice and further research derived from the first part of the research.

In the fifth section, the relationships between the constructs of the mountain destination innovativeness model are determined. More precisely, the impact of environments and innovativeness on mountain destinations development is examined. This section also starts with problem definition, purpose and goals of research, followed by the hypotheses, data and methods, validity and reliability of factors and constructs, and SEM analyses, which comprise data examination, determining the overall model fit, measurement model fit and structural model parameters. The fifth section also concludes with the limitations and implications for theory, practice and further research.

The sixth and final section concludes this dissertation and discusses the goals of the research in the connection with the research questions and hypotheses, based on which the results, derived from the research, are presented. The value of the research is thoroughly discussed as the final culmination of the research efforts exhibited through the dissertation.

1 TOURISM DESTINATIONS

A tourism destination can be defined as a geographical area that is perceived as a separate unit by tourists. It has to feature attractions, i.e. elements of primary tourism supply; it has to have natural, cultural-historic, social or built attractions meeting the expectations of potential and real tourism demand. A tourism destination also has to provide elements of secondary tourism supply; it has to have receptive facilities and organisations that both take care of attractions' valorisation, and create such tourism products that meet the demand of tourists, providing them with accommodation and various forms of recreation at the destination. Secondary tourism supply includes general and tourism infra- and superstructure (Mihalič, 2008). Natural, cultural, heritage and social attractors, general infrastructure, tourism infrastructure and superstructure are therefore crucial for destinations (Dwyer & Kim, 2003; J. R. B. Ritchie & Crouch, 2003). The destination has to be accessible; it has to have a well-developed transport network, roads, traffic connections, terminals and sales paths and meet political and legal conditions for the destinations that enable joint promotion, destination development planning and the creation of tourism destination products. A tourism destination is the reason for travelling, and a tourism destination's attractions stimulate tourism demand. Destinations are the place that tourists travel to, where they spend their time and stay overnight. From the tourists' viewpoint, tourism destinations are in fact a blend of attractions, services and the transport system. If one of these elements is missing, the tourism destination cannot properly develop. Moreover, the elements have to be in harmony in order not to cause bottlenecks in the destination development. For the purpose of this research, a destination is defined as a whole entity, comprising one or several areas or municipalities, complying with all the aforementioned conditions for a destination (perceived as a separate unit by tourists, featuring elements of the primary and secondary tourism supply, being accessible, and meeting political and legal conditions for a destination). Therefore, a destination should fulfil the condition for political and developmental capabilities, and to a certain level also the ability to plan and develop tourism on its own (Mihalič, 2008).

1.1 Tourism destination environments

Collaboration, co-dependency and coordinated activities of the economic, political, socio-cultural, technological and natural environments are crucial for long-term success and sustainable destination development. At a time of increasing efforts in environmental protection, tourism has become an important topic due to its negative impacts on ecological environment (both socio-cultural and natural) (Lama & Sattar, 2004). Destinations should be active in addressing this issue and also guide and advise the companies at the destination about sustainability. A destination differs to a company and therefore has different priorities (J. R. B. Ritchie & Crouch, 2003). At the firm level, tourism businesses put high importance on the economic elements (Mihalič, Žabkar, & Knežević Cvelbar, 2011), but at the destination level, other imperatives are also important; for instance, the natural environment can be one of the most important factors of destination success (Huybers & Bennett, 2003).

Destinations therefore have to strive not only for economic efficiency, but also for the protection of the natural environment and for lowering the negative impacts on the socio-cultural environment. The concept of prosperity used to be linked mainly to economic success, whereas today the need for co-dependency of economic, social, cultural and ecological welfare has been identified in order to ensure a long-term success of the destination. Tourism can add to social development, as it can provide the resources for the renovation of cultural heritage and generate employment. It can also improve the quality of life of the local population. Both legislators and the wider population have come to realise that various sectors of economy are tightly connected. The tourism sector's success therefore depends on the efficiency of energy, technological, telecommunication, agricultural and transport sectors (J. R. B. Ritchie & Crouch, 2000).

When it comes to political environment, it is crucial to be aware of the fact that tourism development has to comply with sustainability principles, i.e. development has to be well planned, promoted and managed. Planning is a process requiring constant research with adjustments to plans and aims for resource preservation and improvement. The government is responsible for tourism planning that has to be based on the improvement and preservation of natural and built resources, as well as the suitable spatial planning of tourism. Therefore, tourism development has to be based on proper tourism policies. Tourism has many negative impacts on natural environment, especially mass tourism, and both politicians and the wider public have started realising the need for reductions of environmental damage. In order to ensure the sustainable development of a destination, one has to include the opinions of tourists into the system, and estimate environmental and social impacts of the planned development (Schianetz, Kavanagh, & Lockington, 2007). The concept of sustainable tourism development means that tourism policies have to follow the principles of protection of natural, social and cultural environment and simultaneously achieve economic success (Mihalič, 2006b). The economic mechanisms in tourism do not work properly, since the free market leads to the overuse of ecological resources. Tourism policies have to ensure tourism attractions' protection and preservation. Tourism development has to become ecologically acceptable. In contemporary society, we cannot explain economic subjects' behaviour by using classic economic instruments, since the economic system functions in close connection with the political system, and we cannot study it as a closed system. The process of accepting the principles of ecological instruments can therefore be slower than it would be rational from the ecological and economic point of view, since political interests are present as well. These also affect the process of realising the already accepted instruments of ecological and economic policies, which can be hindered due to the conflict of interests, or they can even stagnate in some cases. Tourism policies have to be planned in such a manner that they also ensure implementation. Therefore, it is important to take into consideration political factors when thinking about tourism policies. Findings about the various interests of groups taking part in the implementation process have to be connected to the findings about economic viability of ecological elements. Tourism policies should include findings from the fields of tourism ecology and environmental economics. Ecologically responsible behaviour in tourism, led by

social ecological ethics, should be the basic guideline for the destination development, enabling simple monitoring and implementation of instruments of ecological tourism policies (Mihalič, 2006b).

The development of tourism infrastructure stimulates local trade and industry. Direct tourism consumption fuels the purchasing power at the destination and stimulates the economy. Natural and cultural attractions, attracting tourists to the destination, are assigned value. The development of tourism infrastructure has a multiplication effect, and tourism acts as an economic boost for the construction of general infrastructure, which is available for the local population as well. Tourism is also considered to be a stable source of income at times of recession, as it enables diversification of the economy and offers a variety of employment opportunities. It is perceived as an opportunity for small businesses and enterprises. Therefore tourism improves the quality of life of the local population and helps in the preservation of local culture and traditions, as well as in the preservation of the natural environment and cultural and historic attractions (Mihalič, 2006b). Due to the changes in society and the increasing importance of tourism, tourism is now included in economic and social planning. However, the development of tourism also brings about the social responsibility that calls for a better quality of the information used in the process of planning and decision making. Political consensus in regard to development is needed as well, as it influences the economic, social and environmental wellbeing. Competitiveness has to result from suitable approaches that are not supposed to cause damage to less competitive destinations (J. R. B. Ritchie & Crouch, 2000).

Technology has had a huge impact on tourism; jet travel, computers, and telecommunications are just some examples. The development of technology goes hand in hand with business processes in tourism, for instance the decreasing role of intermediaries caused by the development of the Internet (Page, 2012). Destinations have to keep pace with such technological development in order to ensure long-term competitiveness, one such example being the common reservation system for the accommodation providers at a destination, or new types of reservation systems that allow for optimisation of demand (El Gayar et al., 2011). Tourism is also tightly connected with technology in the area of general infrastructure, which is absolutely crucial for destinations (Dwyer & Kim, 2003; J. R. B. Ritchie & Crouch, 2003). The development of tourism brings about higher number of guests and that calls for a better general infrastructure. New airports, roads, marinas, electricity and communication infrastructures, and water, sewage and waste management facilities are considered to be the technological improvements at the destination that can significantly add to the quality of life of the local population by providing clean water, better electricity supply, faster communication and better transport. The development of information technologies ensures better insight into the available offers for the customer; it also leads to customer satisfaction, and makes it easier to compare prices. For service providers, it ensures the direct communication with consumers, the possibility for the management of processes concerning the access to information, and the dynamic packaging and pricing. The development of global tourism networks has a strong influence on intermediaries who are turning into virtual

intermediaries. Service providers are starting to cooperate and contribute to the creation of their own intermediaries and the intermediaries created by destination management organisations (DMO) (Page, 2012).

1.2 Tourism destination management

Proper management is essential for protecting the abovementioned attractors and environments (Crouch, 2006) and for successful tourism infrastructure (Pechlaner & Tschurtschenthaler, 2003). A DMO is the main stakeholder in a destination (Buhalis, 2000). The task of the DMO is to help the local businesses build sustainable competitive advantage and, by positioning the destination properly, contribute to the competitive advantages of the whole area (Enright & Newton, 2004). Businesses and organisations involved in tourism are recognising that strategic management is the key element for achieving competitive advantages due to the processes focused on the creation and implementation of the tourism destination strategy with the help of DMOs (Go & Govers, 2000). A DMO strategically manages the tourism destination, and coordinates stakeholders to achieve strategic goals, such as destination development (Crouch, 2006; Enright & Newton, 2004; Go & Govers, 2000). Strategic management has to comprise two types of processes that play a key role in the success of the destination. Operation processes, new product development and communication are considered to be primary processes. Operation processes, for instance accommodation capacities, are the responsibility of the companies from the private or public sector. The DMO may also be responsible for the introduction of new services and tourism packages targeted to well-defined segments of customers. Strategic communication and operative communication are the processes taking care of the repeat business and attracting new customers. The DMO has to play the role of the supervisor to make sure that the strategic decisions are implemented. Supportive processes contribute to the greater efficiency of primary processes. Internal marketing is responsible for the continuing dialogue between the DMO service providers. Education applies to all stakeholders at the destination, managers as well as service providers and tourists. Research is focused on the continuous improvement of the services offered. To ensure the long-term success, destinations have to make sure that primary and support processes are highly developed (Sainaghi, 2006). Protecting, maintaining or strengthening the destination development is a key challenge in the tourism sector. The DMO is responsible for the destination tourism products, their planning and marketing. The products and the image of the destination are created in the partnership with other stakeholders. Primary stakeholders are directly contacted, while the secondary stakeholders have indirect influence on the operation. There are numerous players involved, which makes the management of destinations more complex. In order to achieve its goals, the DMO has to be well-acquainted with the relationships and potential influences that different players may have on the implementation of goals in the area of tourism. Stakeholders play an important role in the process of financing, building the superstructure and creating the products. They also take part in the promotional programs and impact the local administration (Sheehan & Ritchie, 2005). Local governments are the main source of financing of the DMO by collecting

hotel taxes, concessions, membership fees and revenues from advertising. In the tourism market, the competitors are destinations and not individual companies (J. R. B. Ritchie & Crouch, 2000). Therefore every uncoordinated action of the individual tourism service provider may be harmful. Destination management has to ensure long-term development for the local population, the maximum customer satisfaction, the maximum profitability of local businesses, and the optimisation of the impact of tourism development on the environment (Buhalis, 2000).

1.3 Tourism destination competitiveness models

Theories, frameworks, models, or processes have been developed to cope with aforementioned challenges and to provide an insight to the complexity of management (Crouch, 2007). Destination competitiveness models have proven to be especially useful tools in the tourism sector. The two most influential models were developed by Crouch and Ritchie (1999), which was then improved in 2003 (J. R. B. Ritchie & Crouch, 2003), and by Dwyer and Kim (2003). Crouch and Ritchie (1999) based their model on the national "diamond" of Porter (1990). They applied the idea of the competitiveness of nations on the tourism destination level. Dwyer and Kim (2003) enhanced the model, developed by Crouch and Ritchie (1999), by including demand conditions as a determinant of destination competitiveness and recognising that destination competitiveness is not the end goal in itself, but the "intermediate goal towards the objective of regional or national economic prosperity".

The destination competitiveness model is a mechanism used by the tourism sector for the analysis, prediction, planning, and communication of competitiveness strategies. It is based on the concept of comparative and competitive advantages of the destination. For the tourist experience one has to visit the place, which shows that tourism is highly dependent on factor conditions, representing an important aspect of attraction. The differences between these factors are discussed in the theory of comparative advantages, which cannot sufficiently explain destination competitiveness on its own. The possibility of the effective use of the aforementioned factors is also an important element of the destination competitiveness (J. R. B. Ritchie & Crouch, 2000). The quantity of natural and socio-cultural resources is a comparative advantage of a destination, and the ability to create added value by using the aforementioned resources and the valorisation of the goods is the competitive advantage. The comparative advantages of the destination are its location in regard to major markets, climate, geographical territory, as well as the number of inhabitants (accounting for the potentially higher number of potential tourists), the amount of knowledge, the size of the economy, and access to capital (J. R. B. Ritchie & Crouch, 2000). They are also shown in the resources "that are not the result of labour and cannot be created by human beings in equal quality and with the same degree of applicable value" (Mihalič, 2008). Natural resources are not the product of labour, and their quality and quantity is determined by nature. Although they cannot be created by people, their quality may be degraded by them. Anthropogenic resources are the result of the labour, but they cannot be recreated with the same applicable value, because the past labour cannot be repeated (Mihalič, 2008). The comparative advantage of the destination

may also be found in the secondary tourism supply "comprising the tourism resources that are the result of the human labour and can still be recreated by man under the same circumstances in the required quantity and of the same quality" (Mihalič, 2008). They are considered to be the attractions of the destination that include the manufacturing capacities, as well as the products and services themselves. They include the general infrastructure, only indirectly used by tourists, and tourism infrastructure, which includes buildings and capacities that offer tourism products and services, which are demanded by tourists. The tourism superstructure comprises the elements of the production within tourism infrastructure, and it includes tourism products and services (Mihalič, 2008). The competitive advantages of the destination are evident in the efficient management of natural and anthropogenic resources, sustainable development, the protection of the ecological environment, while simultaneously ensuring the economic benefits for the destination based on its improved attractiveness. This increases the value of the destination due to greater customer satisfaction, which results in a willingness for higher expenditure for the destination experience. This may be done together with the increase in the number of the customers, but at the same time with the consideration for the carrying capacity of the destination. Efficient human resources management and the emphasis on the innovation are critical for the destination's competitiveness.

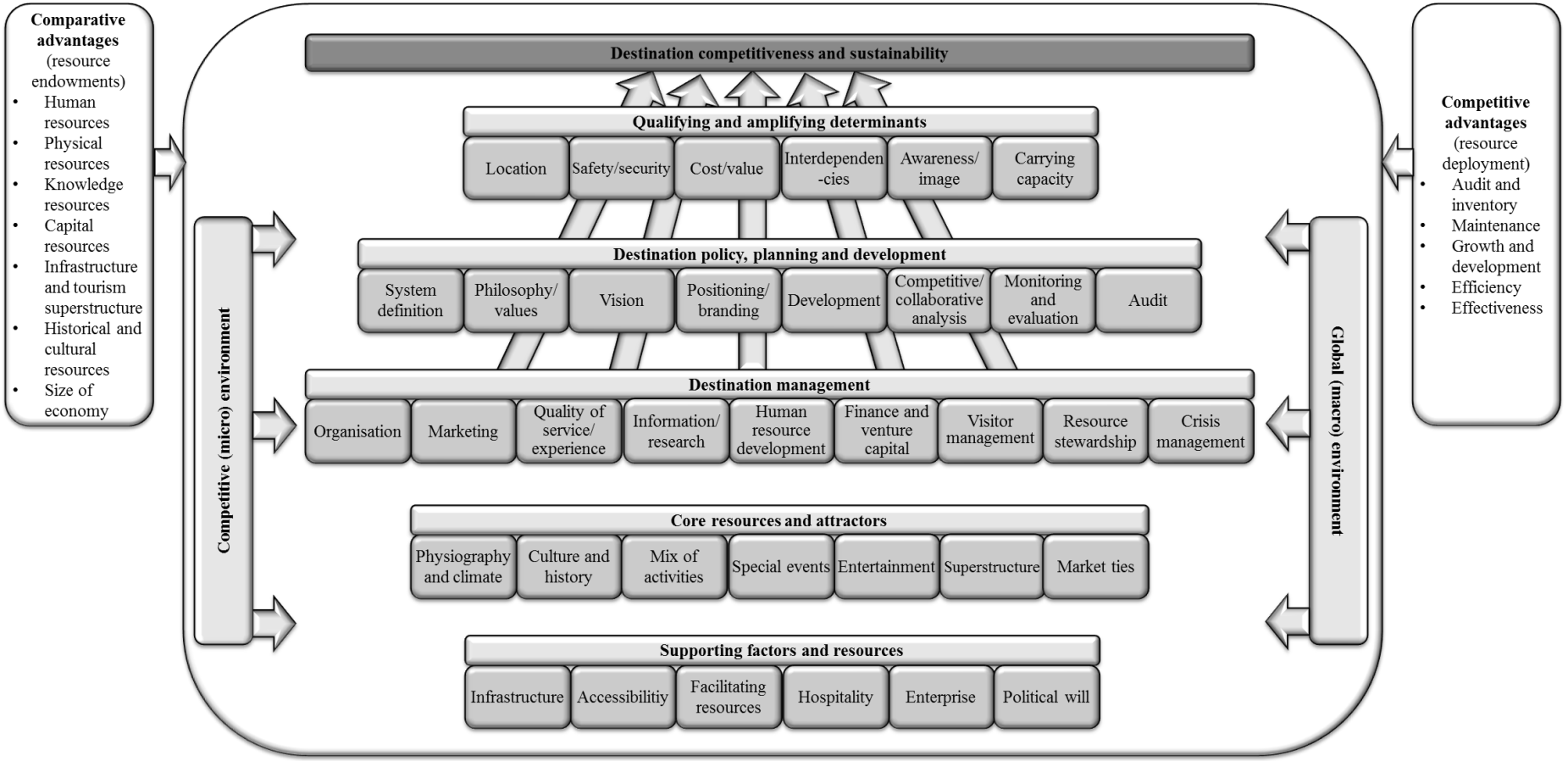
The adequate management of resources is extremely important for the long-term competitiveness of a tourism destination. Cooperation and communication between the stakeholders is necessary for the adequate planning of the suitable destination development. The consensus between the stakeholders in regard to tourism development strategy at the destination is essential. Furthermore, strategies for the management of human resources, the protection and preservation of natural and anthropogenic resources, the promotion of knowledge and the acquisition of new knowledge, increased investment and capital growth, as well as the development and maintenance of the general and tourism infrastructure are needed. The available resources are considered to be the comparative advantage of the destination, while the ability of the destination to ensure the long-term use of these resources is considered to be its competitive advantage. The destination with a greater number of resources can be less competitive than the destination with much fewer resources that are more efficiently used; the efficiency of resource usage ensures the competitive advantage of the destination (J. R. B. Ritchie & Crouch, 2000). Still, the resources have to be interconnected and they should supplement each other. The usage and management of resources, to achieve competitive advantage, is based on the listing of the resources, which is necessary to ensure that later the resources are adequately used. It is not merely a list of resources, but it includes also the information about their carrying capacity, limitations, and the effects of their use. The maintenance and protection of the resources is also essential for the long-term competitiveness of the destination. Adequate maintenance can protect the resources from the deterioration of their quality and ensure the sustainable development.

The concept of comparative and competitive advantages is a theoretical base for the development of the destination competitiveness model. However, the consideration of only comparative and competitive advantages is not enough. It is necessary to understand the

connections between the factors of competitiveness; this calls for a systemic destination competitiveness model. The destination may be without a major competitive advantage, but in spite of this it may be highly competitive due to its system of the connections between factors. The goal of the destination competitiveness model is the increase in the destination competitiveness and development. Destinations have to ensure that they are attractive as an entire entity, and the experience offered to the visitor has to be the same or better than the offer of the competing destinations (J. R. B. Ritchie & Crouch, 2000). J. R. B. Ritchie and Crouch (2003) thoroughly discussed comparative and competitive advantages in their model (Figure 1). They also identified two types of environments that influence the elements at the destination. The competitive (micro) environment comprises those factors that are shaped by different private and public sector institutions at the destination. The global (macro environment) influences the destination, but managers have no control over this. The authors further discuss the factors within these environments, which are economic, technological, political and legal, natural, socio-cultural and demographic (J. R. B. Ritchie & Crouch, 2003).

Based on this wider framework, the authors set the factors that enable destination competitiveness. The supporting factors and resources represent the grounds for development of all other factors. They are not the reason for visitation, but they are the predisposition for pleasurable tourist experiences, and proper supporting factors and resources positively affect destination competitiveness and development. The core resources and attractors are the core reason for visitation and represent the basic factors for destination development. Destination management incorporates the activities that implement the policy and planning framework. It contributes to the improvement of the appeal of the core resources and attractors, strengthens the quality and effectiveness of the supporting factors and resources, and helps in response to the constraints and opportunities given by qualifying and amplifying determinants. Economic and social goals can be achieved with the help of strategic and policy-driven framework for destination development and planning. Destination planning, policy and research ensure that sustainability principles are followed and that the quality of life of the local population is taken into account. Finally, qualifying and amplifying determinants are the situational conditions that moderate, modify or mitigate destination competitiveness as they filter the impacts of other groups of factors (J. R. B. Ritchie & Crouch, 2003).

Figure 1: Ritchie and Crouch's destination competitiveness model



Source: J. R. B. Ritchie & Crouch, 2003.

Dwyer and Kim's (2003) model enables the comparison between countries and between tourism sector industries in terms of their competitiveness. Their model combines objective and subjective measures of destination competitiveness, which improves its explanatory power. It represents a welcome addition to destination competitiveness literature as it discusses the destination competitiveness as an intermediate goal towards socio-economic prosperity. The ultimate end is therefore an increased quality of life of the local population. In Figure 2, Dwyer and Kim's (2003) model is presented graphically; it is explained in detail in the following paragraphs.

Dwyer and Kim's (2003) model emphasises the demand conditions as a crucial dimension of destination competitiveness, which is much less visible in Crouch and Ritchie's (1999) model. Dwyer and Kim (2003) conveyed the need to include the visitor's preferences in regard to destination attributes, and argued that there is a need for further research regarding the role of the demand side factors in improving socio-economic prosperity. They stated that the main elements of tourism demand are awareness, perception and preferences in regard to what a destination has to offer.

This already implies their belief that a destination's competitiveness evaluation should consider trends and that a destination should try to incorporate them into destination management to improve its competitiveness. The factors of destination management in Dwyer and Kim's (2003) model are those identified also by J. R. B. Ritchie and Crouch (2000). Destination management therefore includes the activities of "destination management organisations, destination marketing management, destination policy, planning and development, human resource development and environmental management" (J. R. B. Ritchie & Crouch, 2000 in Dwyer & Kim, 2003). However, Dwyer and Kim's (2003) model goes deeper and makes a distinction between the activities of private and public sector's destination management: "Included among the activities of the public sector we would find the development of national tourism strategies, marketing by the national tourism organisation (NTO), national and regional manpower programmes, environmental protection legislation, etc. Included among the activities of the private sector we would find those of tourism/hospitality industry associations, industry involvement in and funding of destination marketing programs, industry training programmes, industry adoption of 'green' tourism operations and so on" (Dwyer & Kim, 2003).

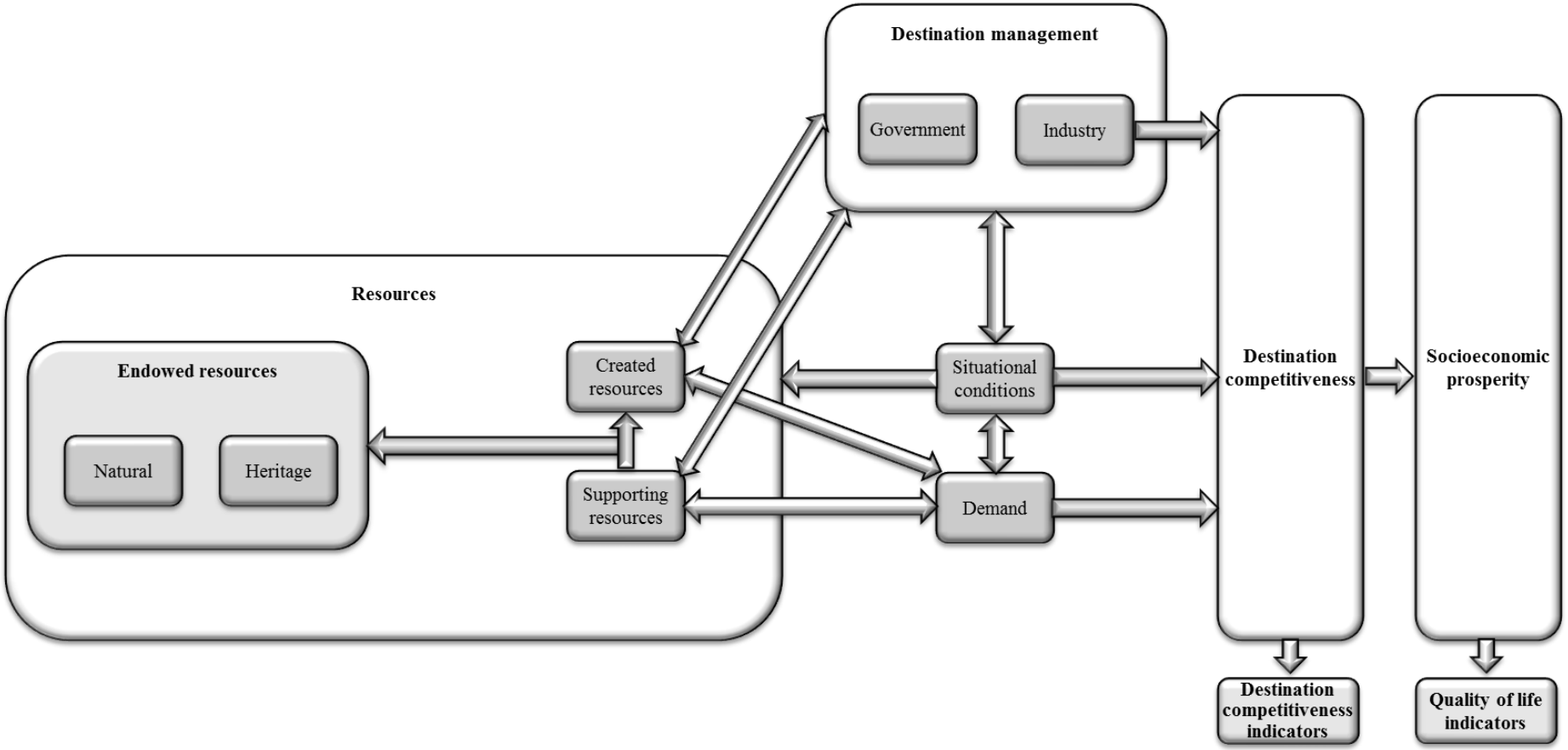
Situational conditions relate to Crouch and Ritchie's (1999) qualifying and amplifying determinants. They are the forces in the wider environment, and can be grouped into "economic, social, cultural, demographic, environmental, political, legal, governmental, regulatory, technological, and competitive trends and events" (Dwyer & Kim, 2003). Similarly to Crouch and Ritchie (1999), Dwyer and Kim (2003) also differentiated between the macro and the micro environments; they termed it the operating and the remote environments, and the situational conditions fall under one or the other. The remote environment impacts the destination, but managers at the destination can neither affect nor

control it. The operating environment is impacted by different public and private sector entities at the destination.

The model contains a meta-category termed resources, which includes endowed (inherited) resources, created resources, and supporting resources. Endowed resources include natural and heritage (or cultural) resources. Natural resources are (for example) mountains, seas, lakes, scenery and climate. Heritage resources are such elements as local cuisine, craftsmanship, beliefs and customs. In contrast, created resources include tourism infrastructure, activities, shopping and entertainment. The last category of resources, namely supporting resources (or enabling factors) include general infrastructure, destination's accessibility, market ties, hospitality, and service quality. These resources represent the base on which successful tourism can be established; they add value to the core resources.

Created resources and supporting resources are linked to demand and to destination management with two-directional arrows, which means that there is a two-way influence. Therefore, created and supporting resources influence demand and destination management, while destination management and demand conditions also influence what kinds of products and services will be offered at a destination. Situational conditions are linked to destination management and demand in the same way; there is a two-way influence between them. Destination competitiveness is linked to the determinants of competitiveness, but as mentioned before, it does not represent a final goal; the final goal is socio-economic prosperity. Both can be measured with a set of indicators; for instance, destination competitiveness can be measured through subjective indicators (appeal or scenic beauty of the destination) and objective ones (foreign exchange earnings from tourism or destination's market share). Socio-economic prosperity can also be measured through a set of indicators, such as rate of economic growth, income per capita, or employment levels (Dwyer & Kim, 2003).

Figure 2: Dwyer and Kim's destination competitiveness model



Source: Dwyer & Kim, 2003.

1.4 Innovativeness in tourism destination competitiveness models

Destination competitiveness models have proven to be very useful for improving destination management and promoting destination development. However, the occurrence of the global economic crisis and resulting changing trends require modifications to business models and tourism supply (UNWTO, 2010). Innovativeness in service sectors is gaining in importance; tourism is no exception (Hall & Williams, 2008). Schumpeter (1934) explained innovation as the introduction of a new product or improving quality of an existing product (product innovation), implementation of new production methods (process innovation), opening new markets (market innovation), obtaining new resources (input innovation), and a new way of organisation (organisational innovation). Tether (2005) noted that the innovation process in services is carried out differently than in production. In principle, innovation in services differs due to the collaboration with customers and suppliers and the usage of external sources of intellectual property. Softer aspects of innovation are emphasised, based on the organisational changes within service organisations, skills and professionalism of the employed workforce and their collaboration with other service providers, suppliers, trade associations and consumers. Similarly, innovativeness in tourism can be explained through five categories and their hybrids (Hjalager, 2002). The categories are product and service, process, management, logistic, and institutional innovativeness. Innovativeness in terms of products and services can be in a form of a new or just improved product or service. Process innovativeness means improvement of existing processes, and management innovativeness is a change in organisational structure, whereas logistic innovativeness means the change regarding the suppliers, buyers or partners. Institutional innovativeness is connected to the environment in which organisations operate and is beyond reach for an organisation (Hjalager, 2002). Hjalager (1997) claimed that innovation in tourism is largely dependent on the research and political wishes, but more recently, the customers, the local population and authorities are starting to demand the preservation of the environment, to which all stakeholders in tourism must respond with new solutions, which means different kinds of innovations, such as sustainable innovations; all innovative activities should be based on the sustainability principles.

Promoting innovativeness on a destination level and including it in a destination competitiveness model is similar to a regional innovation system, since the innovation process can be regarded as a result of individual actions, as well as mutual interactions between individuals, organisations, systems and institutions (Lambooy, 2005). A regional innovation system adheres to private and public interests, formal institutions and other organisations that operate in accordance with organisational and institutional arrangements. It forms the relationships that promote the production, use and dissemination of knowledge (Doloreux, 2003). Such participation enables pervasive and systemic effects that encourage businesses in the region to be more connected with each other, improve relationships and thereby further strengthen and promote regional innovativeness and competitiveness (Asheim & Gertler, 2006). The innovative destinations are able to foresee the changes in the environment and

adequately respond to and predict business opportunities. Being innovative makes it easier to implement the sustainable tourism concept. The ability to innovate adds to destination's competitiveness. Tourism is a complex, dynamic and non-linear system; planning its development is a demanding task. To achieve the sustainable development, it is important to encourage the cooperation of all stakeholders within companies, destinations and regions. Education at the destination is essential for the recognition of the sustainable development elements that reach beyond the responsibilities of private companies and local governments (Schianetz et al., 2007). Knowledge management contributes to better efficiency, better responsiveness to guests' wishes, the development of basic abilities of the company or the destination, and represents the support to innovativeness. In order to innovate, companies have to create the environment based on openness and trust and to align the interests of the individuals with those of the company. In the case of the destination, this is even more difficult as the destination is a much more complex system with more stakeholders. Governments used to play a less active role in the destination management. Today their role tends to be essential in promotion, regulation, presentation, planning, monitoring, maintenance, coordination, and the improvement and organisation of tourism resources (J. R. B. Ritchie & Crouch, 2000, 2003). The need for cooperation is evident at the local as well as at the regional level, and the same can be said for the public and private sectors in order to ensure the quality of tourism products, efficiency and competitiveness at the global level. Apart from economic goals, it is also important to take care of the environment, preserve the local culture and show concern for the local population. Economic success and the need for sustainable development should be the goal of every tourism destination, as this is the only way to ensure the long-term competitiveness and development without the degradation of resources (J. R. B. Ritchie & Crouch, 2000).

Over the previous decade, numerous destination competitiveness models were developed and proven to be useful tools in the tourism sector. However, there is still room for improvement in regard to destination competitiveness models; adding innovativeness might enable destinations to better respond to the fast changing environment. Crouch and Ritchie (1999) and also Dwyer and Kim (2003) mentioned innovation in their papers, but did not perceive it as a separate dimension of destination competitiveness. Crouch and Ritchie (1999) discussed forces that enable destinations' opportunities for innovation. Dwyer and Kim (2003) discussed innovation in terms of its usefulness for firms, rather than for destinations. Introducing innovativeness as a dimension of destination competitiveness and development can therefore supplement already existing destination competitiveness models. Tsai, Song and Wong (2009) believed that future research should focus on the development of useful measures of competitiveness and development that are adapted to the changes incurred in the environment. Special attributes of a destination that make it desirable are going to become increasingly important, and therefore, destination competitiveness models should include innovativeness. The models need to be adapted to technological changes and innovation that lead to increased diversity and quicker response to the rapid changes in the environment (Tsai et al., 2009). Using destination competitiveness models as a base, while including

innovativeness, provides strong foundations for the identification of elements of innovativeness that contribute to destination development. Including innovativeness to assist destination management can increase knowledge, and improve correct anticipation and responses. Having properly developed and preserved tourism environments and including innovativeness principles in destination management and attractors can lead to the improvement of quality and efficiency, attraction and appeal; which in turn lead to destination competitiveness and development.

1.5 Mountain destinations

Mountain destinations have been chosen for analysis since different competitiveness elements are relevant for different kinds of destinations (Dwyer & Kim, 2003). Innovation is also a localised phenomenon, highly reliant on destination-specific resources (Asheim & Gertler, 2006; Edquist, 2006). What makes mountain destinations so interesting is the high altitude and relative isolation that create specific conditions (Godde, 1999) that have enabled the preservation of habits and lifestyles at mountain destinations (Higham, 2003). Nepal and Chipeniuk (2005) described mountain destinations as being diverse, marginal, inaccessible, vulnerable, niche and aesthetic. For the purpose of this research, a mountain destination is defined as a geographical, economic and social entity. It incorporates companies, organisations, activities, areas and infrastructure to satisfy the specific needs of mountain tourists (adapted from Flagestad & Hope, 2001). The altitude and slope criteria used for the research to define a mountain destination are the criteria proposed by the Nordic Centre for Spatial Development (2004). For elevations above 2500 meters, there are no additional criteria necessary; all destinations above 2500 meters are mountain destinations. For elevations from 1500 to 2499 meters, the additional criterion is a more than 2° slope within a 3 km radius, whereas for elevations from 1000 to 1499 meters, a more than 5° slope within a 3 km radius and/or local elevation range are necessary; a local elevation range should be more than 300 meters within a 7 km radius. For altitudes from 300 to 999 meters, a local elevation range of more than 300 meters within a 7 km radius is required, and for altitudes from 0 to 299 meters, a standard deviation of more than 50 meters for cardinal points is necessary.

Snow-based tourism, adventure tourism (trekking, climbing, rafting, cycling), cultural tourism, ecotourism and pilgrimages to popular sites are all part of mountain tourism (Godde, 1999). Event tourism is also a part of mountain tourism (May, 1995). Multiple authors have called for the reinvention of mountain tourism (Bourdeau, 2009; Flagestad & Hope, 2001; Macchiavelli, 2009; Pechlaner & Sauerwein, 2002), which makes it a perfect research area. Mountain destinations are highly susceptible to changes in climate (Moen & Fredman, 2007) and tourism development in such fragile areas should be based on sustainability principles (Alpine Convention, 2011a). People living in the mountains have managed to preserve certain ways of life throughout history. However, recent changes have caused brain drain and losses of traditional ways of life (G. H. Miller, 1994). This is why it is crucial to be innovative and protect the fragile mountain environments when developing tourism. Mountain destinations have to develop sustainably, which includes incorporating sustainable innovations (Jorna,

2006). The theoretical bases for mountain destination environments, innovativeness and development are presented in the next three sub-chapters.

1.5.1 Mountain destination environments

In their conceptual model, Murphy, Pritchard and Smith (2000) presented destination environments as the foundation of the tourist destination experience and stated that these environments can have a significant effect on visitors. Undoubtedly, environments are inextricably linked and interdependent. They affect the influence of other groups of factors on destination competitiveness in both negative and positive ways (Dwyer & Kim, 2003). Tourism environments may therefore support or hinder tourism development (Mihalič, 2006a). Hence, the possibility of the effective utilisation of environments is an important element of the competitiveness of destinations (Crouch & Ritchie, 1999). Natural, cultural, social and technological environments are crucial for destination development (Dwyer & Kim, 2003; J. R. B. Ritchie & Crouch, 2003), and there is a need for more detailed research on the influence of these environments on tourism development (Kaynak & Marandu, 2011). Some researchers also point to political and legal environments as areas in which more research is needed (Clarimont & Vlès, 2009). Changes, big or small, in political forces, the natural environment and technology can cause major shifts in destination development (Dwyer, Edwards, Mistilis, Roman, & Scott, 2009). Economic, cultural, social and aspects in the natural environment are a basis for the definition of future scenarios of local development (Castellani & Sala, 2010) and should be acknowledged in order to achieve sustainable development (Godde, Price, & Zimmermann, 2000).

Political, economic, technological and ecological (natural, cultural and social) environments should incorporate sustainability principles. When the sustainability principles are properly used, the economic pillar can ensure the long-term business success. The socio-cultural pillar helps with the understanding and respect of the authenticity of the local inhabitants and the preservation of the traditional values as well as the built and cultural heritage. The ecological pillar ensures that the natural environment and resources are adequately used, as they are the key elements of tourism development. Apart from the aforementioned pillars there are also three demands for the implementation of the sustainable tourism development concept. For the sustainable tourism development, all stakeholders need to be well informed, and they need strong political leadership making sure that all of them are cooperating. Sustainable tourism has to ensure highly satisfied tourists, raise their awareness of ecological issues, and improve their responsible behaviour. Therefore, it also calls for ecological education (UNWTO, 2004).

In the case of mountain destinations, it is argued that environments are very sensitive to tourism influences (Flagestad & Hope, 2001). Socio-cultural and natural environments affect the tourists' selection of the mountain destination (Konu, Laukkanen, & Komppula, 2011) and can therefore promote destination development by transmitting value to the customer (Flagestad & Hope, 2001). The natural environment in mountain destinations is very fragile and usually offers exquisite natural attractions (Jansky, Ives, Furuyashiki, & Watanabe, 2002), which is why it is often the main source of destination development (Huybers &

Bennett, 2003). The socio-cultural environment in mountain destinations can also represent an important source of mountain destination development (Price, Wachs, & Byers, 1999). Furthermore, a proper technological environment can facilitate mountain tourism (Beedie & Hudson, 2003). Mountain destinations have a specific economic environment that can be quickly negatively affected by the international companies (Beedie & Hudson, 2003). That is why proper managerial strategies should be put in place to foster economic environment at mountain destinations (S. Hudson & Miller, 2005). Shifts in governance and management strategies have to be made due to exogenous factors, such as the current economic crisis, and endogenous factors that mountain destinations are subjected to. Political and legal environment creates the basis for proper destination development; it has become evident that destination governance should promote sustainable development, but such an approach creates many challenges (Gill & Williams, 2011). The research concentrates on the effects of mountain destination environments on destination development, although such development can in turn have positive and negative influences on mountain destination environments (Lama & Sattar, 2004; Lasanta, Laguna, & Vicente-Serrano, 2007; Nepal & Chipeniuk, 2005).

1.5.2 Mountain destination innovativeness

Y.-H. Huang, Li and Chen (2009) perceived innovativeness as the most important factor of future performance and potential success. Innovativeness is an important predecessor of performance (Hult, Hurley, & Knight, 2004) and it influences destination development (Zach & Fesenmaier, 2009). Innovation can be viewed from many different aspects, and scholars have inconsistent viewpoints due to a one-dimensional view of innovation, which leads to lack of consensus (Dobni, 2008; Y.-H. Huang et al., 2009). Wang's and Ahmed's (2004) definition of innovativeness can be used on a destination level. They defined it as "an organization's overall innovative capability of introducing new products to the market, or opening up new markets, through combining strategic orientation with innovative behaviour and process". Such a definition fits the purpose of this research, since a wide definition of innovation should be used in order to cover all aspects of tourism destination innovativeness. Dobni (2008) believed that innovativeness can be viewed as the ability to introduce new products, services, ideas, processes and systems that can lead to enhanced business performance. He stated that innovativeness also incorporates behavioural (cultural), and infrastructure aspects and argued that the standard for innovativeness is multi-dimensional; Hamel (2006) discussed innovation as a departure from usual organisational forms; Sundbo (1997) also discussed organisational innovation, and Hurley and Hult (1998) claimed that the level of innovativeness is linked to how much organisational culture promotes participative decision making and learning. Tidd, Bessant and Pavitt (2009) recognised the importance of technology, knowledge and experience for increasing innovativeness; Li, Chen and Huang (2006) concentrated especially on technological innovativeness. Y.-H. Huang et al. (2009) also considered innovativeness of personnel and defined the concept of innovativeness as the inclination to develop new products and services and the firm's innovative climate. They expanded the concept of innovation that included only the tangible outcome, by introducing

the intangible dimension, to form the concept of innovativeness. Both sides are taken into account for this research and sustainability principles guide the development of elements of innovativeness. Sustainable innovation is a necessary precondition for the sustainability of societies and organisations and, as such, all innovative activities should be sustainable. Sustainable innovations influence principles of organisation, products, services, energy and resources used, and waste production (Jorna, 2006). Sustainable innovations create new products and processes that provide customers and businesses value, while considerably decreasing environmental impacts (James, 1997). Jorna (2006) argued that during the innovation process, attention must be put on the triple bottom line of economic, social and environmental value creation.

The nature of services, types of products, connection with consumers, specific processes, different organisational perspective and coordination and cooperation make service innovations markedly different (Hipp & Grupp, 2005); they are mostly driven by technology, knowledge and networks (Kandampully, 2002). Tödtling, Lehner and Kaufmann (2009) stated that innovation is a result of the interactive gathering of knowledge, while Swan, Scarbrough and Robertson (2003) claimed that networking encourages knowledge creation and plays a central role in innovation. In addition, Pechlaner, Hölzl and Tallinucci (2004) called for the development of innovative forms of strategic knowledge networking. Information and communication technologies, entrepreneurship, infrastructure, regulations and the existence of territorial industry clusters are the determinants that influence innovativeness in tourism (Hjalager, 2002, 2010). Especially information and communication technologies have brought many changes in tourism sector (Buhalis & Law, 2008) that should be taken into consideration when forming mountain destination innovativeness elements.

Paget, Dimanche and Mounet (2010) recognised the impact of innovativeness on mountain destination development. Flagestad and Hope (2001) stated that mountain destination development depends on strategies for creating competitive advantages, which can include innovativeness. Bourdeau (2009) identified the need for innovative practices in mountain tourism. He called for the drastic reorganisation and adaptation of European mountain tourism. Organisational as well as strategic innovations are needed to provide the flexibility to face the challenges imposed by the environment (Macchiavelli, 2009). Mountain tourism is experiencing pressure, uncertainty and crisis; mountain destinations should be more innovative within marketing, space usage, activities, and operate in all four seasons (Bourdeau, 2009). The International Scientific Committee on Research in the Alps (ISCAR) identified the need to discover innovative ways, methods and governance in order to restructure mountain destinations, limit the impacts of crises and facilitate sustainable development (ISCAR, 2008). Nordin and Svensson (2007) found that destination governance has an effect on innovativeness and the level of destination development. They claimed that good public-private sector relations, joint risk taking, informal structures and strategic consensus can have a positive effect on innovativeness of mountain destinations. Tourists demand innovation in tourism products and the inclusion of learning about natural and socio-cultural environments in mountain destinations (Franch, Martini, Buffa, & Parisi, 2008).

Being innovative in all aspects of product development, marketing, cooperation, education and prolonging the season are the future priorities of sustainable mountain destination development (Müller & Weber, 2008). Climate change can provide an incentive for innovation, mountain destinations have to rethink what they offer, as well as the balance between summer and winter seasons (Franch et al., 2008). The adoption of sustainable innovations at ski resorts is influenced by the perceived simplicity of such innovations and opinion leadership (Smerecnik & Andersen, 2011). The mountain resort of Whistler, British Columbia has been innovative in its growth-oriented management approaches, which simultaneously emphasised sustainability (Gill & Williams, 2011). Macchiavelli (2009) stated that some Alpine communities have also successfully launched innovations. But many Alpine destinations have matured, even stagnated (Pechlaner, Fischer, & Hammann, 2005); this is where innovativeness comes in as a crucial factor for destination development.

A literature review shows that tourism destination innovativeness has come to the attention of some researchers, but needs additional research on the key components of destination innovativeness, their driving forces and how they interact on a destination level as well as in different sectors (Volo, 2005). Innovativeness at destinations is crucial (UNWTO, 2010) and should therefore be further researched. Properly implementing innovativeness can increase the destination's ability to meet and adjust to the global changes. That enables destinations to become "future makers", rather than "future takers" (Dwyer et al., 2012).

1.5.3 Mountain destination development

Destinations should strive for the protection, maintenance and improvement of their destination development. Crouch and Ritchie (1999) indicated that besides the economic and political indicators, social and cultural prosperity, and the preservation of the natural environment are imperative for measuring sustainable destination competitiveness. Choi and Sirakaya (2006) believed that in order to implement the holistic concept of sustainable tourism development at a local level, which covers all the dimensions of tourism environments (political, legal, economic, social, cultural, technological and natural), an effective set of elements that measure development in communities is crucial. Gunn (1988) stated that a qualitative improvement should be made to social and natural aspects in order to increase sustainability and not focus only on traditional quantitative economic measures. Selected elements for measuring destination development should show actual performance in destinations, be demand driven and useful for the private sector, and cover all aspects of sustainability. In order to achieve sustainable development and improve the planning process, proper elements that help evaluate and coordinate sustainable development should be put in place (European Commission, 2000).

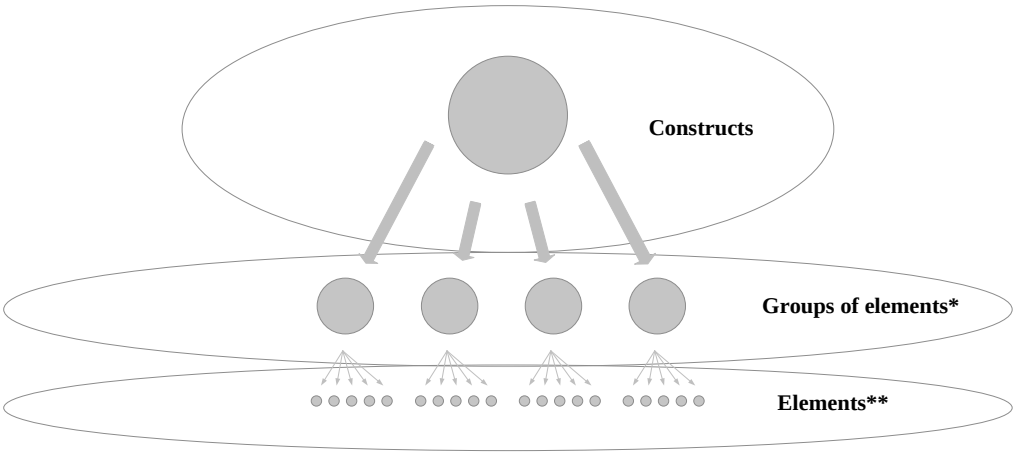
This dissertation meets this need and discusses a wide variety of elements that measure sustainable development in mountain destinations. Mountain destination development should be properly managed, since mountain destinations are fragile ecosystems with diverse flora and fauna; social and economic development should also be properly managed. To achieve this, the stage of destination development should be identified and understood (Curto, 2006).

Sustainability measures should be taken into account when evaluating mountain destination development (Zhelezov, 2011). Social and economic well-being and the protection of nature are all crucial factors of sustainable destination development (Castellani & Sala, 2010). Tourism development in mountain destinations can have positive social and economic effects (Lasanta et al., 2007) or negative ones, if activities and visitor numbers are not properly managed, which is why tourist traffic and expenditure should be measured as part of the mountain destination development (Linde & Grab, 2008). Visitor satisfaction measured at the destination level can also be used as a factor of destination development (Dmitrović et al., 2009), and it can induce repeat visitation (Bornhorst, Ritchie, & Sheehan, 2010).

2 DEVELOPMENT OF THE MOUNTAIN DESTINATION INNOVATIVENESS MODEL

Existing destination competitiveness models, elements of destination environments, innovativeness and development, applied to mountain destinations, constitute a basis for the development of the model. The bottom layer of the literature-based model comprises elements, i.e. the variables that are used for the analysis (Figure 3). Mountain destination environments is an exogenous construct, whereas mountain destination innovativeness and development are endogenous constructs. These hypothesised constructs (top layer) are composed of the corresponding elements. For clearer presentation, the elements are clustered into groups of elements (middle layer) based on their similarities and literature review findings (Figure 3).

Figure 3: Structure of the MDIM



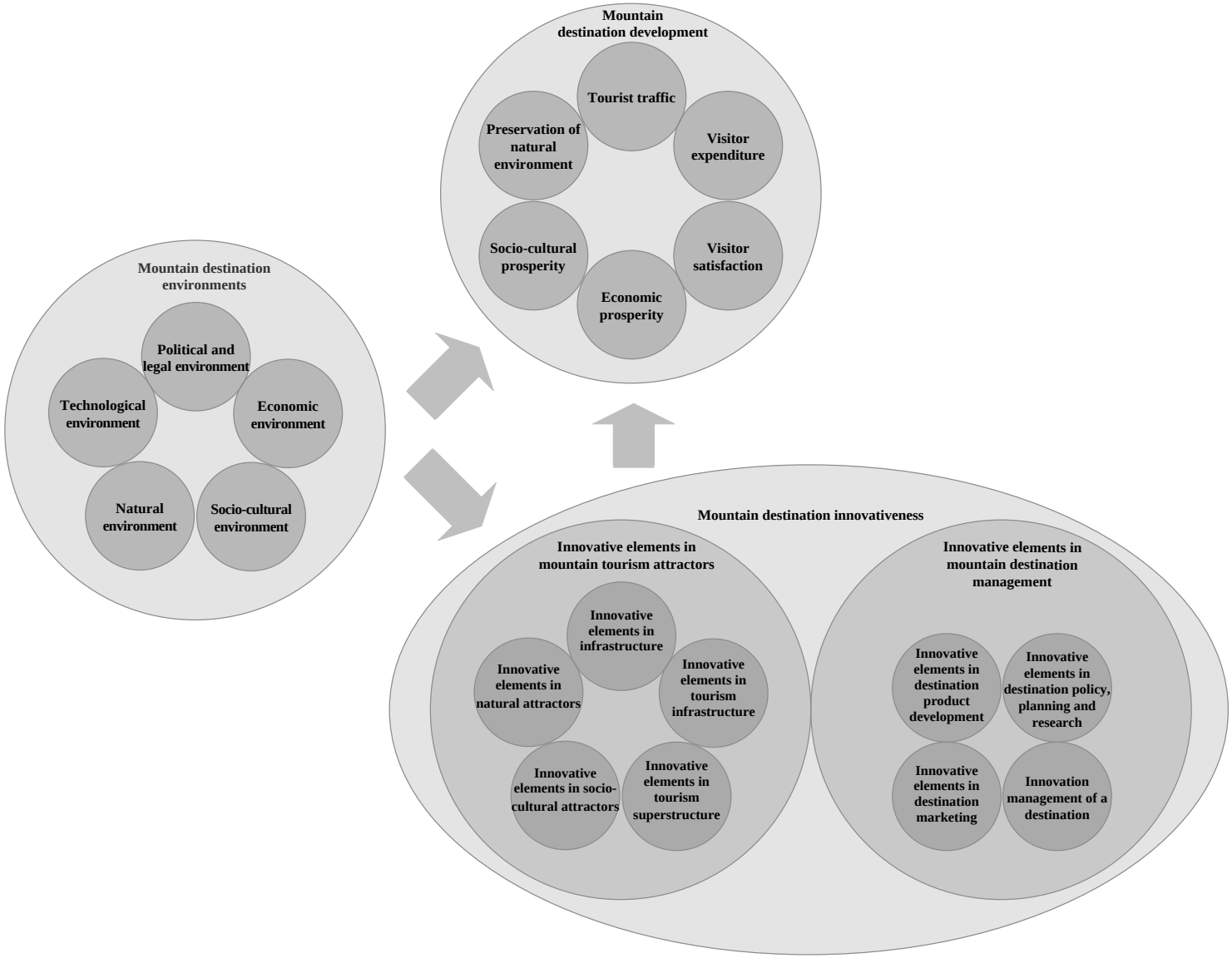
*Constructs can be determined by an infinite number of groups of elements.
**Groups of elements can be determined by an infinite number of elements.

Not much comprehensive research has been performed regarding the elements of innovativeness, environments and development in mountain destinations; the elements are consequently identified from many different sources. The literature review therefore sets the grounds for scale development. Due to the fact that destination competitiveness models have been widely accepted as a basis for destination research, the lists of elements of mountain

destination environments, innovativeness and development are built on the basis of destination competitiveness models, developed by Dwyer and Kim (2003) and J. R. B. Ritchie and Crouch (2003). Some authors have attempted to measure different environments in mountain destinations, but have not concentrated enough on a comprehensive overview of mountain destination environments. The same is true for innovativeness: researchers have mainly concentrated only on partial views of mountain destination innovativeness. Mountain destination development has been given some thought, but incorporating all the different measures of mountain destination development in a single list that would represent a sound basis for scale development has yet to be perfected. That is why the elements of mountain destination environments, innovativeness and development are gathered from many different sources and incorporated into newly developed lists that will be used for scale development. Due to the lack of research on mountain destinations, some elements from scales, used to measure rural destination environments, innovativeness and development are included in the research as well, but adapted to mountain destinations. This was done due to some mutually shared characteristics of mountain and rural destinations (Roberts & Hall, 2001). Therefore, the lists of elements of mountain destination environments, innovativeness and development are developed based on many different research projects, which have partially addressed the issues of this research.

The literature review reveals the elements and the groups of elements behind the constructs mountain destination environments, innovativeness and development. Mountain destination environments are composed of political and legal, economic, socio-cultural, natural and technological environments. Mountain destination innovativeness comprises innovative elements in mountain tourism attractors and in mountain destination management. Innovative elements in mountain tourism attractors include innovative elements in general infrastructure, tourism infrastructure, superstructure, socio-cultural and natural attractors. Innovative elements in mountain destination management contain innovative elements in destination policy, planning and research, innovation management of a destination and innovative elements in destination marketing and destination product development. Mountain destination development covers tourist traffic, visitor expenditure, visitor satisfaction, economic and socio-cultural prosperity and the preservation of natural environment. The theory-based groups of elements within the constructs are presented graphically in Figure 4 and explained in greater detail in the following sub-chapters. Furthermore, elements that the groups of elements are composed of, and are used for the empirical analyses, are discussed. Proposed relationships between the constructs, which are based on literature review, are presented in Figure 4 as well.

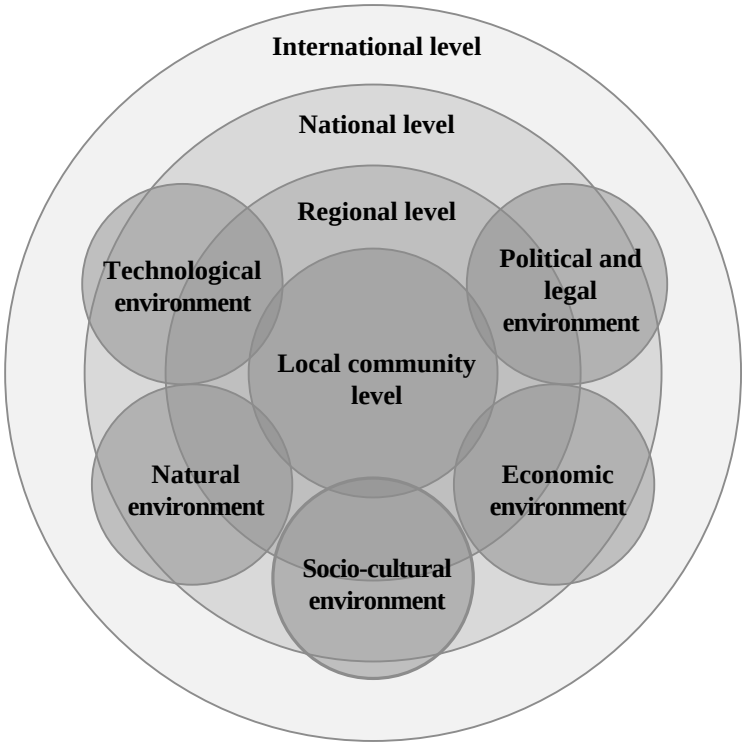
Figure 4: Literature-based MDIM



2.1 Elements of mountain destination environments

Mountain destination development is influenced by political and legal, economic, socio-cultural, natural and technological environments (Murphy et al., 2000). They should be considered on international, national, regional and local community levels for sustainable tourism development (Choi & Sirakaya, 2006). Dwyer and Kim (2003) differentiated between the operating environment and the remote environment. The operating environment comprises those factors that are shaped by different private and public sector institutions at the destination. The remote environment influences the destination, but managers have no control over this. J. R. B. Ritchie and Crouch (2003) were likeminded, but they termed the environments differently: the competitive (micro) environment and the global (macro environment). For the purpose of this research, the mountain destination system comprises environments as defined by Murphy et al. (2000) while acknowledging that the elements in these environments can be on a local community, regional, national or international level, and can therefore be either from the operating or the remote environment (Figure 5).

Figure 5: Literature-based mountain destination environments



Based on the literature review, elements of the political and legal environment, economic environment, socio-cultural environment, natural environment and of the technological environment have been gathered. Theoretical backgrounds of the literature-based elements and the corresponding groups of elements are described in the following sub-chapters. The list of all elements and groups of elements of mountain destination environments is provided in Table 1.

Table 1: Literature-based elements of mountain destination environments

Elements in political and legal environment	**Reference**
Support of government at the state level	McCool, Moisey and Nickerson (2001)
Support of government at the regional level	
Support of government at the municipality level	
Efficiency of regulatory framework	Robson and Robson (1996)
Number of levels of decision making	Pellinen (2003)
Efficiency of decision making	
Adequacy of labour market organisation	Kanniainen and Vesala (2005)
Adequacy of tax regime	Blake (2000)
Elements in economic environment	**Reference**
Size of the economy at the destination level	Bailey and Richardson (2010)
Business cooperation (business alliances and network relationships)	Tinsley and Lynch (2001)
Support from related industries	Tang and Jang (2009)
Favourable exchange rate	Chadeeand and Mieczkowski (1987)
Price competitiveness	Dwyer, Forsyth and Rao (2000)
Market potential (domestic and nearby)	Belland and Boss (1994)
Market potential (long-haul)	European Commission (2002)
Investment incentives	Church and Coles (2007)
Presence of local businesses	Okumus, Okumus and McKercher (2007)
Presence of international businesses	Mastny (2001)
Local competition	Hong (2008)
International competition	Schubert, Brida and Risso (2011)
Business ties	Tinsley and Lynch (2001)
Staff costs	Baum (2007)
Property-related costs	Palmer and Mathel (2010)
Costs and accessibility of capital	Murphy (1985)
Elements in socio-cultural environment	**Reference**
Number of inhabitants	Rigall-I-Torrent and Fluvià (2011)
Share of employed in tourism sector in total employment	Demunter (2008)
Cultural differences between host communities (local way of life) and visitors	S.-H. Lee, Chang, Hou and Lin (2008)
Presence of historical and cultural resources	Price et al. (1999)
Problem of ageing population	Długosz (2011)
Problem of brain drain	Thissen, Fortuijn, Strijker and Haartsen (2010)
Hospitality of local population	Bornhorst et al. (2010)
Support for tourism development by local population	Yoon, Gursoy and Chen (2001)
Local managerial and staff skills	Pyo (2005)
Presence of multilingual written instructions/guides (traffic signs, maps and restaurant menus)	Kurihara and Okamoto (2010)
Ease of oral communication (in English or other languages)	Leslie and Russell (2006)
Presence of community institutions	Tao and Fuying (2010)
Ethnic ties (visiting friends and relatives)	Crouch and Ritchie (1999)
Safety of tourists at the destination	Prashyanusorn, Kaviya and Yupapin (2010)

(table continues)

(continued)

Elements in natural environment	Reference
Favourable geographical location (vicinity of big cities)	Bornhorst et al. (2010)
Destination's altitude	UNWTO and UNEP (2008)
Variety and diversity of terrains for different sports	Papadimitriou and Gibson (2008)
Favourable climate conditions	Ritchie and Crouch (2003)
Size of the destination (area)	K. F. Lee (2001)
Carrying capacity	Schianetz, Kavanagh and Lockington (2007)
Visual appeal	Whitlock, Van Romer and Becker (1991)
Diversity of flora and fauna	Edwards and Abivardi (1998)
Elements in technological environment	**Reference**
Stage of technological development	Beedie and Hudson (2003)
Presence of Internet connection facilities and Internet coverage	Buhalis and Law (2008)
Mobile phone signal coverage	Kurihara and Okamoto (2010)
Acceptance of credit cards and presence of ATMs	
Access to technologies and technological knowledge resources	Shanker (2008)
Efficient health/medical facilities	Briassoulis (2002)
Efficient water supply infrastructure	Gössling et al. (2012)
Efficient electricity infrastructure	Chaoqun (2011)

2.1.1 Political and legal environment

Development of the Alps is and will be influenced by the political environment (Alexandre et al., 2006), which has to be changed (Strandberg, 2007). A proper political and legal environment is crucial for sustainable destination development (Blanco, Rey-Maquieira, & Lozano, 2009). The signing of the Alpine Convention can be regarded as a demonstration of an efficient political and legal environment (Perez-Salom, 2000). However, there are still policies that are inadequate, or are not being properly followed, which represent a threat to sustainable mountain destination development (Clarimont & Vlès, 2009). Therefore, efficiency in decision making (Pellinen, 2003) and the efficiency of regulatory frameworks (Robson & Robson, 1996) are needed. An efficient regulatory framework occurs when the rules are enforced and are also perceived to be enforced, which increases the efficiency of tourism development (Dodge, 2005). To promote sustainable destination development, a wider ecological economics framework with multiple imperatives should be put in place (Bailey & Richardson, 2010). Environmental laws in mountain destinations have been centred on people first and the environment second, which must change (Milne, LeMense, & Virginia, 2009). The law must strike a balance between regulation and the promotion of mountain tourism in order to achieve sustainable mountain destination development (Morgera, 2010). However, there have been certain changes recently. Some ski resorts are even implementing voluntary environmental programs that go beyond the requirements established by mandatory environmental rules and regulations (Little, 2010). Selecting an appropriate number of political levels of decision making can also positively influence tourism development (Pellinen, 2003). The question is not whether tourism businesses in rural regions need political support, but what kind of support and at what level (Fleischer & Felsenstein, 2000). McCool, Moisey and Nickerson (2001) noted that state, regional and municipality levels have

to be taken into account for tourism development. Moreover, regional governmental support for tourism development is crucial, which is why the Swiss have focused their regional policies towards enhancing competitiveness through innovation and deregulation (Stucki, Roque, Schuler, & Perlik, 2004). Government support at the municipality level is needed as well (Selby, Petäjistö, & Huhtala, 2011). Furthermore, local communities must be understood and taken into account when developing policies in mountain destinations (Kaltenborn, Riese, & Hundeide, 1999). However, this is not enough. The adequacy of labour market organisation is of high importance (Kanniainen & Vesala, 2005), while the suitability of the tax regime is also of considerable interest (Blake, 2000). A proper tourism tax policy regime can positively affect long-term environmental quality (Rey-Maquieira, Lozano, & Gómez, 2009). The literature review has shown that the political and legal environment has to be efficient and supportive to sustainable mountain destination development.

2.1.2 Economic environment

The size of the economy at the destination level is constrained by the carrying capacity, the availability of renewable resources, and the assimilative capacity of the environment (Bailey & Richardson, 2010). Business cooperation in terms of business alliances and network relationships is vital (Tinsley & Lynch, 2001), and has to be especially nurtured in nature-based tourism destinations (Huybers & Bennett, 2003). Business ties are an important source of steady flow of visitors and consequential tourism and economic development (Crouch & Ritchie, 1999). Equally as important for tourism development is the support from related industries (Tang & Jang, 2009). Moreover, the presence of local businesses can highlight local culture and heritage, which attracts tourists and represents a source of tourism development (Okumus et al., 2007). Encouraging local competition can lead to improved tourism development (Hong, 2008). Generally speaking, in mountain-based adventure tourism it is sometimes very difficult for local firms to compete with large international companies (Beedie & Hudson, 2003), and rapid internationalisation has increased the presence of international businesses at destinations (Mastny, 2001). It is important for firms within a destination to realise that they have to compete internationally with firms at other destinations (Schubert et al., 2011). The development of mountain destinations usually requires capital that cannot be provided locally, which is why the costs and accessibility of capital is of high importance for destination development (Murphy, 1985). Staff costs include wages and salaries, social contributions, vocational-training costs, other expenditures and taxes relating to employment, lowered for the subsidies received (European Commission, 2005). Lowering staff costs can sometimes outweigh better tourism development that would be achieved by employing a more skilled and higher paid workforce (Baum, 2007). Induced property-related costs might contribute to better utilisation of properties at a tourist resort (Palmer & Mathel, 2010).

Furthermore, assessing domestic, nearby and long-haul market potential is important for increasing destination development (Belland & Boss, 1994; European Commission, 2002). Another important part of the economic environment is the risk associated with exchange rate

fluctuations (S. K. Lee & Jang, 2011). Favourable exchange rates can increase tourism development by attracting more tourists from foreign countries (Chadeeand & Mieczkowski, 1987). No matter the exchange rate, price competitiveness is always an important element of destination development and should be regularly monitored (Dwyer et al., 2000). Investment incentives can also be used to boost the development of ski-lift infrastructure (Church & Coles, 2007), and to increase the sustainable development of destinations (Blanco et al., 2009).

2.1.3 Socio-cultural environment

The specifics of the socio-cultural environment in mountain destinations attract tourists from cities and can represent a source of mountain destination development (Price et al., 1999), but only if socio-cultural environment is properly used (Davis, 1984). Tourism development and the socio-cultural environment are inextricably connected (Crouch & Ritchie, 1999). Employment in tourism has the most direct and beneficial impact on mountain communities (Rosen, 2000). Unemployment rates in tourist regions are usually below the national average (Demunter, 2008). Brain drain represents a serious threat to development of rural areas (Thissen et al., 2010). Miller (1994) noted that brain drain might have contributed to slowdown in development in mountain areas, although at first, mountain destination development actually contributed to increasing the brain drain (Kohler, Hurni, Wiesmann, & Kläy, 2002). One social element that affects destination development is the number of local inhabitants (Rigall-I-Torrent & Fluvià, 2011). In the European Union (EU), the ageing population represents a serious challenge (Długosz, 2011; Kurek & Rachwał, 2011) and can negatively influence tourism development (Tomljenovic & Faulkner, 2000). The presence of community institutions is necessary for proper tourism development in rural regions (Tao & Fuying, 2010). Furthermore, the support of the local population is crucial for sustainable tourism development; any dissatisfaction can be conveyed to tourists, and tourists are reluctant to visit destinations where they feel unwelcome (Yoon et al., 2001). Even if the services and destination products are on a high level, an inhospitable local population can represent a significant threat to tourism development (Bornhorst et al., 2010). If tourists feel welcome, then their safety is next on the list of important elements. The safety of tourists at the destination has to be ensured for a sustainable development of tourism (Prashyanusorn et al., 2010) and is one of the pillars of tourism competitiveness (World Economic Forum, 2008). Furthermore, cultural differences between host communities and visitors may lead to problems in adaptation (S.-H. Lee et al., 2008) and vary considerably depending on the type of tourists that visit the destination (Reisinger & Turner, 2003). Ethnic ties can make a positive effect to a mountain destination. Such religious or cultural bonds induce one of the most steady flows of visitors to a destination (Crouch & Ritchie, 1999) and can increase destination development considerably (Seaton & Palmer, 1997). They can be quite diverse (Buhalis & Costa, 2006), with the common denominator being visiting friends and relatives (Larsen, Urry, & Axhausen, 2007). The presence of historical and cultural resources in a mountain region can prove to be very valuable and represents a source of inspiration and induces a type of pilgrimage from visitors (Price et al., 1999).

Being open to the cultures and languages of visitors is also noted as being a valuable element. For example, Kurihara and Okamoto (2010) found the multilingual written instructions, such as maps, signs and menus, to be important for tourism development. The ease of oral communication in English and other languages is a valued characteristic for employees in the tourism sector and it requires more attention, since in mainland Europe, prosperity is often linked with foreign language abilities. Effective communication is crucial, as it greatly impacts customer experience (Leslie & Russell, 2006). Wozniak (2011) found that it is essential for mountain guides to be able to interact with clients, in order to build trust and to respond to unpredictable circumstances. Local managerial and staff skills are therefore crucial for tourism development and increased knowledge helps to improve the service level of the destination (Pyo, 2005). Tourism can also have negative influence on the socio-cultural environment in mountain destinations (Jansky et al., 2002), but this research only examines the influence of environments on mountain destination development.

2.1.4 Natural environment

The natural environment is the most vital factor for destination success in nature-based tourism destinations (Huybers & Bennett, 2003). In mountain destinations, it is very fragile, but extremely rich in valuable resources (Jansky et al., 2002) and influences tourism development, its form, its location, and can act as an attraction of its own (Gómez Martín, 2005). The natural environment consists of physical and biological elements such as climate, geology, flora, fauna, physiography, aesthetics and visual appeal of the destination, etc. (Gómez Martín, 2005; J. R. B. Ritchie & Crouch, 2003). The physiography and climate of a destination are sometimes dominant elements of tourism development (J. R. B. Ritchie & Crouch, 2003). Favourable climate can provide a competitive advantage and determine what type of recreation activities can be developed at the destination. However, climate change can represent a serious threat for winter mountain tourism. With recent changes, there is the possibility of a redistribution of climate resources across regions and seasons (Perch-Nielsen, Amelung, & Knutti, 2010). A destination's altitude can be a positive factor due to wider range of climate change adaptation options (UNWTO & UNEP, 2008). A high altitude destination is defined as any place at 2500 meters above sea level or higher (Hall & Boyd, 2005). High altitudes, however, are connected to many dangers and should be a factor in trip planning (Anderson, 2010; Musa, Hall, & Higham, 2004). The variety and diversity of terrains for different sports lead to tourism development (Papadimitriou & Gibson, 2008; Standeven & De Knop, 1999), since the majority of nature-based sports tend to be dependent on specific terrain features and require appropriate landscape (Hinch & Higham, 2004). Excellent built and natural sporting environments provide a tourism attraction, crucial for sport destination success (Hinch & de la Barre, 2004). Nature-based tourism development is fuelled by the natural appeal of the destination (Whitlock et al., 1991). Higher prices can be charged at the destinations that offer uniqueness and appeal (Wells, 1997). Beautiful mountain scenery, fauna and flora represent sources of mountain destination development (Draper, 2000). Diversity of flora and fauna and its conservation is crucial for sustainable development; in fact, the human race is dependent on it (Edwards & Abivardi, 1998). A favourable

geographical location is also an element of destination development (Bornhorst et al., 2010). Equally important is the size of the destination, since an appropriate size contributes to better management of the destination and helps tourists to view it as an entity (K. F. Lee, 2001). Schianetz, Kavanagh and Lockington (2007) emphasised the importance of taking into account the carrying capacity of the destination. This is especially true for the Alps, which have the second highest tourism intensity in Europe (Coccossis & Mexa, 2004). When the natural environment is used sustainably, it can be a highly valuable resource for mountain destination development (S. Hudson & Miller, 2005). Essentially, mountain tourism development depends on the quality of natural environment (Scott, Jones, & Konopek, 2007), but at the same time, it can destroy it (Caprio, Chamberlain, Isaia, & Rolando, 2011), which is why sustainable development is crucial.

2.1.5 Technological environment

The technological environment can be an important source of destination development (Buhalis, 1998). In order to succeed, one must be able to grasp the changes in the technological environment (Dwyer et al., 2009). This same rule applies to destination development, as advances in technological environment clearly facilitate mountain tourism (Beedie & Hudson, 2003). Access to technologies and technological knowledge resources increases the supply of information (Shanker, 2008), helps achieve several strategic benefits and positively affects destination development (Lovely & Popp, 2011). Kurihara and Okamoto (2010) stated that credit cards should generally be accepted and automated teller machines (ATMs) easily accessible. Choi and Sirakaya (2006) believed that improvements in communication systems have considerable impact on tourism development. Such improvements can include increased usability of mobile phones at a destination (Kurihara & Okamoto, 2010) or the use of Wireless Local Area Networks (WLANs). WLANs are being used more and more often at destinations and they allow users to connect to the Internet easily. They supplement mobile networks, which offer wide coverage, whereas when using WLANs one has to be in the vicinity of a stationary hot-spot (Buhalis & Law, 2008).

As a part of technological environment, health facilities are crucial for tourism development (Briassoulis, 2002). Technology is not only noted with mobile phones, the Internet and efficient health facilities, but also in terms of efficient electrical infrastructure. The development of rural tourism can be positively affected by the introduction of renewable, low carbon energy technologies. These kinds of technologies can solve the problem of energy supply and lead to sustainable tourism development (Chaoqun, 2011). Moreover, efficient water supply infrastructure and sustainable water use reduce costs and positively affect tourism in the region. In order to achieve this, water conservation management and sustainable technologies must be implemented (Gössling et al., 2012).

2.2 Elements of mountain destination innovativeness

Due to the inexplicit definition of innovativeness, special care is required to define the field of mountain destination innovativeness. Existing literature on tourism destinations and innovation constitutes a basis for the development of elements of mountain destination innovativeness. Common foundations of innovation have been determined and an inventory of elements of innovativeness formed that captures the core of mountain destination innovativeness. Elements have been carefully selected in order to cover as many views of mountain destination innovativeness as possible. Theory suggests that elements of innovativeness can be found in tourism attractors and in destination management. Innovativeness has been incorporated into general infrastructure, tourism infrastructure and superstructure, socio-cultural and natural attractors, destination policy, planning and research, destination management, marketing, and product development (Figure 6). The list of all literature-based elements and groups of elements of mountain destination innovativeness is provided in Table 2. The elements and the corresponding groups of elements are discussed in detail in the following sub-chapters.

Figure 6: Literature-based mountain destination innovativeness

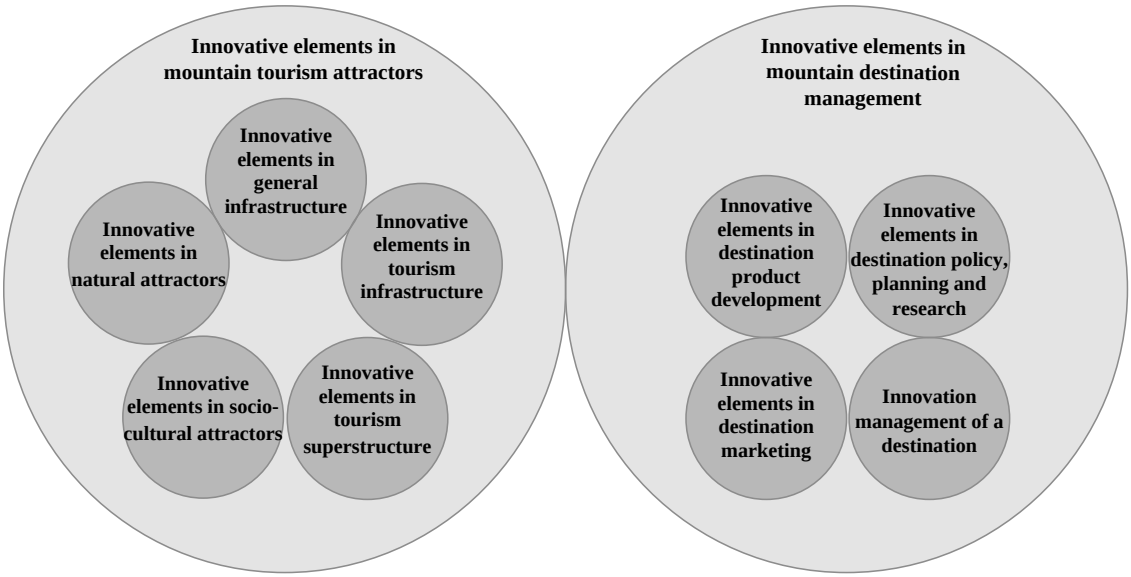


Table 2: Literature-based elements of mountain destination innovativeness

Innovative elements in tourism attractors	
Innovative elements in general infrastructure	**Reference**
State-of-the-art safety procedures and safety infrastructure in the mountains (anti-avalanche systems, etc.)	Chaudhary and Mathur (2004)
Improvements in destination accessibility (tunnels, reinventing the trains, etc.)	Pyo (2005)
Advances in internal transportation (electric cars, bikes, etc.)	Yang (2010)
Ease of access to information through a highly developed communication system	Stamboulis and Skayannis (2003)
Efficient waste management	Godde (1999)
Tourist firms' IT capabilities	Camisón and Monfort-Mir (2012)
Supporting services providers' IT capabilities	Huang, Ou, Chen and Lin (2006)
Innovative elements in tourism infrastructure	**Reference**
Unique forms of tourist accommodations	Walford (2001)
New sports infrastructure development	Pucher, Dill and Handy (2010)
Environmentally friendly solutions for ski infrastructure	Varley and Medway (2011)
Energy efficient ski infrastructure (solar-powered ski lifts, etc.)	Janke (2010)
Quality audits/certification (ISO)	Simon, Bernardo, Karapetrovic and Casadesús (2011)
Environmental audits (ISO, Eco-Management and Audit Scheme (EMAS), etc.)	
Environmentally friendly solutions for tourist accommodations	Dalton, Lockington and Baldock (2009)
Eco-labels and environmental awards	K. F. Lee (2001)
Advanced snow-making equipment (possibility of producing snow in above-zero temperatures without chemical additives, etc.)	Bark, Colby and Dominguez (2010)
Innovative elements in tourism superstructure	**Reference**
New health-related products	Novelli, Schmitz and Spencer (2006)
Distinctive local cuisine (using local agriculture, etc.)	Cohen and Avieli (2004)
Organising new kinds of special events	Bowdin, Allen, O'Toole, Harris and McDonnell (2004)
Distinctive entertainment and nightlife (adapted to new demand patterns)	Yüksel (2007)
Special business and congress tourism products	Pechlaner, Zeni and Raich (2007)
Combining different tourism products into a new kind of experience (special ski runs for experiencing gourmet cuisine while skiing, etc.)	Yeoman (2008)
Adapting shops to new demand patterns (such as free-ride ski rental, etc.)	Yüksel (2007)

(table continues)

(continued)

Innovative elements in socio-cultural attractors	**Reference**
Developed forms of cultural tourism (experiencing how people in the mountains lived in the past, etc.)	Batra (2006)
Equal opportunities for all society (socio-cultural sustainability)	Alpine Convention (2011a)
Equitable distribution of tourism benefits (respect of different cultures and avoidance of any form of exploitation)	Crouch and Ritchie (1999)
Respect for the socio-cultural authenticity of host communities (conservation of cultural heritage and traditional values)	Meleghy, Preglau and Tafertshofer (1985)
Respect of societal norms and values in business and economic relationships	Garretsen, Lensink and Sterken (2004)
The local population's support for change	Fallon and Kriwoken (2003)
The local population's capacity to change	
Availability of knowledge resources and education	Dredge (2006)
Offering local products in combination with experiencing local craftsmanship	Brandth and Haugen (2011)
Innovative elements in natural attractors	**Reference**
Making optimal use of environmental resources (environmental sustainability)	Kuniyal (2002)
Maintaining ecological processes and helping to conserve natural resources and biodiversity	Kruk, Hummel and Banskota (2007)
Using flora as an attraction (learning about plants, etc.)	Bhuiyan, Islam, Siwar and Ismail (2010)
Using fauna as an attraction (bird watching, etc.)	Orams (2002)
Using mountain scenery as an attraction (taking photos, etc.)	Dávid (2011)
Learning about the history of the formation of the mountains (geology, etc.)	Varley and Medway (2011)
Using mountain rivers as an attraction (extreme sports, appreciating the natural beauty, etc.)	B. J. Hudson (1998)
Adapting to changing climate conditions	UNWTO and UNEP (2008)
Exploiting opportunities created by changing climate conditions	Franch et al. (2008)

(table continues)

(continued)

Innovative elements in mountain destination management	
Innovative elements in destination policy, planning and research	**Reference**
Participation of all stakeholders in tourism planning	Soliva et al. (2008)
Collaboration of all stakeholders in decision-making processes	Gunya (2007)
Creation of innovative vision	Dávid (2011)
Formation of destination's innovation strategy	Dwyer et al. (2009)
Tax incentives for new products, services and processes	Logar (2010)
Investment incentives for new products, services and processes	Alexandre et al. (2006)
Energy policies that support usage of alternative sources of energy	Heagle, Naterer and Pope (2011)
Transportation policies that favour alternative transportation modes and public transportation	Reilly, Williams and Haider (2010)
Environmental policies that promote sustainable development	Castellani and Sala (2010)
Active research, communication and application of research findings	Xiao and Smith (2010)
Active education of all interested parties at the destination	Weiermair, Peters and Frehse (2008)
Control mechanisms for evaluating research, development and innovation policy	Camisón and Monfort-Mir (2012)
Public private partnership for the transfer of know-how and availability of new solutions	Weiermair et al. (2008)
Innovation management of a destination	**Reference**
Continuous learning and knowledge creation	Dwyer et al. (2009)
Adaptive management that enables quick response to changing environment	Farrell and Twining-Ward (2004)
Resource management (resources used in different manners to meet the emerging needs)	Macchiavelli (2009)
Human resource development (employee empowerment and education)	Batra (2006)
Formation of clusters	Novelli et al. (2006)
Formation of regional innovation systems	Mattsson, Sundbo and Fussing-Jensen (2005)
Taking into account the interests of the local community	Debarbieux and Price (2008)
Organisational structure that supports involvement of all stakeholders	Lebe and Milfelner (2006)
Proximity to technological clusters, innovation centres, etc.	Hjalager (2010)
Organisational culture supporting changes, development of new products, processes and services	Macchiavelli (2009)
Destination's ability to simultaneously support both evolutionary and revolutionary technological changes	Dwyer et al. (2009)
Quick development of competences and skills in destination management organisation to match the demands of new technologies	Yuan, Gretzel and Fesenmaier (2006)
Implementing new practices in environmental management	Mihalič (2000)

(table continues)

(continued)

Innovative elements in destination marketing	Reference
Contextual and behavioural advertising (target advertising to a specific user based on the searched keywords)	Pak and Chung (2010)
Social networking, the interaction of social and commercial networks	Xiang and Gretzel (2010)
Including trendsetters (usually athletes) in destination marketing (also through social media)	van der Veen (2008)
Real-time communication	Buhalis (2003)
Using new technological developments in customer relationship management	Vogt (2011)
Application of a selective destination marketing system (control in terms of number and segment of tourists)	Connell (2005)
Co-branding (cooperation of different brands at the destination)	Cai (2002)
Co-marketing of service providers	Kylänen and Rusko (2011)
Balancing environmental actions and environmental communication (environmental marketing)	Hudson and Miller (2005)
New forms of active formal communication channels between destination management organisation and service providers	Fux, Mathieu and Myrach (2007)
New forms of active informal communication channels between destination management organisation and service providers	
Innovative elements in destination product development	**Reference**
Web portal providing rich user experience	Woodside, Vicente and Duque (2011)
Dynamic content on the web portal	B'Far (2005)
Destination's products based on determined customer characteristics (context awareness)	Buhalis and Law (2008)
Destination's products supported by mobile services and applications	
User participation in product development	Hjalager (2010)
Inclusion of social networking in destination's product development (blogs, Facebook, Twitter, etc.)	Litvin, Goldsmith and Pan (2008)
Inclusion of environmental education in destination's products	Dávid (2011)
Logistics adapted to changing demand (last minute reservations, new reservations systems, etc.)	Marom and Seidmann (2011)
Tourism products adapted to changing demand (last minute reservations, increased price sensitivity, etc.)	Vanhove (2011)
Creation of distinctive image of the destination	Govers, Go and Kumar (2007)

2.2.1 Innovative elements in mountain tourism attractors

General infrastructure, tourism infrastructure and superstructure, and socio-cultural and natural attractors are crucial for destinations (Dwyer & Kim, 2003; J. R. B. Ritchie & Crouch, 2003), and mountain tourism is closely connected to ecotourism and sustainable development (Funnell & Price, 2003). General infrastructure in mountain destinations is crucial and should be in line with sustainable development. Changing demand requires new and innovative tourism infrastructure that can contribute to proper mountain destination development (Macchiavelli, 2009). There is a need for innovation in the tourism superstructure in order to improve destination development (Rønningen, 2010); furthermore, socio-cultural attractors are crucial for mountain destinations (Godde, 1999). Innovation of products and services

connected to socio-cultural and natural attractors requires transformation, reinvention and usefulness (Hjalager, 2010). Activities in mountain destinations are becoming more accessible and the quest for nature experiences drives mountain destination development (Beedie & Hudson, 2003). The abovementioned groups of attractors have created grounds for the identification of the elements of mountain destination innovativeness.

2.2.1.1 Innovative elements in general infrastructure

Improvements in destination accessibility are important in overcoming the barriers imposed by mountains (Pyo, 2005) and for increasing mountain destination development (Funnell & Parish, 2001). Advances in transportation within the destination, such as good public transportation, cable cars, electric cars and bikes can significantly contribute to lower carbon emissions (Yang, 2010) and improve the eco-efficiency of tourist transportation at the destination (Reilly et al., 2010). It is very important to have efficient waste management at mountain destinations (Godde, 1999). State-of-the-art safety procedures and safety infrastructure in the mountains, such as anti-avalanche systems, etc., provide improved protection for the tourists and the local population (Chaudhary & Mathur, 2004). Effective usage of innovative information and communication technologies facilitates tourism (Buhalis, 1998); they have brought many changes in the tourism sector, such as effective data processing and communication (Buhalis & Law, 2008) and easier access to information through a highly developed communication system (Stamboulis & Skayannis, 2003). Enabling such a communication system can provide opportunities for better mountain destination development (Beritelli & Jufer, 2004). Many tourist firms have been quick to explore innovation in information and communication technologies, and therefore possess advanced information technology (IT) capabilities (Camisón & Monfort-Mir, 2012). Furthermore, supporting services providers' IT capabilities are important, since they increase providers' performance (S.-M. Huang et al., 2006).

2.2.1.2 Innovative elements in tourism infrastructure

Unique forms of tourist accommodations, such as small-scale, high quality accommodations by farm households, are likely to succeed in aesthetically pleasing natural environments with the possibility of physical outdoor activities (Walford, 2001). Tourists expect tourist accommodations located in sensitive natural areas to be more environmentally friendly than mainstream accommodations (Dalton et al., 2009). Another important element of innovativeness is the development of new sports infrastructure, such as bicycling infrastructure. When thinking about new sports infrastructure development, environmental impacts should be considered (Pucher et al., 2010). Environmentally friendly solutions for ski infrastructure should be implemented. Varley and Medway (2011) believed that redundant ski infrastructure should be removed, and that temporary and semi-temporary structures, such as yurts and dry-stoned, turf-roofed shelters should be used. More advanced mountain destinations have started to use energy efficient ski infrastructure, such as solar-powered ski lifts (Janke, 2010). Energy demand for ski infrastructure and other types of tourism infrastructure in mountain destinations can be served by wind, solar and micro-hydroelectric

energy generation. Innovative technologies also provide the possibility of storing energy at mountain destinations (Troxell, 2005). According to climate model temperature projections, snowmaking can remain feasible until 2030 in most cases. However, advances in snowmaking equipment must be made (Bark et al., 2010). New technologies and better efficiency are required, since the large amounts of energy and water needed for snowmaking create negative environmental effects (Fry, 2007). Certification is also a key to increased performance and better development (Tarí, Claver-Cortés, Pereira-Moliner, & Azorín, 2009). Quality and environmental audits tend to increase awareness of the environmental impacts of the firms' activities and their willingness to improve environmental and quality practices (Simon et al., 2011). In order to provide information on environmental performance, eco-labels can be used (K. F. Lee, 2001), and can also be used on a destination level (Buckley, 2002).

2.2.1.3 Innovative elements in tourism superstructure

The introduction of innovative and new health-related products is necessary due to changing demand patterns (Novelli et al., 2006). Changing demand patterns also call for distinctive entertainment and nightlife (Kozak & Martin, 2012). Distinctive local cuisine has become an attraction on its own at some destinations (Cohen & Avieli, 2004). Shopping can also represent a major attraction for tourists (Dallen, 2005), especially when adapted to new demand patterns (Yüksel, 2007). Special business and convention tourism products can provide tourist traffic during the low season (Pechlaner et al., 2007). Organising new kinds of special events can also aid to improved destination development (Bowdin et al., 2004). Special sport events, for instance, can be introduced by incorporating the destination's attractions into the event elements (Chalip & McGuirty, 2004). Combining different tourism products into a new kind of experience can contribute to destination development. Being innovative and providing experiences adapted to changing demand are crucial for destinations (Yeoman, 2008).

2.2.1.4 Innovative elements in socio-cultural attractors

Godde (1999) stressed the importance of socio-cultural attractors for mountain destinations. Socio-cultural sustainability in mountain destinations can be fuelled by social innovation that culminates in equal opportunities for the entire society (Alpine Convention, 2011a). Respect of societal norms and values in business and economic relationships contribute to economic development (Garretsen et al., 2004). Destination competitiveness and development is also defined by the equitable distribution of tourism benefits, which provides high standard of living for the local population (Crouch & Ritchie, 1999). Cultural heritage is crucial for mountain destinations (Godde, 1999) and should be offered to tourists properly for achieving sustainable tourism development (Lasanta et al., 2007). If tourism in mountain destinations is developed appropriately and shows respect for the socio-cultural authenticity of host communities, it will be in line with all forms of cultural heritage and traditional values (Meleghy et al., 1985). Moreover, the local population's support for change and their capacity to change are crucial for sustainable tourism development (Fallon & Kriwoken, 2003). The availability of knowledge resources and education are important attributes for innovation and

destination development (Dredge, 2006). Innovative and developed forms of cultural tourism that show local lifestyle and involve local residents contribute to the appearance of a destination and its development (Batra, 2006). If offering local products in combination with experiencing local craftsmanship is handled appropriately, it can provide a source of living for the local population and contribute to destination development (Brandth & Haugen, 2011). There is evidence regarding already implemented innovation in terms of socio-cultural attractors for increasing innovativeness and development at mountain destinations (S. Hudson & Miller, 2005).

2.2.1.5 Innovative elements in natural attractors

Destinations should be innovative in optimising the usage of environmental resources. The development of sustainable destinations, where individual performance of businesses, local authorities, and other organisations contribute to environmental sustainability, requires the integration of different tools, approaches and concepts (K. F. Lee, 2001); mountain destinations must be sustainable (Flagestad & Hope, 2001). Environmental sustainability is reflected in conserving and maintaining ecological processes, biodiversity and natural resources (Kruk et al., 2007); managers in nature destinations should strive to achieve environmental sustainability and instil such values in the minds of all stakeholders (Tsaur, Lin, & Lin, 2006). Being active and innovative in the optimal use of environmental resources and lowering the ecological footprint can considerably help protect fragile mountain destinations (Kuniyal, 2002). Tourists demand intact nature and therefore environmental sustainability is a must (Varley & Medway, 2011). Balbi, Perez and Giupponi (2010) stated that mountain areas are sensitive to climate change, which calls for innovative practices. Climate change influences winter mountain tourism (Moen & Fredman, 2007). Capitalising on opportunities and adapting to changing climate is vital for sustainable mountain destination development (Landauer, Pröbstl, & Haider, 2012); mountain destinations have a wide range of adaptation options to changing climate conditions and to exploit opportunities created by changing climate conditions (UNWTO & UNEP, 2008), such as the lengthening of the summer season (Amelung, Nicholls, & Viner, 2007). Mountain destinations should implement innovative strategies, adapt the offering and take advantage of changing climate conditions (Franch et al., 2008). New forms of tourism supply can provide services for tourists in cases of bad weather (Weiermair et al., 2008). New activities and new concepts, such as ecotourism and agrotourism, should be offered to tourists (Stucki et al., 2004). Mountain adventure tourism as a collection of different experiences is gaining in attractiveness due to a shift away from consumer society values (Beedie & Hudson, 2003). Using flora as an attraction, learning about plants and natural eco-systems, represents an element of innovativeness. Forest tourism is one important form of educational tourism (Bhuiyan et al., 2010), which is becoming increasingly popular (Font & Tribe, 2000). Using fauna as an attraction by observing and experiencing wildlife is a recent phenomenon (Orams, 2002). Diversity in wildlife is one of the most important attractors in some tourism destinations; the same is true for scenery and undisturbed landscapes (Dávid, 2011). Aesthetics can be used as a trait for the development of mountain tourism (Nepal, 2002a). In

Tyrol, for instance, tourists perceive mountain scenery as a value-creating attribute (Pesonen, Komppula, Kronenberg, & Peters, 2011). Mountain rivers can be used as an attraction. Tourists appreciate their natural beauty (B. J. Hudson, 1998). Innovative sports have also developed on such rivers (Hardiman & Burgin, 2011). Varley and Medway (2011) proposed the idea of a place at the mountain destination where tourists would be able to learn about the mountains. They suggested that such innovative projects reduce dependency on snow in mountain destinations.

2.2.2 Innovative elements in mountain destination management

Hjalager (2010) recognised the importance of product, process, institutional, distribution, management, marketing and organisational innovations in the tourism sector. Mountain destinations should be innovative in terms of technology, strategy and destination products to adapt to the changing environment, such as changes brought by climate change (Landauer et al., 2012). Being innovative can help capitalise on opportunities for technological leadership and help better manage strategic issues and uncertainties in ski resorts (Sharma, Aragón-Correa, & Rueda-Manzanares, 2007). Destination policy should be oriented towards innovation (Alexandre et al., 2006), and proper planning should be used to achieve sustainable development (Castellani & Sala, 2010). Mountain tourism sustainability is based on the participation of all stakeholders (Nepal & Chipeniuk, 2005). Being innovative in research enhances mountain destination development (R. J. B. Ritchie & Ritchie, 2002). Flagestad et al. (2005) and Zach and Fesenmaier (2009) believed that destination management organisation as a link between different actors plays a decisive role and is an essential function for innovation processes. Innovation management of mountain destinations is key to improved destination development (Pechlaner & Tschurtschenthaler, 2003). Integrating innovative elements in destination marketing is vital to destination success (Gretzel, Yuan, & Fesenmaier, 2000), and destination marketing should be focused on maximising benefits for the destination and optimising tourism impacts (Buhalis, 2000). Innovativeness in destination product development is perceived as important for destination development (Dwyer et al., 2012). Technology influences the entire process of destination product development, which has to embrace changes and need for innovation (Buhalis & Law, 2008). The literature review that covered these areas of destination management has created the basis for the development of elements of mountain destination innovativeness.

2.2.2.1 Innovative elements in destination policy, planning and research

Tourism planning is dynamic (Hall, 2008; Sautter & Leisen, 1999) and should consider the community perspective (Nunkoo & Ramkissoon, 2011) in order to develop sustainable tourism (Edgell, DelMastro Allen, Smith, & Swanson, 2008). The innovative visions of some industry professionals that are presently emerging might be the solutions for responsible and sustainable tourism (Dávid, 2011). Being innovative in the social aspects of mountain destinations and including stakeholders and local communities in decision making promotes sustainable tourism development in mountain destinations (Rescia, Pons, Lomba, Esteban, & Dover, 2008). Stakeholder participation is therefore key for achieving sustainability of

mountain destinations; including local stakeholders in planning and policy making is a way forward for the entire community (Soliva et al., 2008). Strategies must be adjusted and based on innovation in order to maintain destination development in the rapidly changing environment (Dwyer et al., 2009). Partnerships enable the transfer of know-how and the availability of new solutions between several stakeholders, which contributes to destination development (Bramwell & Lane, 2000). A public-private partnership is an example of such cooperation, and is based on co-ownership and/or cooperation between the public and private sector (Weiermair et al., 2008). To receive public subsidies, EU programs require more cooperation, which creates incentives for innovation (Alexandre et al., 2006). The collaboration of all stakeholders in decision-making processes has been the key to success of the Alpine process; the Alpine Convention has played a key role in promoting collaboration (Gunya, 2007). Participatory planning and decision making, sustainable tourism development strategies and environmental policies are a focus of the European Charter for Sustainable Tourism in Protected Areas (Castellani & Sala, 2010). Energy policies that support the usage of alternative sources of energy should be put in place, such as programs for alternative energy projects by the Ontario government (Heagle et al., 2011) or by the Lithuanian government (Katinas & Markevicius, 2006). Discussions on renewable energy policies in the EU have become the focal point of the European policy debate and steps towards supporting the usage of renewable energy through common EU strategy have been taken (Maza, Hierro, & Villaverde, 2010). The tourism sector continues to face the challenge of reducing social and environmental costs of transport (Dwyer et al., 2009). Destination managers have the ability to influence the eco-efficiency of tourism travel, but one must take precaution when implementing transportation policies that favour alternative transportation modes and public transportation, as skiers tend to prefer private transportation (Reilly et al., 2010). Tax and investment incentives for new products, services and processes can improve sustainable tourism development (Logar, 2010). Weiermair, Peters and Frehse (2008) recognised the importance of education and training of all interested parties for achieving sustainability in mountain destinations. Active research, communication and the application of research findings in tourism have increased dramatically in recent years (Xiao & Smith, 2010). In some mountain destinations, frameworks for the acquisition and application of research findings have already been developed (R. J. B. Ritchie & Ritchie, 2002) and projects implemented (Alexandre et al., 2006). For proper tourism development, control mechanisms for evaluating research, development and innovation policy have to be put in place (Camisón & Monfort-Mir, 2012; Castellani & Sala, 2010).

2.2.2.2 Innovation management of a destination

In order to achieve sustainable mountain destination development, the interests of the local community should be taken into account (Debarbieux & Price, 2008). Tourism development should include local community perspectives (Nunkoo & Ramkissoon, 2011); destinations should be managed in a way to serve the needs of all stakeholders at a destination (Y. Wang, 2008). Organisational structure should therefore support the involvement of all stakeholders in tourism development (Lebe & Milfelner, 2006). Increasing knowledge through stakeholder

involvement contributes to innovativeness and steers proper sustainable mountain destination development (Breu, Maselli, & Hurni, 2005). Multi-stakeholder collaboration as an innovation process shows promising results in facilitating sustainable mountain destination development and should be implemented on national, regional and community levels (Kruk et al., 2007). Human resource development, such as employee empowerment and education, is also a crucial element of sustainable tourism destination development (Batra, 2006). Active education is necessary to improve innovative capabilities at the destination, which leads to destination development (Dwyer et al., 2009). Tourism destinations can achieve sustainable destination development through continuous learning and knowledge creation. A learning tourism destination framework assists destination management, as it increases knowledge and improves correct anticipation and response (Schianetz et al., 2007). Local learning systems are needed in destinations (Flagestad et al., 2005). Knowledge is a critical factor due to the nature of innovations and is crucial for them to take place (Hjalager, 2010). Efficient links with other destinations can facilitate the exchange of information and knowledge and, as such, promote innovative activities (Haugland et al., 2011). Flagestad et al. (2005) developed a model of a destination innovation system that embraced product and process innovations, and concluded that it could be compared to a local or regional innovation system. Mattsson, Sundbo and Fussing-Jensen (2005) stated in their study of innovation systems in tourism that the successful usage of attractors requires innovation in tourism companies and cooperation between them. There is a lack of systematically organised procedures and policies on a European level that would support the formation of clusters in the tourism industry (Lagos & Courtis, 2008). Clusters are an innovative process that facilitates innovation in tourism and positively influences destination development (Novelli et al., 2006). The existence of territorial industry clusters influences innovativeness in tourism (Hjalager, 2010), which is also why the proximity to technological clusters, innovation centres, etc. is crucial for destination development. Quick development of competences and skills in destination management organisation to match the demands of new technologies can provide new business opportunities and contribute to destination development (Yuan et al., 2006). Destinations must be able to support evolutionary and revolutionary changes in technology (Dwyer et al., 2009). Organisational culture should support changes, and the development of new products, processes and services. However, such organisational culture is difficult to find in mountain destinations, and the lack of it hinders destination development (Macchiavelli, 2009). Adaptive management is an effective way of managing the comprehensive tourism system; it generates knowledge through learning and enables rapid responses to the changing environment (Farrell & Twining-Ward, 2004). Resources must be used in a different manner to meet the emerging needs in mountain destinations (Macchiavelli, 2009). Koscak (1998) and Mihalič (2000) recognised environmental management and its practices as a crucial factor of tourism destination development. Furthermore, S. Hudson and Miller (2005) recognised environmental management to be an economic and competitive opportunity in mountain destinations.

2.2.2.3 Innovative elements in destination marketing

Destination marketing has been subject to important changes in the recent years. Being innovative can help considerably. The Internet has become an important marketing and communication tool in tourism (Wu, Wei, & Chen, 2008). The integration of information and communication technologies into destination marketing is a key to destination development and success (Gretzel et al., 2000). Destinations can target specific consumer profiles with the help of behavioural advertising, which is target advertising to a specific user based on their online activities (McDonald & Cranor, 2010). Contextual advertising can also be of use for destinations, since advertisements can be inserted based on the content of the viewed web page (Pak & Chung, 2010). In addition, social networking and the interaction of social and commercial networks is crucial for destination marketing. Social networks have been growing in importance and have become an important source of travel information, since they can offer highly-relevant content pages (Xiang & Gretzel, 2010), which is why destinations should use such networks commercially. Social networks have potential for synergies with the inclusion of trendsetters in destination marketing. In the early stage of the destination life cycle, a destination's success is heavily influenced by the early visitors, trendsetters, who are important opinion formers (Morgan, Pritchard, & Pride, 2004). Celebrities can also be trendsetters. Choosing the right celebrity can help create a more favourable evaluation of the advertisement of the destination (van der Veen, 2008), improve perceptions and attitudes towards a destination (S. Lee, Scott, & Kim, 2008) and can affect many aspects of destination image, a number of which can be controlled by the advertiser (Glover, 2011). Moreover, real-time communication can provide serious benefits for destinations. Obtaining near real-time information from consumers offers opportunities to provide services that can respond quickly to ever-changing needs of tourists (Buhalis, 2003). Therefore, customer relationship management is gaining in importance with the growth of competitiveness in tourism. Being innovative and using new technological developments to advance customer relationship management has the potential to redefine tourism industry (Vogt, 2011). Additionally, a selective destination marketing system must be applied at a destination in order to attract the proper number and segment of tourists (Connell, 2005). Selective marketing can be used to target specific tourist segments visiting ski resorts (Konu et al., 2011); it can be applied to attract more environmentally friendly tourist segments (Dolnicar & Leisch, 2008). Co-branding can help solve the problem of the small size of some communities by merging them into one destination (Cai, 2002). Destination co-branding helps transfer the perceptions of the brands at the destination into the destination features. It requires brands to be jointly advertised and promoted (Jayswal, 2008). Implementing co-branding and co-marketing is logical when customers relate to the destination they choose, rather than a single service (Middleton, Fyall, Morgan, & Ranchhod, 2009). The co-marketing of service providers can help achieve a stronger marketing effect, while investing less (Kylänen & Rusko, 2011). However, co-marketing is not the only beneficial form of marketing. Environmental marketing can help destinations succeed, while preserving the environment. Balancing environmental actions and environmental communication can provide competitive advantages for mountain destinations (S. Hudson & Miller, 2005). Nevertheless, environmental

marketing is often misused and misleads tourists; insensitive marketing policies also negatively affect local communities (Batra, 2006). Besides communication with the tourists, communication between the destination management organisation and service providers is also of vital importance. Information and communication technologies have enabled improved communication in tourism by introducing innovative software and networks (Buhalis & Law, 2008). New forms of active formal and informal communication channels between the destination management organisation and service providers can provide the means to increase mountain destination development (Fux et al., 2007). Such connectedness helps transfer and share knowledge, which in effect promotes innovation and development (Dredge, 2006).

2.2.2.4 Innovative elements in destination product development

Being innovative in destination product development enables destinations to differentiate themselves from other destinations and improve destination development (Dwyer et al., 2012). Innovative elements in destination product development represent the core of the innovation process (Hjalager, 1997). One such element is a web portal that provides rich user experience. With the emergence of Web 2.0, consumers can access a wide range of data (B. C. Lee & Wicks, 2010). The relative importance of e-tourism is still growing and calls for a vision in designing web pages. Web pages high in content richness are more likely to successfully help carry out strategies (Woodside et al., 2011). Having dynamic content on the web portals can also be helpful for destinations, since it is generated in almost real time and the information is based on each case individually (the client, the request or the session) (B'Far, 2005). Stamboulis and Skayannis (2003) noted that destinations should focus on customer-based content and have more customer-oriented innovation strategies for information and communication technologies. The destination's products should therefore be based on determined customer characteristics, and the development of innovative information and communication technologies enables destinations to do so (Buhalis & Law, 2008). Tourism products should take into account specific tourist contexts with each interaction, especially when they are supported by mobile applications (Souffriau, Vansteenwegen, Vertommen, Berghe, & Van Oudheusden, 2008). Mobile services and applications supporting destination's products have had significant influence on destination development (Buhalis & Law, 2008) and might continue to do so in the future (Jolly & Dimanche, 2009). New communication channels and the emergence of Web 2.0 enable customers to become co-developers, who create large quantities of tourist information. This forces destination management organisations to implement new technologies (B. C. Lee & Wicks, 2010). A part of organisational innovation is user participation in product development, which is increasingly used in mountain destinations (Hjalager, 2010). The inclusion of social networking in a destination's product development, such as blogs, Facebook, Twitter, etc., is of considerable interest for destinations as well. Social networking has enabled the digitalisation of word-of-mouth publicity; it expanded the scope of influence of consumers on other consumers in tourism (Litvin et al., 2008). Such interaction over the information and communication technology infrastructure is very useful for destinations, since it attracts feedback from tourists and creates the perception of involvement and belonging; it advances

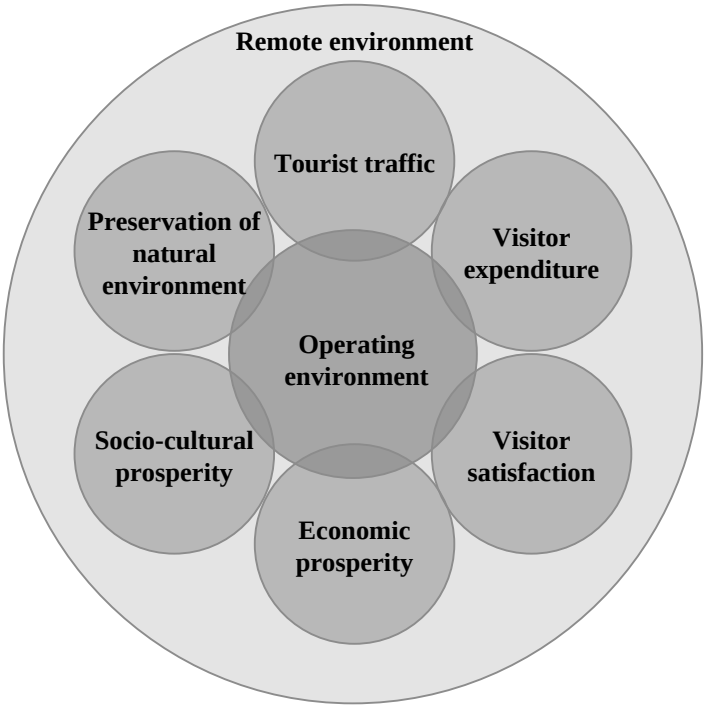
interactive learning and promotes customer loyalty (Stamboulis & Skayannis, 2003). Social networking can therefore also promote environmental education, which is becoming an important aspect in mountain destinations' products. Tourists have shown renewed interest in environmental protection and intact nature (Narasaiah, 2005). Some destinations have already started to implement environmental education in their products, such as environmental excursions (Dávid, 2011). Such actions can improve tourist experience, stimulate the appreciation of natural areas and lead to correct behaviour (Tsaur et al., 2006). Destinations also have to adapt their logistics and tourism products to changing demand, such as the growth of last minute reservations, new reservations systems, increased price sensitivity, etc. Having efficient logistics enables destinations to capture different profiles of tourists (for instance those that reserve early versus those that reserve at the last minute) (Marom & Seidmann, 2011). New reservation system developments allow the optimisation and forecasting of demand (El Gayar et al., 2011). The adaptation of tourism products to changing demand can be observed through new types of accommodations and attractions (Vanhove, 2011). Being innovative in the adaptation and development of new products to serve the requirements of potential tourists is essential for increasing competitiveness (Sundbo, Orfila-Sintes, & Sørensen, 2007). The ageing population can change the demand patterns and destinations should adapt their products accordingly (Glover & Prideaux, 2009). Introducing new products and adapting the existing ones to customer expectations is vital for resolving the problems that ski resorts are facing nowadays (Paget et al., 2010). Besides a destination's products, its image is crucial. Hinch and Higham (2004) claimed that tourism destination success is dependent on its uniqueness; therefore, creating a distinctive image of the destination is of high importance, since it can assist destination development (Govers et al., 2007). Blain, Levy and Ritchie (2005) stressed the importance of distinctive image of the destination, which can be the key to survival in times of increasing competition (Qu, Kim, & Im, 2011).

2.3 Elements for measuring mountain destination development

Several elements for the measurement of a destination's development have been researched, as there is no single perfect measure (Vaughan, 1999). Elements for measuring mountain destination development are based on the work of Mihalič et al. (2009), Choi and Sirakaya (2006), Dwyer and Kim (2003), McCool et al. (2001), Miller (2001) and others. There has not been much discussion regarding the elements for measuring mountain destination development. That is why some elements identified by researchers as useful for measuring rural destination development were applied to mountain destinations and used in this research, since mountain destinations share some similar characteristics as rural destinations (Roberts & Hall, 2001). Based on the literature review, a list of elements was developed. Elements were then classified into groups of elements based on relation and literature review (Figure 7). These elements comprise both objective and subjective measures. Objective and subjective measures should be used together in order to create a strong monitoring system of tourism development (Choi & Sirakaya, 2006). Elements are affected by the operating and the remote

environment. Different private and public sector institutions at the destination shape the operating environment. The remote environment influences the destination, but is beyond the reach of managers to influence it (Dwyer & Kim, 2003).

Figure 7: Literature-based mountain destination development



Based on the literature review, a list of elements and groups of elements was developed, which includes tourist traffic, visitor expenditure, visitor satisfaction, economic prosperity, socio-cultural prosperity and preservation of natural environment. Theoretical backgrounds of the literature-based elements and corresponding groups of elements are described in the following sub-chapters. The list of all elements and groups of elements for measuring mountain destination development is provided in Table 3.

Table 3: Literature-based elements for measuring mountain destination development

Tourist traffic	**Reference**
Tourist arrivals per capita	Sequeira and Nunes (2008)
Growth rate of tourist arrivals per capita	
Tourist arrivals per employee in tourism sector	Krakover (2000)
Growth rate of tourist arrivals per employee in tourism sector	
Tourist arrivals per destination area (km²)	Tsaur et al. (2006)
Growth rate of tourist arrivals per destination area (km²)	
Average length of stay	Barros and Machado (2010)
Growth rate in average length of stay	
Market share growth in terms of tourist arrivals	Dwyer and Kim (2003)
Market share growth in terms of nights spent	
Hotel occupancy rate	O'Neill and Mattila (2006)
Visits to parks, recreation areas	McCool et al. (2001)
Visitor expenditure	**Reference**
Daily visitor expenditure	Sun and Stynes (2006)
Growth rate in daily visitor expenditure	
Visitor expenditure per capita	McCool et al. (2001)
Growth rate in visitor expenditure per capita	
Visitor expenditure per employee in tourism sector	Krakover (2000)
Growth rate in visitor expenditure per employee in tourism sector	
Visitor expenditure per destination area (km²)	Tsaur et al. (2006)
Growth rate in visitor expenditure per destination area (km²)	
Market share growth in terms of tourist earnings	Dwyer and Kim (2003)
Price mark-up for tourism products	Nicolau (2009)
Visitor satisfaction	**Reference**
Share of very satisfied visitors	Chi and Qu (2008)
Visitor satisfaction with environmental issues	G. Miller (2001)
Share of returning visitors	Chi and Qu (2008)
Perceived quality of tourist services	Konu et al. (2011)
Perceived value for money of tourist services	Tam (2004)
Share of reservations in total number of inquiries	Ho, Jacobs and Cox (2003)
Share of cancelled bookings	Steiger (2011)
Number of visits to the destination's website	Woodside et al. (2011)
Economic prosperity	**Reference**
Number of unemployed tourism workers	Choi and Sirakaya (2006)
Employment growth in tourism	
Seasonality of employment in tourism sector	Charters and Saxon (2007)
Average wage in tourism sector compared to other sectors of the economy	Lundberg (2008)
Contribution of tourism sector to economic growth	Arslanturk, Balcilar and Ozdemir (2011)
Lodging revenues	McCool et al. (2001)
Annual number of new tourism businesses	
Percentage of income leakage out of the community	Choi and Sirakaya (2006)
Local market demand for tourism products	Vanhove (2011)
Income-earning opportunities in tourism for host communities	McCool et al. (2001)
Availability of local credit to local business	Choi and Sirakaya (2006)

(table continues)

(continued)

Socio-cultural prosperity	**Reference**
Presence of social services	Go and Govers (2000)
Availability of tourism infrastructural services	Konu et al. (2011)
Contribution of tourism to poverty reduction	Goodwin (2011)
Satisfaction of local population with tourism development	Choi and Sirakaya (2006)
Frequency of accidents related to outdoor activities	Gómez Martín (2005)
The employment of locals compared to non-locals in tourism-related activities	G. Miller (2001)
Employment equity between males and females in tourism-related activities	
Integration of all stakeholders in tourism development	Sautter and Leisen (1999)
Preservation of natural environment	**Reference**
Share of recycled water in tourism sector	Gössling et al. (2012)
Water pollution from sewage	
Usage of clean energy (wind, sun, geothermal, photovoltaic etc.) in tourism sector	Karamanis (2011)
Share of recycled waste in tourism sector	Yaw (2005)
Number of environmental certificates in tourism sector	Font (2002)
CO_2 emissions in tourism sector	Lin (2010)
Energy consumption in tourism sector	Cruz (2011)
Water consumption in tourism sector	
Environmental pollution	Greiner, Feichtinger, Haunschmied, Kort and Hartl (2001)
Air quality	Choi and Sirakaya (2006)
Amount of soil erosion	Zhang et al. (2010)
Frequency of environmental accidents related to tourism	Choi and Sirakaya (2006)

2.3.1 Tourist traffic

Tourist arrivals are the most common element for measuring tourism demand (Song & Li, 2008); determining mountain destination development should include the measurement of this (Linde & Grab, 2008). Tourist arrivals should be appropriately managed in order not to threaten the natural and social environments in mountain destinations (Gill & Williams, 1994). Tourist arrivals per capita are often used as a measure of tourism intensity (Sequeira & Nunes, 2008). There is usually a high number of tourist arrivals per capita in the Alpine destinations, although more than one third of Alpine villages do not have tourist beds (Alpine Convention, 2009a). The number of tourist arrivals and the number of nights spent have a significant effect on the hotel's efficiency (Radu, Huidumac, Rossela, & Costel, 2010). The hotel occupancy rate is the main determinant of a hotel's net operating income (O'Neill & Mattila, 2006). For a hotel manager, it is vital to synchronise tourist arrivals per employee (Krakover, 2000). The growth rate in tourist nights is a reasonably good element for measuring destination development, simple to obtain (destinations tend to collect these data), and it is comparable between different destinations (Mihalič & Kuščer, 2012). Barros and Machado (2010) stated: "The length of stay is largely explained by the socio-demographic profile of the tourist, and moderated by the perceived characteristics of the destination". The

Alps are experiencing a trend towards shorter but more frequent holidays (Alpine Convention, 2007). The average length of stay is four days (Alpine Convention, 2009a). There are numerous factors that influence tourist arrivals and nights spent in mountain destinations. For low-elevation resorts, with slopes below 2000 metres, snow depth was found to be important, which is why the effects of climate change are of particular concern for these types of resorts. For high-elevation resorts, there are other factors that influence the number of nights spent, such as weighted real GDP per capita of the major countries of visitor origin (Falk, 2010). While researching sustainable development, McCool et al. (2001) found that visits to parks and recreation areas are a useful element for measuring sustainable development. Such visits can be a source of mountain destination development (Nanni et al., 2004). Tourist arrivals per destination area is listed as a sustainable tourism development element by the UNWTO, since the impact of tourist arrivals on the ecological environment can be substantial (Tsaur et al., 2006). Formica and Uysal (1996) claimed that the Alps are still appealing to tourists, although many destinations have already reached their carrying capacity.

2.3.2 Visitor expenditure

Visitor expenditure has become an important source of income, employment and foreign exchange earnings for many countries (Choong-Ki, Var, & Blaine, 1996); it is an important source of mountain destination development (Reinius & Fredman, 2007). Tourist expenditure broadly consists of accommodation, food, transport, shopping and entertainment (Divisekera, 2010). Nevertheless, it has to be noted that a considerable part of tourism is non-commercial; since tourists can be situated in second homes, they might be visiting friends or relatives or performing non-commercial, nature-based tourism activities, which are performed for free, and enhanced by the natural environment (Tangeland, Vennesland, & Nybakk, In Press). One way to measure visitor expenditure is by surveying a probability sample of visitors (Breen, Bull, & Walo, 2001). In nature-based tourism, attracting higher spending tourists and for longer stays is crucial (Sandbrook, 2010), since the length of stay has a positive, although diminishingly so, effect on tourism expenditure (Thrane & Farstad, 2011). Daily visitor expenditure should be determined by computing averages for trip spending and length of stay individually from the sample and then dividing the two figures (Sun & Stynes, 2006). Again, when looking at tourism through the sustainability lens, McCool et al. (2001) noted that per capita visitor expenditure is a useful element for measuring sustainable tourism development, which means that it is better to measure expenditure per visitor and not in the aggregate. In effect, tourism policy should seek increases in expenditure per capita, rather than increases in absolute number of visitors (Perez & Juaneda, 2000). Since per capita expenditure is affected by the purpose of the visit (Divisekera, 2010), destinations should target correct market segments. A high growth rate in expenditure leads to increased prices of tourism services, which makes investments in tourism more attractive (Schubert et al., 2011). Price mark-ups for tourism products can be considered useful elements for measuring destination development, since tourists consider both price and quality attributes for such non-homogenous products (Kamakura & Moon, 2009). It is crucial for destinations to understand

which factors influence expenditure and to determine the correct price mark-ups (Nicolau, 2009).

2.3.3 Visitor satisfaction

Destination competitiveness and development depends on visitor satisfaction (Yoon & Uysal, 2005). Understanding the elements of visitor satisfaction is therefore crucial for destination development (Devesa, Laguna, & Palacios, 2010); Buhalis (2000) emphasised the importance of monitoring these elements. Visitor satisfaction is a key issue in mountain destination development and it leads to increased shares of returning visitors to the destination (Chi & Qu, 2008). Hence, visitor satisfaction is an element of destination success (Bornhorst et al., 2010) and linked to improved mountain destination development (Dickson & Huyton, 2008). Visitor satisfaction is affected by the level of prices, products, transport, the sites, the food, quality of services and the hospitality of the local population (Stevens, 1992). Visitor satisfaction in nature destinations is also measured based on the attributes of the natural environment (Geva & Goldman, 1991). Benefits, received stimuli, and experiences gained are also determinants of visitor satisfaction in nature destinations (Bigné, Andreu, & Gnoth, 2005; Scott, Tian, Wang, & Munson, 1995). Experiences can also affect the attitude towards environmental issues (Kals, Schumacher, & Montada, 1999). Visitor satisfaction with environmental issues is relevant to sustainable development (G. Miller, 2001) and is becoming increasingly important (S. Hudson, 1996). Proper environmental practices positively influence tourists' perception of the destination (Ruiz-Molina, Gil-Saura, & Moliner-Velázquez, 2010). However, the perceived value for money of tourist services is a vital element and represents an important determinant of post-purchase behaviour (Tam, 2004). The perceived quality of tourist services is also an important element for measuring mountain destination development (Konu et al., 2011) and can be determined by comparing service quality expectations and experienced service quality (Stauss & Seidel, 1995). When measuring satisfaction, the lifestyle, family and social identity of the tourists and the expectations tourists have must all be taken into account (Choi & Sirakaya, 2006). Returning visitors have different characteristics, preferences and evaluations, which is why it is important to know such structures of visitors (Petrick, 2004). In order to achieve a high number of visits to the destination's website, it must be designed effectively (Woodside et al., 2011). With constant development of information and communication technologies, a tourism destination's website must be rich in content in order to develop affection for the destination (W. Lee, Gretzel, & Law, 2010). Furthermore, achieving a high share of reservations in proportion to the total number of inquiries is very important and represents a serious challenge (Ho et al., 2003). Steiger (2011) claimed that share of cancelled bookings in snow-based tourism increases only if the snow conditions are unacceptable, rather than just sub-optimal. Making artificial snow aided in solving this problem. Nevertheless, a revenue management system must take into account the possibility of cancelled bookings (Morales & Wang, 2010).

2.3.4 Economic prosperity

Destinations have to think in terms of economic prosperity (Crouch & Ritchie, 1999), which has to be measured when evaluating mountain destination development (Kreutzmann, 2001). For example, proper development of ski resorts can induce economic prosperity in mountain destinations (Lasanta et al., 2007). Sustainable mountain destination development should include the economic wellbeing of all stakeholders at a mountain destination (Flagestad & Hope, 2001). The contribution of tourism sector to economic growth provides evidence of mountain tourism destination development and success (Bornhorst et al., 2010). Tourism can contribute to economic growth through foreign exchange surpluses, which have a positive contribution to the balance of payments (Arslanturk et al., 2011). However, a lack of funding is a lasting problem in the tourism development of rural communities; the availability of local credit to local businesses is a top priority element for measuring sustainable development (Choi & Sirakaya, 2006). The problem arises because the banks do not possess sufficient information on small rural businesses (Fleischer & Felsenstein, 2000). Of course, in some mountain destinations, large companies are also present, but small businesses are vitally important in mountain destinations, and this issue is therefore of considerable interest (Nepal, 2002b). Another crucial economic aspect of tourism development is employment. Employment growth in tourism is an important element for measuring sustainable development (Choi & Sirakaya, 2006). Employment in tourism has some specific characteristics. There is more part-time employment, self-employment, and temporary employment than in non-tourism industries. There are also more minorities employed in tourism and the workforce tends to be younger (Smith, Webber, & White, 2011). Labour turnover in the tourism sector is higher than in other sectors of the economy; Europe is facing high levels of temporary employment due to seasonality (Baum, 2007). If not properly managed, the seasonality of employment in tourism sector can be a problem in mountain destination development (Charters & Saxon, 2007). Income-earning opportunities in tourism for host communities correspond to the economic pillar of sustainability (McCool et al., 2001). One of the problems is the relatively low average wage in the tourism sector (Lundberg, 2008), although Sharpley and Forster (2003) found that remuneration alone is not an effective means of motivating staff. McCool et al. (2001) stated that the lodging revenues and annual number of new tourism businesses are important elements. Also, the percentage of income leakage out of the community is an important element for measuring sustainable development (Choi & Sirakaya, 2006; G. Miller, 2001).

2.3.5 Socio-cultural prosperity

Elements of socio-cultural prosperity are very common in more recent literature and include broad technical elements and discipline-based elements (Choi & Sirakaya, 2006). Tourism tends to increase the availability of social services, which can be used as an element for measuring destination development (Go & Govers, 2000). With such services, the quality of life of residents can be improved from the social perspective (Jurowski & Gursoy, 2004). The availability of tourism infrastructural services is also an important element for measuring mountain destination development (Konu et al., 2011). They need to be developed in order to

provide a proper business and social setting (Selby et al., 2011). Measuring the satisfaction of the local population with tourism development is crucial (Choi & Sirakaya, 2006; McCool et al., 2001); all stakeholders should be included in tourism development to achieve sustainability (Sautter & Leisen, 1999). Few studies have been made that provide detailed information regarding the contribution of tourism to poverty reduction (Goodwin, 2011); but in mountain destinations it can help considerably (Rosen, 2000). The employment of locals compared to non-locals in tourism-related activities is considered to be a very important element for measuring sustainable development; interestingly, employment equity between males and females in tourism-related activities is regarded as less important (G. Miller, 2001). One would expect that this might be the case because the wages have become almost equal with tourism development, but Thrane (2008) found that this is not so. Temporary employment of female workers is also considerably higher (Baum, 2007). Another socio-cultural element relates to safety. The geography of tourism and climatology aid in planning in the tourism industry (Gómez Martín, 2005), which can help lower the frequency of accidents related to outdoor activities. It is also crucial to properly respond to such accidents, especially in mountain areas (Alberti, Chiappa, Moschioni, Saggin, & Tarabini, 2006).

2.3.6 Preservation of natural environment

Natural environments represent attractions for destination development, which is why tourism managers are increasingly promoting sustainable development to preserve the natural environment (Farrell & Runyan, 1991). Ecotourism practices should be implemented in mountain destination development (Nepal, 2002b). Choi and Sirakaya (2006) noted environmental pollution as an element for measuring sustainability. High levels of environmental pollution reduce visitation to a certain destination and therefore hinder destination development (Greiner et al., 2001). Environmental quality can be measured with environmental certificates. Over 100 labels certifying environmental quality are used and since ISO9000 and ISO14000 have limited scope in tourism (Font, 2002), others can be used as well, a good example being the Green Globe (Mihalič, 2000). The tourism sector consumes large amounts of energy and emits large amounts of CO_2 (Lin, 2010). The vulnerability of mountain ecosystems to climate change is extremely high, and it is important that the stakeholders in mountain destinations reduce CO_2 emissions (Alpine Convention, 2011b). Resource usage and water and energy consumption should be included in preservation of the natural environment to achieve sustainable mountain destination development (Cruz, 2011). Escalating demand for energy is a major threat to sustainable tourism development. Efficiency of energy consumption can be improved by examining energy use patterns (Becken & Simmons, 2002). Clean energy is becoming increasingly important; the EU is committed to achieving a 20% contribution of renewable energy by 2020 (Karamanis, 2011). Rural areas should implement eco-technologies to produce clean energy, which can resolve the current energy concerns in such regions and lead to sustainable development (Chaoqun, 2011). However, the problem is that many mountain resorts and accommodation facilities were built before sustainability principles were considered in the construction process. Applying sustainable solutions to such infrastructure is a difficult and significant challenge, but it can be

done when handled appropriately (Yalcintas & Kaya, 2009). Nevertheless, all new infrastructures should be built in such a way as to include and enable the usage of eco-technologies. Since energy consumption somewhat depends on the destination's location (e.g., mountain destinations require more heating of accommodations and facilities), a better element that is more comparable is the usage of clean energies (European Commission, 2000). McCool et al. (2001) noted water consumption in tourism sector to be a useful element for measuring sustainable destination development, since tourism is an important cause of water consumption, with snow-based tourism being even more dependent on water than other forms of tourism (Gössling et al., 2012). They indicated that water pollution from sewage can be decreased with better sewage treatment in the tourism sector. However, total demand for water in the Alps is increasing, consequently producing more wastewater (Alpine Convention, 2009b). This issue has to be addressed by increasing the share of recycled water in tourism sector (Gössling et al., 2012). Interest in water reuse is growing in the tourism sector (March, Gual, & Orozco, 2004). Similarly, recycling waste can also reduce costs since waste can be used as inputs by receiving firms (Yaw, 2005). Reducing waste is perceived as one of the principles of sustainable tourism (Garrod & Fyall, 1998). Air pollution has become a severe environmental issue (Cheng et al., 2007). Therefore, air quality is also an element for measuring sustainable development, as well as the amount of soil erosion (Choi & Sirakaya, 2006). Zhang et al. (2010) defined soil erosion as loss of surface soil caused by rain and runoff water. Making artificial snow can contribute heavily to soil erosion (Rixen, Stoeckli, & Ammann, 2003). Besides making artificial snow, protecting the tourism infrastructures from natural disasters also changes the hydro-morphological situation of Alpine rivers (Alpine Convention, 2009b). Therefore, sustainable destination development is also partially explained by the frequency of environmental accidents related to tourism (Choi & Sirakaya, 2006). The natural environment should be preserved to achieve sustainable destination development, which is a strenuous task in mountain destinations, since winter sports tend to have severe negative impacts on the environment. Summer tourism in mountain destinations tends to have a lesser impact, but the negative effects are still present (May, 1995). Being active in preserving the natural environment in terms of energy and water consumption, sewage treatment and air quality at mountain destinations can provide destination development opportunities in the form of increased biodiversity, aesthetic appeal and improved recreational opportunities (Kelly, Haider, Williams, & Englund, 2007).

3 DETERMINING THE ELEMENTS AND FACTORS OF THE CONSTRUCTS IN THE MOUNTAIN DESTINATION INNOVATIVENESS MODEL

As demonstrated in the previous chapter, a comprehensive literature-based MDIM has been developed. Since there has not been much research performed in terms scale development for mountain destination environments, mountain destination innovativeness and mountain destination development, the scales in the model had to be built from the ground up and from many different sources, provided by numerous researchers. Building an entirely new model and scales carries the highest added value, but also requires comprehensive empirical testing. Hence, three surveys were conducted on international samples of tourism researchers and all stakeholders at mountain destinations to provide the data regarding the important elements and factors of mountain destination environments, innovativeness and development.

This doctoral dissertation therefore firstly contemplates the importance of elements of mountain destination environments, innovativeness and development and searches for factors that comprise these elements with the help of EFAs. The identification of important elements is not based on the Delphi technique, but instead employs an innovative approach. First, a literature review has been performed in order to identify elements of mountain destination environments, innovativeness and development. Second, web-based surveys were conducted on international samples consisting of researchers, lecturers and consultants from the field of tourism and all stakeholders in mountain destinations, such as destination management organisations, local tourism organisations, ski area operators, event management companies, local governments, hotel management companies, non-governmental organisations, incoming agencies, attraction management companies, international organisations, transport companies, chambers of commerce, convention centre management companies, catering companies and other organisations. Research has been performed using the same method and principles. Elements of mountain destination environments, innovativeness and development, based on theoretical foundations, have been evaluated in regard to their importance for mountain destination development. Using only the important elements has enabled a reduction in the number of variables, since the elements that are less critical for destination development have been excluded from the subsequent analysis. Therefore, only the important elements have been kept, and EFAs have been conducted in order to identify coherent factors that comprise these elements.

3.1 Problem definition, purpose and goals of research

The literature review has helped to uncover the need for identification of important elements of mountain destination environments, innovativeness and development. It shows that additional research is needed in regard to mountain destinations, especially in the field of innovation (Macchiavelli, 2009). Additional research in terms of quantitative and qualitative studies of the foundations, processes, implications and policies of innovation in tourism is necessary for expanding the knowledge in the field (Hjalager, 2010). Volo (2005) called for

more attention to be put on the building blocks of destination innovativeness and their main components. Destination success and development is also dependent on its tourism environments (Bornhorst et al., 2010), which uncovers the need for determining important tourism environments. Destination development should be properly measured, which is why Choi and Sirakaya (2006) called for more research on the measures of sustainable tourism destination development.

The purpose of the first part of the research is to offer a valuable instrument for further research in the field of mountain tourism. Furthermore, the purpose is also to provide assistance in decision making in mountain destinations. Based on the purpose of the research, the goals are to identify important elements of environments for mountain destination development, important elements of innovativeness for mountain destination innovativeness and development and to identify important elements of development for measuring mountain destination development. Another goal is to establish factors, based on the identified important elements, which represent underlying dimensions of mountain destination environments, innovativeness and development. These analyses help to identify key factors to focus on in order to improve mountain destination environments, innovativeness and development.

3.2 Research questions

The research questions are divided into two sections. The first section corresponds to the part of the research, which seeks to identify important elements of mountain destination environments, innovativeness and development. Dwyer and Kim (2003) called for more research on the relative importance of different dimensions of destination elements. McCool et al. (2001) stated that there is a great deal of confusion in regard to appropriate elements for sustainable development. This implies that determining a list of important elements of mountain destination environments, innovativeness and development can contribute to the existing body of literature. The research questions are:

RQ_1: Which elements of environments are important for mountain destination development?

RQ_2: Which elements of innovativeness are important for mountain destination innovativeness and development?

RQ_3: Which elements of development are important for measuring mountain destination development?

The proposition of whether the identified important elements form coherent factors is studied in the part of the research that concentrates on the development of the factors of mountain destination environments, innovativeness and development. Based on the results of the first part of the research, the elements chosen for this analysis are statistically significantly important. The research questions are:

RQ_4: Do elements of environments form coherent factors that represent underlying dimensions of mountain destination environments?

RQ_5: Do elements of innovativeness form coherent factors that represent underlying dimensions of mountain destination innovativeness?

RQ_6: Do elements of development form coherent factors that represent underlying dimensions of mountain destination development?

3.3 Data and methods

The elements of mountain destination environments, innovativeness and development have been tested for their importance for mountain destination development by using survey samples consisting of lecturers, researchers, consultants, and managers in the field of mountain tourism. Initially, about 200 researchers and 400 managers were contacted. Crouch (2011) stated that the collective experience, knowledge and insights of managers from destination management organisations[1] and tourism researchers with expertise in destination management provide a valuable source of information. The development of elements should include experts as well as other groups, since experts are prone to disregard some issues that can be important in tourism system (Bossel, 1999). Not only researchers from the field of mountain tourism and mountain destination managers were included in the research; a mountain destination comprises numerous stakeholders, and in order to decrease sample bias other managers (e.g. hotel managers) at mountain destinations were also included. For such research, it is common that the respondents are managers and other practitioners from public and private tourism sectors, as this is the population that is the most knowledgeable about the destination elements (Enright & Newton, 2004).

Each element was evaluated by respondents according to its importance. Importance was measured with seven-point[2] Likert items, which is a common practice in tourism literature (Barquet, Osti, & Brida, 2010; Borchgrevink & Knutson, 1997; Peters, 1993). The survey about mountain destination environments (Appendix 2) generated 194 completed responses that have been used for analysis. Seven completed responses have been excluded from the analysis, since the respondents completed the survey in less than four minutes, much quicker than the average time needed to complete the survey. The survey about mountain destination innovativeness (Appendix 3) generated 210 responses, of which 197 have been used for analysis, since the amount of time taken to complete the survey was set to at least four minutes. The survey about mountain destination development (Appendix 4) generated 175 completed responses that have been used for analysis. Again, seven completed responses have been excluded from the analysis, because the respondents completed the survey in less than

[1]National tourism administrations, state or provincial tourism offices, regional tourism organizations, convention and visitor bureaus and similar types of bodies.

[2]1 = Very unimportant, 2 = Unimportant, 3 = Slightly unimportant, 4 = Neither unimportant or important, 5 = Slightly important, 6 = Important, 7 = Very important.

four minutes. The number of generated responses falls within the range of 150 to 300 cases, as suggested for factor analysis by Hutcheson and Sofroniou (1999).

EFA does not explain all the variance within the common factor model; a certain amount of error cannot be avoided (Norris & Lecavalier, 2010). To produce relevant results, the quality of input data submitted to the analysis should be ensured when performing factor analysis. To ensure content validity, an in-depth literature review has been conducted. The survey questions have been reviewed for validity, completeness and readability by three professors and three destination managers to reduce the possibility of non-random errors (Liu & Arnett, 2000). The distribution of all measured elements has been examined, as well as missing values and outliers, in order to purify the data and reduce systematic errors (Yoon & Uysal, 2005). Serious missing values have not been found, and missing observations that existed have been managed with the expectation-maximisation imputation method, which produces the best representation of the original distribution of values with the least bias (Hair, Black, Babin, & Anderson, 2010). Last but not least, in order to prove that the factor solutions are valid and reliable, convergent and discriminant validity tests have been performed.

3.4 Determining the elements and factors of mountain destination environments

The survey about elements of mountain destination environments consisted of 54 elements (Table 1) that were graded by the respondents. In Table 4, the structure of the sample is presented, based on the country of origin of the respondents. Slovenia, Italy and Austria are the countries with the highest numbers of responses; together they represent 39.7% of the sample. The first six countries, based on the numbers of responses received, represent 60.8% of the sample.

Table 4: Country of origin of the mountain destination environments survey respondents

Country*	**SI**	**IT**	**AT**	**CA**	**FR**	**CH**	**US**	**GB**	**DE**	**ES**	**NO**	**AU**	**FI**	**BG**	**IN**	**JP**	**Other****	**Sum**
Number of cases	33	24	20	17	13	11	9	9	7	6	4	4	4	4	3	3	23	**194**
Share (%)	17.0	12.4	10.3	8.8	6.7	5.7	4.6	4.6	3.6	3.1	2.1	2.1	2.1	2.1	1.5	1.5	11.9	**100.0**

*Two-letter codes supplied by the International Organization for Standardization (ISO).

**TW, SE, NL, CZ, RU, PT, NZ, HR, ZR, BE, HK, MV, BD, CN, DK, IE.

The structure of the sample based on the sector type and line of work is presented in Table 5 and Table 6. The survey enabled multiple responses for these questions in order to grasp the true nature of the work of respondents. The numbers of the answers are presented, and their shares in the total volume of answers are shown. The share of respondents from the public sector is higher than the share of respondents from the private sector (Table 5); the highest number of respondents described their line of work as destination management and local tourism organisation, followed by education and research. These three groups together represent more than 60% of the answers (Table 6).

Table 5: Sector type of the mountain destination environments survey respondents

Sector	Responses	
	N	%
Public sector	140	69.7
Private sector	61	30.3
Total	**201**	**100.0**

Table 6: Line of work of the mountain destination environments survey respondents

Line of work	Responses	
	N	%
Destination management, local tourism organisation	55	21.3
Education	54	20.9
Research	52	20.2
Consultancy	21	8.1
Ski area operator	16	6.2
Event management	15	5.8
Local government	10	3.9
Hotel management	8	3.1
Non-governmental organisation	8	3.1
Incoming agency	4	1.6
Attraction management	4	1.6
International organisation	3	1.2
Other*	8	3.1
Total	**258**	**100.0**

*Transport, chamber of commerce, convention centre management, catering, other organisations.

The respondents that described themselves as researchers, lecturers and/or consultants were also asked to state their area/s of interest (Table 7). Multiple responses were again enabled in order to allow the respondents to state all their interests; the numbers of responses and their shares in the total volume of responses are presented. It can be seen that the respondents are most interested in mountain tourism and innovativeness in tourism, which together represent more than 60% of the answers (Table 7).

Table 7: Areas of interest of the mountain destination environments survey respondents

Interests	Responses	
	N	%
Mountain tourism	66	34.0
Innovativeness in tourism	51	26.3
Sport tourism	22	11.3
Innovativeness	18	9.3
Sustainable tourism	17	8.8
Tourism marketing and management	8	4.1
Other	12	6.2
Total	**194**	**100.0**

3.4.1 Importance of elements

A one-sample t-test was used for identification of statistically significantly important elements of mountain destination environments for mountain destination development. That enabled the reduction in the number of elements used in the part of the research that groups the elements into factors. Altogether, 54 elements have been tested for their importance (Appendix 5); 35 elements with means higher than 5.25 have been retained (Table 8). The threshold 5.25 has been used in order to retain the highest 25% of the Likert scale, which suggests that the respondents consider these elements to be important. The same threshold was used by Matthews, Moore and Wright (2008) when they measured the perception of low versus high switching costs for bank services. The means of these elements were then tested if they are statistically significantly higher than 5.25. The results show statistical significance at 0.05 or higher level for 27 elements (Table 8). The most important identified elements of mountain destination environments are safety of tourists at the destination, visual appeal, efficient water supply infrastructure, support for tourism development by local population, efficient electricity infrastructure and hospitality of local population. The first 27 elements of mountain destination environments (Table 8) can be considered to be important for mountain destination development and are used in the second part of the analysis, in which they are grouped into factors of mountain destination environments.

Table 8: One-sample t-test of the elements of mountain destination environments

Element	Mean	Std. Deviation	t	Sig. (2-tailed)
Safety of tourists at the destination	6.22	1.309	10.344	0.000
Visual appeal	6.13	1.231	9.921	0.000
Efficient water supply infrastructure	6.07	1.225	9.366	0.000
Support for tourism development by local population	6.06	1.267	8.889	0.000
Efficient electricity infrastructure	6.04	1.225	8.962	0.000
Hospitality of local population	6.00	1.297	8.047	0.000
Support of government at the municipality level	5.93	1.428	6.652	0.000
Favourable climate conditions	5.88	1.189	7.331	0.000
Support of government at the regional level	5.86	1.229	6.939	0.000
Efficiency of decision making	5.86	1.327	6.365	0.000
Market potential (domestic and nearby)*	5.86	1.167	7.324	0.000
Acceptance of credit cards and presence of ATMs	5.82	1.322	5.993	0.000
Business cooperation (business alliances and network relationships)*	5.78	1.285	5.721	0.000
Ease of oral communication (in English or other languages)	5.76	1.229	5.722	0.000
Presence of Internet connection facilities and Internet coverage)	5.75	1.373	5.106	0.000
Efficient health/medical facilities	5.71	1.278	5.060	0.000
Variety and diversity of terrains for different sports	5.66	1.237	4.672	0.000
Presence of local businesses*	5.62	1.179	4.366	0.000
Mobile phone signal coverage	5.61	1.414	3.553	0.000
Diversity of flora and fauna	5.55	1.311	3.191	0.002
Presence of multilingual written instructions/guides (traffic signs, maps and restaurant menus)	5.54	1.429	2.789	0.006
Market potential (long-haul)*	5.51	1.320	2.745	0.007
Presence of historical and cultural resources	5.50	1.326	2.621	0.009
Efficiency of regulatory framework	5.48	1.157	2.747	0.007
Carrying capacity	5.46	1.264	2.351	0.020
Costs and accessibility of capital*	5.45	1.308	2.180	0.030
Local managerial and staff skills	5.42	1.262	1.883	0.061
Support of government at the state level	5.40	1.365	1.498	0.136
Price competitiveness	5.36	1.203	1.326	0.186
Access to technologies and technological knowledge resources	5.30	1.311	0.579	0.563
Investment incentives	5.29	1.209	0.480	0.632
Staff costs	5.29	1.220	0.489	0.626
Favourable geographical location (vicinity of big cities)	5.28	1.210	0.387	0.700
Support from related industries	5.27	1.217	0.256	0.798
Property-related costs	5.25	1.222	-0.053	0.958

*Elements from the economic environment that the respondents consider important for mountain destination development.

3.4.2 Grouping important elements into factors

EFA has been performed in order to group elements of mountain destination environments into factors. It has been conducted based on 27 elements of mountain destination environments that were identified as important for mountain destination development. The Kaiser-Meyer-Olkin measure of sampling adequacy is very high (0.921), suggesting the

appropriateness of factor analysis. Furthermore, the significance of Bartlett's Test of Sphericity (p = 0.000) indicates that sufficient correlations exist among the elements to proceed with the analysis (Hair et al., 2010).

The principal axis factoring extraction method with promax rotation has been used (oblique rotation is more appropriate, since the underlying dimensions are assumed to be correlated). Some correlation among factors can be expected, in which case oblique rotation generates a more accurate solution (Costello & Osborne, 2005). Table 9 shows the correlations between the four factors. In Appendix 6, correlations between the elements of mountain destination environments are presented.

Table 9: Correlation Matrix of the factors of mountain destination environments

Factor	Factor 1*	Factor 2**	Factor 3***	Factor 4****
Factor 1*	1.000	0.744	0.683	0.662
Factor 2**	0.744	1.000	0.652	0.683
Factor 3***	0.683	0.652	1.000	0.627
Factor 4****	0.662	0.683	0.627	1.000

Extraction method: principal axis factoring.
Rotation method: promax with Kaiser normalisation.
*Technological environment
**Socio-cultural environment
***Natural environment
****Political and legal environment

A range of criteria have been used to determine the number of factors to extract, such as latent roots or eigenvalues, scree plot, communalities, and percentage of explained variance. The proposed solution with four factors with eigenvalues greater than 1.0 was tested. Based on the guidelines of Hair et al. (2010), items with factor loadings lower than 0.5, the minimum necessary for practical significance, and cross-loadings higher than 0.4, were eliminated one by one. A four-factor solution, with 19 elements being retained, has been produced, representing approximately 67.5% of the total variance (Table 10), which is considered to be satisfactory in social sciences (Hair et al., 2010). Furthermore, the communalities of the 19 elements ranged from 0.421 to 0.802, suggesting that the variances of each original element were reasonably explained by the four-factor solution. Cronbach's alpha for the four factors varied from 0.844 to 0.929, all much higher than the generally agreed upon lower limit of 0.7, suggesting high internal consistency (Hair et al., 2010). Each proposed factor contains at least four elements, which exceeds the suggested minimum criteria of three elements per factor (Velicer & Fava, 1998). The four factors were then labelled based on the elements that constituted them (Table 10). The factors of mountain destination environments that were identified are the technological environment, the socio-cultural environment, the natural environment and the political and legal environment.

Efficient health/medical facilities, electricity infrastructure and water supply infrastructure, as well the presence of Internet connection facilities and Internet and mobile phone signal coverage, and the acceptance of credit cards and the presence of ATMs are all important elements of technological environment that can determine the development of mountain

destinations. The socio-cultural environment is important as well. Local managerial and staff skills, ease of oral communication (in English or other languages) and the presence of multilingual written instructions/guides (traffic signs, maps and restaurant menus) are of high importance, as well as the support for tourism development and hospitality of local population. Visual appeal, favourable climate conditions, the variety and diversity of terrains for different sports and the carrying capacity of the destination have all been identified as important elements of the natural environment. The political and legal environment should also be taken into account as a crucial factor that influences mountain destination development through the efficiency in decision making and regulatory framework and governmental support at the regional and municipality level.

Table 10: Rotated factor loadings, communalities of elements, share of explained variance and reliability tests for mountain destination environments

Element	Factor 1*	Factor 2**	Factor 3***	Factor 4****	Commu-nality
Mobile phone signal coverage	**0.851**	0.065	-0.220	0.095	0.682
Presence of Internet connection facilities and Internet coverage	**0.834**	0.089	-0.307	0.214	0.748
Acceptance of credit cards and presence of ATMs	**0.817**	0.025	-0.046	0.058	0.712
Efficient health/medical facilities	**0.699**	-0.003	0.274	-0.160	0.644
Efficient electricity infrastructure	**0.694**	-0.001	0.287	-0.028	0.800
Efficient water supply infrastructure	**0.687**	-0.031	0.347	-0.052	0.802
Presence of multilingual written instructions/guides (traffic signs, maps and restaurant menus)	-0.028	**0.949**	-0.211	0.055	0.712
Ease of oral communication (in English or other languages)	0.050	**0.835**	-0.067	0.087	0.794
Local managerial and staff skills	0.140	**0.671**	0.113	-0.232	0.508
Hospitality of local population	0.126	**0.619**	0.184	0.007	0.738
Support for tourism development by local population	0.001	**0.578**	0.279	0.072	0.712
Carrying capacity	-0.147	-0.132	**0.877**	0.054	0.522
Variety and diversity of terrains for different sports	-0.050	0.037	**0.776**	0.055	0.643
Favourable climate conditions	0.105	0.089	**0.580**	0.160	0.704
Visual appeal	0.074	0.092	**0.568**	0.194	0.691
Support of government at the regional level	0.148	-0.107	0.002	**0.810**	0.707
Support of government at the municipality level	0.055	0.051	0.107	**0.638**	0.620
Efficiency of decision making	-0.098	0.208	0.102	**0.627**	0.618
Efficiency of regulatory framework	0.025	-0.117	0.236	**0.540**	0.421
Share of variance explained (%)	54.599	5.389	4.050	3.411	
Cronbach's alpha	0.929	0.904	0.879	0.844	

Extraction method: principal axis factoring
Rotation method: promax with Kaiser normalisation
*Technological environment
**Socio-cultural environment
***Natural environment
****Political and legal environment

To prove that the four-factor solution is valid and reliable, convergent and discriminant validity tests have been performed (Table 11). All factor loadings are significant (at $p<0.01$ or better), indicated by the t-values well in excess of 2.58 in absolute terms, thus validating the

proposed relationships among factors and their elements, and supporting convergent validity. All the error variances are also significant (at $p<0.01$ or better), indicated again by the t-values well in excess of 2.58 in absolute terms, providing additional validity evidence, since zero measurement error is a cause for concern (Diamantopoulos & Siguaw, 2000).

Squared multiple correlations (SMCs) range between 0.355 and 0.887, indicating fairly high indicator reliability. Construct reliability (CR), ranging between 0.872 and 0.925, also greatly exceeds the recommended level of 0.7 by Hair et al. (2010), revealing a high level of internal consistency and providing additional support for convergent validity.

Discriminant validity has been assessed by pairing factors together and comparing a two-factor model with a model in which variables make up only one factor. In all instances, the two-factor χ^2 significantly surpasses the one-factor χ^2. We can therefore conclude that the factors of mountain destination environments are not perfectly correlated and that discriminant validity is supported (Hair et al., 2010).

Table 11: CFA validity and reliability analysis for mountain destination environments

Mountain destination environments	Loading	Compl. stand. loading	t-value	Error variance	t-value	CR and SMC
Technological environment						**0.872**
Mobile phone signal coverage	1.000	0.767	-	0.622	8.488	0.588
Presence of Internet connection facilities and Internet coverage	1.136	0.750	10.766	0.894	8.626	0.562
Acceptance of credit cards and presence of ATMs	0.731	0.596	8.305	0.863	9.316	0.355
Efficient health/medical facilities	1.021	0.725	10.361	0.835	8.791	0.526
Efficient electricity infrastructure	1.147	0.787	11.402	0.716	8.291	0.620
Efficient water supply infrastructure	1.114	0.742	10.644	0.898	8.679	0.551
Socio-cultural environment						**0.925**
Presence of multilingual written instructions/guides (traffic signs, maps and restaurant menus)	1.000	0.765	-	0.725	9.198	0.585
Ease of oral communication (in English or other languages)	1.030	0.815	12.277	0.550	8.943	0.663
Local managerial and staff skills	1.142	0.942	14.735	0.169	6.133	0.887
Hospitality of local population	1.137	0.938	14.654	0.181	6.389	0.879
Support for tourism development by local population	0.956	0.745	11.028	0.748	9.270	0.555
Natural environment						**0.877**
Carrying capacity	1.000	0.792	-	0.597	8.248	0.628
Variety and diversity of terrains for different sports	0.859	0.684	9.989	0.847	9.021	0.467
Favourable climate conditions	1.164	0.817	12.481	0.678	7.929	0.668
Visual appeal	1.101	0.899	14.014	0.290	5.878	0.808
Political and legal environment						**0.877**
Support of government at the regional level	1.000	0.809	-	0.528	8.044	0.655
Support of government at the municipality level	1.060	0.893	14.410	0.287	6.130	0.797
Efficiency of decision making	0.824	0.652	9.601	0.918	9.145	0.426
Efficiency of regulatory framework	1.026	0.834	13.206	0.460	7.655	0.696

3.4.3 The missing economic environment

It is theorised that economic environment is an integral part of the factors affecting destination development (Castellani & Sala, 2010; Godde et al., 2000). The research has shown that there are only five elements (out of 16) from the economic environment that the respondents consider important for mountain destination development (elements marked with a * in Table 8). These elements are market potential (domestic and nearby), business cooperation (business alliances and network relationships), presence of local businesses, market potential (long-haul) and costs and accessibility of capital. The elements that were not selected as important by the respondents might not provide the proper means to improve destination development.

Although only five elements from the economic environment were identified as important for mountain destination development, the factor of economic environment could still be identified with the EFA. But when the EFA was conducted on the 27 elements that are considered important for mountain destination development, the factor economic environment did not converge. This might be due to the current economic crisis. The survey has been performed in a very delicate period, and there is a possibility that the economic environment is not included in the model because of it. This cannot be determined due to the fact that the survey has been performed only once. Future research should conduct the same survey in a different time period and compare the results to check for differences in terms of the importance of the elements of the economic environment.

Another reason the economic environment has not converged might be because a great deal of importance has been placed on the socio-cultural and natural environments in recent years due to the rapid popularisation of sustainability. This could have caused neglect of the economic environment, which actually is an integral part of sustainable development.

It would also be very interesting to explore in depth whether the importance of the economic environment differs at the destination level and the firm level in mountain destinations. The research conducted cannot show these differences, despite the fact that managers from the private sector in mountain destinations responded to the survey, since the questions were aimed at determining the importance of elements at the destination level. It can be expected that at the firm level, tourism businesses put high importance on the economic elements (Mihalič et al., 2011). Nevertheless, a destination does not exist as an entity in the same way a company does, and hence, it does not behave as one (J. R. B. Ritchie & Crouch, 2003). At the destination level, the nature of work is quite different and other imperatives might be important, since destination development should not be based solely on economic foundations (Crouch & Ritchie, 1999). In nature-based tourism destinations, the natural environment is the most important factor for destination success (Huybers & Bennett, 2003). However, this does not automatically translate to the firm level and not all tourism businesses would act in an environmentally friendly way without environmental regulations imposed by the governments (Huybers & Bennett, 2003). One can therefore expect that in terms of environments, the firm level and destination level perspective differ to some extent.

One might expect that there would be considerable differences regarding the evaluation of importance of elements of the economic environment between the private and public sector. Theory suggests that managers in the public sector have different motivations than managers in the private sector (Jurkiewicz, Massey, & Brown, 1998; Perry & Porter, 1982). Economic success causes the public sector to be less focused on the economic dimension (Wong, 1998). An independent samples t-test has been used to compare the means of two samples (private and public sector) on each of the 16 elements of economic environment, to test whether there are significant differences between private and public sector's perspective on the economic environment. The means and standard deviations of the two groups on each of the 16 elements, and the t-values obtained after applying the t-test, are shown in Table 12. The

results make it evident that the two groups differ significantly at the 0.05 level of significance on only two elements (elements marked with a * in Table 12), namely those of support from related industries (which was evaluated higher by the public sector) and staff costs (which was evaluated higher by the private sector). Hence, it was not possible to confirm that there are considerable differences between the evaluations of the importance of elements of economic environment between the private and public sector.

Table 12: Independent samples t-test of the elements of economic environment

Element	Operating sector: Private (N = 61) Public (N = 140)	Mean	Std. Deviation	t	Sig. (2-tailed)
Size of the economy at the destination level	private	5.12	1.344		
	public	5.03	1.418	0.434	0.665
Business cooperation (business alliances and network relationships)	private	5.63	1.336		
	public	5.83	1.238	-0.960	0.340
Support from related industries*	private	4.99	1.145		
	public	5.41	1.218	-2.229	0.028
Favourable exchange rate	private	5.09	1.391		
	public	4.83	1.231	1.218	0.226
Price competitiveness	private	5.41	1.192		
	public	5.36	1.200	0.277	0.782
Market potential (domestic and nearby)	private	5.82	1.305		
	public	5.89	1.075	-0.369	0.713
Market potential (long-haul)	private	5.67	1.200		
	public	5.47	1.372	1.029	0.306
Investment incentives	private	5.19	1.183		
	public	5.34	1.206	-0.797	0.427
Presence of local businesses	private	5.54	1.002		
	public	5.66	1.220	-0.672	0.503
Presence of international businesses	private	4.70	1.312		
	public	4.63	1.333	0.315	0.754
Local competition	private	5.24	0.847		
	public	5.18	1.141	0.397	0.692
International competition	private	4.72	1.484		
	public	4.80	1.367	-0.356	0.723
Business ties	private	5.05	1.083		
	public	5.12	1.232	-0.398	0.691
Staff costs*	private	5.61	1.055		
	public	5.17	1.271	2.444	0.016
Property-related costs	private	5.26	1.168		
	public	5.25	1.255	0.053	0.958
Costs and accessibility of capital	private	5.50	1.131		
	public	5,45	1.365	0.299	0.766

*The private and public sector differ significantly at the 0.05 level of significance on only these two elements of economic environment.

3.5 Determining the elements and factors of mountain destination innovativeness

In the survey about the elements of mountain destination innovativeness, the respondents graded 88 elements (Table 2) for their importance. The structure of the sample is presented, based on the country of origin of the respondents, in Table 13. The highest numbers of responses were received from Slovenia, Austria and Italy; the three countries together

represent 37.1% of the sample. The responses received from the six countries with highest numbers of responses, represent 58.9 % of the sample.

Table 13: Country of origin of the mountain destination innovativeness survey respondents

Country *	SI	AT	IT	US	CA	CH	AU	GB	FR	ES	DE	NO	DK	SE	BE	IN	NL	PT	Other **	Sum
Number of cases	36	20	17	17	14	12	9	9	8	7	6	5	4	4	3	3	3	3	17	**197**
Share (%)	18.3	10.2	8.6	8.6	7.1	6.1	4.6	4.6	4.1	3.6	3.0	2.5	2.0	2.0	1.5	1.5	1.5	1.5	8.6	**100.0**

*Two-letter codes supplied by the ISO.

**BG, CN, FI, JP, NZ, TW, AD, IE, PL, RU, SK.

The structure of the sample based on the sector type and line of work is presented in Table 14 and Table 15. As in previous research, the survey enabled multiple responses to determine the true nature of the work of respondents. In Table 14 and Table 15, the numbers of the answers are presented, and their shares in the total volume of answers are shown. The share of respondents from the public sector is higher than the share of respondents from the private sector (Table 14); the highest number of respondents described their line of work as research, followed by education, and then destination management and local tourism organisation. These three groups together represent more than 60% of the answers (Table 15).

Table 14: Sector type of the mountain destination innovativeness survey respondents

	Responses	
Sector	**N**	**%**
Public sector	136	66.0
Private sector	70	34.0
Total	**206**	**100.0**

Table 15: Line of work of the mountain destination innovativeness survey respondents

	Responses	
Line of work	**N**	**%**
Research	67	24.3
Education	61	22.1
Destination management, local tourism organisation	33	12.0
Consultancy	23	8.3
Ski area operator	23	8.3
Hotel management	12	4.3
Local government	9	3.3
Event management	9	3.3
Incoming agency	8	2.9
Non-governmental organisation	6	2.2
Attraction management	6	2.2
Other sectors*	19	6.9
Total	**276**	**100.0**

*Transport, international organisations, chamber of commerce, convention centre management, catering, other organisations.

As in previous research, the researchers, lecturers and/or consultants were also asked to state their area/s of interest (Table 16). The numbers of the answers are presented, and their shares in the total volume of answers are shown; multiple responses were enabled in order to determine all the interests of the respondents. It can be seen that the respondents are most interested in mountain tourism and innovativeness in tourism, which together represent more than 60% of the answers (Table 16).

Table 16: Areas of interest of the mountain destination innovativeness survey respondents

Interests	Responses	
	N	%
Mountain tourism	62	33.5
Innovativeness in tourism	50	27.0
Innovativeness	23	12.4
Sport tourism	21	11.4
Sustainable tourism	12	6.5
Tourism marketing and management	6	3.2
Tourism networks	5	2.7
Other	6	3.2
Total	**185**	**100.0**

3.5.1 Importance of elements

Firstly, important elements of mountain destination innovativeness were identified, which enabled the reduction in the number of elements used for EFA. Altogether, 88 elements were tested for their importance (Appendix 7); 50 elements with means higher than 5.5 were retained. A higher threshold than in the previous research was used due to the need for a higher reduction of the elements, since the number of elements input to the model was higher than in the previous research. Although the limit has been set higher, this only increases the robustness of the model. A threshold of 5.5 was used, since elements with means above 5.5 are closer to "important" (6) than "slightly important" (5). The means of these elements were then tested as to whether they are statistically significantly higher than 5.5. The results show statistical significance at 0.05 or higher level for 33 elements (Table 17). The most important identified elements of mountain destination innovativeness are creation of distinctive image of the destination, creation of innovative vision, maintaining ecological processes and helping to conserve natural resources and biodiversity, participation of all stakeholders in tourism planning, making optimal use of environmental resources (environmental sustainability) and formation of destination's innovation strategy. The first 33 elements of mountain destination innovativeness (Table 17) can be considered to be important for mountain destination innovativeness and development, and are used in the second part of the analysis, in which factors of mountain destination innovativeness are identified based on these elements.

Table 17: One-sample t-test of the elements of mountain destination innovativeness

Element	Mean	Std. Deviation	t	Sig. (2-tailed)
Creation of distinctive image of the destination	6.14	1.167	7.752	0.000
Creation of innovative vision	6.14	1.097	8.213	0.000
Maintaining ecological processes and helping to conserve natural resources and biodiversity	6.12	1.103	7.933	0.000
Participation of all stakeholders in tourism planning	6.07	1.121	7.118	0.000
Making optimal use of environmental resources (environmental sustainability)	6.06	1.105	7.125	0.000
Formation of destination's innovation strategy	6.01	1.128	6.350	0.000
Taking into account the interests of the local community	5.98	1.174	5.787	0.000
Environmental policies that promote sustainable development	5.93	1.097	5.444	0.000
Human resource development (employee empowerment and education)	5.92	1.174	5.039	0.000
Adaptive management that enables quick response to changing environment	5.92	1.001	5.861	0.000
The local population's support for change	5.91	1.238	4.654	0.000
Web portal providing rich user experience	5.88	1.189	4.454	0.000
Dynamic content on the web portal	5.87	1.184	4.347	0.000
The local population's capacity to change	5.86	1.207	4.230	0.000
Transportation policies that favour alternative transportation modes and public transportation	5.86	1.068	4.723	0.000
Adapting to changing climate conditions	5.85	1.289	3.788	0.000
Continuous learning and knowledge creation	5.84	1.192	4.027	0.000
Collaboration of all stakeholders in decision-making processes	5.83	1.215	3.855	0.000
Ease of access to information through a highly developed communication system	5.82	1.200	3.754	0.000
Resource management (resources used in different manners to meet the emerging needs)	5.81	1.032	4.151	0.000
Using mountain scenery as an attraction (taking photos, etc.)	5.79	1.200	3.413	0.001
State-of-the-art safety procedures and safety infrastructure in the mountains (anti-avalanche systems, etc.)	5.79	1.336	3.040	0.003
Respect for the socio-cultural authenticity of host communities (conservation of cultural heritage and traditional values)	5.76	1.268	2.876	0.004
Organisational structure that supports involvement of all stakeholders	5.76	1.226	2.945	0.004
Energy policies that support usage of alternative sources of energy	5.76	1.059	3.379	0.001
Active education of all interested parties at the destination	5.72	1.202	2.600	0.010
Offering local products in combination with experiencing local craftsmanship	5.72	1.193	2.578	0.011
Tourism products adapted to changing demand (last minute reservations, increased price sensitivity, etc.)	5.70	1.101	2.495	0.013
Exploiting opportunities created by changing climate conditions	5.69	1.395	1.880	0.062
Availability of knowledge resources and education	5.69	1.247	2.101	0.037
Logistics adapted to changing demand (last minute reservations, new reservations systems, etc.)	5.68	1.168	2.104	0.037
Distinctive local cuisine (using local agriculture, etc.)	5.66	1.265	1.747	0.082

(table continues)

(continued)

Element	Mean	Std. Deviation	t	Sig. (2-tailed)
Public private partnership for the transfer of know-how and availability of new solutions	5.64	1.313	1.527	0.128
Active research, communication and application of research findings	5.64	1.281	1.495	0.137
Implementing new practices in environmental management	5.63	1.007	1.821	0.070
Social networking, the interaction of social and commercial networks	5.62	1.157	1.459	0.146
Destination's products based on determined customer characteristics (context awareness)	5.62	1.225	1.336	0.183
Improvements in destination accessibility (tunnels, reinventing the trains, etc.)	5.62	1.339	1.221	0.224
User participation in product development	5.60	1.118	1.274	0.204
Efficient waste management	5.60	1.353	1.019	0.309
Using mountain rivers as an attraction (extreme sports, appreciating the natural beauty, etc.)	5.60	1.163	1.176	0.241
Environmentally friendly solutions for ski infrastructure	5.60	1.332	1.008	0.315
Tourist firms' IT capabilities	5.58	1.149	1.025	0.307
Organising new kinds of special events	5.58	1.160	0.979	0.329
Destination's products supported by mobile services and applications	5.57	1.170	0.888	0.376
Respect of societal norms and values in business and economic relationships	5.55	1.180	0.578	0.564
Environmentally friendly solutions for tourist accommodations	5.54	1.176	0.515	0.607
Inclusion of social networking in destination's product development (blogs, Facebook, Twitter, etc.)	5.53	1.223	0.325	0.746
Quick development of competences and skills in destination management organisation to match the demands of new technologies	5.52	1.079	0.268	0.789
Using new technological developments in customer relationship management	5.51	1.198	0.149	0.882

3.5.2 Grouping important elements into factors

EFA has been conducted using the identified important elements to form factors of mountain destination innovativeness. This enables the identification of different aspects of mountain destination innovativeness. The EFA has been conducted based on the 33 elements that have been identified as important for mountain destination innovativeness and development. The appropriateness of factor analysis is confirmed by a very high Kaiser-Meyer-Olkin measure of sampling adequacy (0.897). Also, sufficient correlations exist among the elements to proceed with the analysis, which is shown by the significance of Bartlett's Test of Sphericity (p=0.000) (Hair et al., 2010).

EFA has been performed to determine the underlying dimensions of mountain destination innovativeness by analysing patterns of correlations among the 33 elements. The principal axis factoring extraction method with promax rotation has been used. Table 18 shows the correlations between the three factors. In Appendix 8, correlations between the elements of mountain destination innovativeness are presented.

Table 18: Correlation Matrix of the factors of mountain destination innovativeness

Factor	Factor 1*	Factor 2**	Factor 3***
Factor 1*	1.000	0.628	0.622
Factor 2**	0.628	1.000	0.523
Factor 3***	0.622	0.523	1.000

Extraction method: principal axis factoring.
Rotation method: promax with Kaiser normalisation.
*Socio-cultural sustainability and stakeholder participation
**Environmental sustainability (natural environment)
***Proactiveness

A range of criteria, such as latent roots or eigenvalues, scree plot, communalities, and percentage of explained variance, have been used to determine the number of factors to extract. The proposed solution with four factors with eigenvalues greater than 1.0 was tested, but it produced a factor with only two elements, which is below the suggested minimum criteria of three elements per factor (Velicer & Fava, 1998). Therefore, the scree plot was re-analysed, which showed that the maximum factors to extract might be three. Subsequently, a three-factor model was tested. Items with factor loadings lower than 0.5, the minimum necessary for practical significance, and cross-loadings higher than 0.4, were individually eliminated, based on guidelines of Hair et al. (2010). Finally, a three-factor solution, with 25 elements being retained, has been produced, representing approximately 56.8% of the total variance (Table 19); that is adequate for social sciences (Hair et al., 2010). The variances of each original element were reasonably explained by the three-factor solution, which is confirmed by the communalities of the 25 elements that ranged from 0.405 to 0.723. Cronbach's alpha for the three factors suggests high internal consistency, since it varied from 0.899 to 0.921, which is much higher than the lower limit of 0.7 (Hair et al., 2010). Each proposed factor contains at least five elements, as suggested by Hair et al. (2010). The three factors were then labelled based on the elements that constituted them (Table 19). The factor of socio-cultural sustainability and stakeholder participation addresses one dimension of sustainability, while innovativeness in regard to natural environment is included in the factor of environmental sustainability. Proactiveness was also identified as a factor that constitutes mountain destination innovativeness.

Innovativeness in socio-cultural sustainability is crucial, as there is a need for the local population's support and capacity for change, and the participation of all stakeholders in tourism planning; their collaboration in decision-making processes is also crucial. Therefore, the interests of the local community should be taken into account and an organisational structure that supports involvement of all stakeholders should be put forward. Destinations have to respect the socio-cultural authenticity of host communities (conservation of cultural heritage and traditional values) and start offering local products in combination with experiencing local craftsmanship. One should also not neglect the availability of knowledge resources and education, which has been identified as an important element of socio-cultural sustainability and stakeholder participation. Innovativeness in regard to environmental sustainability incorporates the optimal use of environmental resources, introducing

environmental policies that promote sustainable development and energy policies that support usage of alternative sources of energy. Transportation policies that favour alternative transportation modes and public transportation have also been identified as important. Implementing new practices in environmental management, maintaining ecological processes and helping to conserve natural resources and biodiversity while adapting to and exploiting opportunities created by changing climate conditions have also been identified as elements of the factor environmental sustainability. Proactiveness is the last factor that was identified; it covers the technological aspect of mountain destination innovativeness, as well as the strategic one. The formation of a destination's innovation strategy and the creation of distinctive image and innovative vision of the destination, while having tourism products and logistics adapted to changing demand (last minute reservations, increased price sensitivity, new reservations systems, etc.) are important elements of proactiveness that influence mountain destination innovativeness and development. The respondents also believe that ease of access to information through a highly developed communication system, having dynamic content on the web portal and providing rich user experience are important elements of proactiveness for increasing mountain destination innovativeness and development.

Table 19: Rotated factor loadings, communalities of elements, share of explained variance and reliability tests for mountain destination innovativeness

Element	Factor 1*	Factor 2**	Factor 3***	Commu-nality
The local population's support for change	**0.834**	0.008	-0.085	0.622
The local population's capacity to change	**0.803**	0.012	-0.080	0.581
Participation of all stakeholders in tourism planning	**0.754**	-0.029	0.020	0.560
Collaboration of all stakeholders in decision-making processes	**0.753**	0.000	0.026	0.593
Taking into account the interests of the local community	**0.751**	0.004	0.031	0.598
Organisational structure that supports involvement of all stakeholders	**0.737**	0.110	-0.051	0.607
Availability of knowledge resources and education	**0.674**	0.003	0.093	0.543
Respect for the socio-cultural authenticity of host communities (conservation of cultural heritage and traditional values)	**0.664**	0.216	-0.102	0.570
Offering local products in combination with experiencing local craftsmanship	**0.537**	0.104	0.124	0.481
Energy policies that support usage of alternative sources of energy	-0.043	**0.850**	-0.031	0.653
Environmental policies that promote sustainable development	0.079	**0.836**	-0.136	0.674
Making optimal use of environmental resources (environmental sustainability)	0.069	**0.699**	0.062	0.607
Transportation policies that favour alternative transportation modes and public transportation	0.041	**0.666**	0.120	0.583
Maintaining ecological processes and helping to conserve natural resources and biodiversity	-0.032	**0.662**	0.167	0.550
Exploiting opportunities created by changing climate conditions	-0.024	**0.638**	0.026	0.405
Implementing new practices in environmental management	0.087	**0.637**	0.024	0.502
Adapting to changing climate conditions	0.104	**0.580**	0.001	0.423
Dynamic content on the web portal	-0.164	0.062	**0.870**	0.655
Creation of distinctive image of the destination	0.179	-0.101	**0.782**	0.723
Logistics adapted to changing demand (last minute reservations, new reservations systems, etc.)	-0.134	0.100	**0.758**	0.539
Web portal providing rich user experience	-0.078	0.106	**0.753**	0.585
Tourism products adapted to changing demand (last minute reservations, increased price sensitivity, etc.)	-0.138	0.067	**0.737**	0.480
Formation of destination's innovation strategy	0.296	-0.058	**0.615**	0.637
Creation of innovative vision	0.260	-0.027	**0.587**	0.577
Ease of access to information through a highly developed communication system	0.307	-0.174	**0.539**	0.456
Share of variance explained (%)	43.168	7.645	6.006	
Cronbach's alpha	0.921	0.899	0.908	

Extraction method: principal axis factoring.
Rotation method: promax with Kaiser normalisation.
*Socio-cultural sustainability and stakeholder participation
**Environmental sustainability (natural environment)
***Proactiveness

The identified three-factor solution has been checked for its validity and reliability; therefore convergent and discriminant validity tests have been performed (Table 20). All factor loadings are statistically significant (at $p<0.01$ or better), since the t-values are well in excess of 2.58 in absolute terms. This validates the suggested relationships between factors and their elements and confirms convergent validity. All error variances are also significant (at $p<0.01$ or better), suggested again by the t-values (more than 2.58 in absolute terms), giving supplementary proof of validity, since zero measurement error is a source of concern (Diamantopoulos & Siguaw, 2000).

SMCs range from 0.380 to 0.718, which shows reasonably high indicator reliability. CR extends from 0.904 to 0.922, which is much higher than 0.7, recommended by Hair et al. (2010). This shows a high level of internal consistency and presents extra support for convergent validity.

Discriminant validity has been evaluated through pairing factors together and comparing a two-factor model with a model in which variables constitute only one factor. In all cases the two-factor χ^2 significantly exceeds the one-factor χ^2. Hence, it can be surmised that the factors of mountain destination innovativeness are not perfectly correlated and that discriminant validity is confirmed (Hair et al., 2010).

Table 20: CFA validity and reliability analysis for mountain destination innovativeness

Mountain destination innovativeness	**Loading**	**Compl. stand. loading**	**t-value**	**Error variance**	**t-value**	**CR and SMC**
Socio-cultural sustainability and stakeholder participation						**0.922**
The local population's support for change	1.000	0.768	-	0.630	8.831	0.589
The local population's capacity to change	0.950	0.749	11.004	0.639	8.949	0.561
Participation of all stakeholders in tourism planning	0.898	0.762	11.232	0.527	8.869	0.581
Collaboration of all stakeholders in decision-making processes	1.001	0.783	11.610	0.570	8.715	0.614
Taking into account the interests of the local community	0.957	0.775	11.458	0.551	8.780	0.600
Organisational structure that supports involvement of all stakeholders	1.025	0.795	11.820	0.552	8.617	0.632
Availability of knowledge resources and education	0.934	0.712	10.377	0.766	9.134	0.507
Respect for the socio-cultural authenticity of host communities (conservation of cultural heritage and traditional values)	0.997	0.747	10.980	0.710	8.957	0.559
Offering local products in combination with experiencing local craftsmanship	0.861	0.687	9.946	0.752	9.237	0.471
Environmental sustainability						**0.904**
Energy policies that support usage of alternative sources of energy	1.000	0.799	-	0.406	8.318	0.638

(table continues)

(continued)

Mountain destination innovativeness	Loading	Compl. stand. loading	t-value	Error variance	t-value	CR and SMC
Environmental policies that promote sustainable development	1.045	0.806	12.500	0.422	8.234	0.650
Making optimal use of environmental resources (environmental sustainability)	1.033	0.791	12.198	0.457	8.398	0.626
Transportation policies that favour alternative transportation modes and public transportation	0.963	0.763	11.635	0.477	8.653	0.582
Maintaining ecological processes and helping to conserve natural resources and biodiversity	0.978	0.750	11.386	0.533	8.749	0.562
Exploiting opportunities created by changing climate conditions	1.016	0.616	8.963	1.208	9.353	0.380
Implementing new practices in environmental management	0.838	0.704	10.527	0.511	9.019	0.496
Adapting to changing climate conditions	0.971	0.638	9.335	0.985	9.287	0.407
Proactiveness						**0.909**
Dynamic content on the web portal	1.000	0.764	-	0.584	8.722	0.584
Creation of distinctive image of the destination	1.093	0.847	12.569	0.385	7.758	0.718
Logistics adapted to changing demand (last minute reservations, new reservations systems, etc.)	0.881	0.683	9.792	0.726	9.167	0.467
Web portal providing rich user experience	0.990	0.754	10.962	0.610	8.795	0.569
Tourism products adapted to changing demand (last minute reservations, increased price sensitivity, etc.)	0.791	0.650	9.257	0.700	9.288	0.423
Formation of destination's innovation strategy	1.006	0.807	11.871	0.444	8.328	0.651
Creation of innovative vision	0.945	0.780	11.403	0.471	8.595	0.608
Ease of access to information through a highly developed communication system	0.871	0.657	9.367	0.818	9.265	0.432

3.6 Determining the elements and factors for measuring mountain destination development

The survey about mountain destination development consisted of 61 elements (Table 3) that were graded by the respondents. The structure of the sample is presented in Table 21, based on the country of origin of the respondents. Slovenia, Italy and Austria are the three countries, from which the most respondents originate; 40% of the respondents came from one of these three countries. The respondents, coming from the first six countries with the highest numbers of responses, represent 61.7% of the sample.

Table 21: Country of origin of the mountain destination development survey respondents

Country*	SI	IT	AT	CA	FR	CH	US	GB	DE	ES	NO	AU	FI	BG	JP	Other**	Sum
Number of cases	33	19	18	15	13	10	9	8	7	6	4	4	3	3	3	20	**175**
Share (%)	18.9	10.9	10.3	8.6	7.4	5.7	5.1	4.6	4.0	3.4	2.3	2.3	1.7	1.7	1.7	11.4	**100.0**

*Two-letter codes supplied by the ISO.

**IN, TW, SE, CZ, NL, HR, RU, ZR, BE, HK, CN, MV, BD, NZ, PT.

The structure of the sample based on the sector type and line of work is presented in Table 22 and Table 23. Again, the survey enabled multiple responses for these questions. The numbers of responses and their shares in the total volume of responses are presented. The share of respondents from the public sector is higher than the share of respondents from the private sector (Table 22); the highest number of respondents described their line of work as education, followed by destination management and local tourism organisation, and then research. These three groups together represent more than 60% of the answers (Table 23).

Table 22: Sector type of the mountain destination development survey respondents

	Responses	
Sector	**N**	**%**
Public sector	126	70.4
Private sector	53	29.6
Total	**179**	**100.0**

Table 23: Line of work of the mountain destination development survey respondents

	Responses	
Line of work	**N**	**%**
Education	50	22.0
Destination management, local tourism organisation	50	22.0
Research	44	19.4
Consultancy	16	7.0
Event management	13	5.7
Ski area operator	12	5.3
Local government	10	4.4
Hotel management	8	3.5
Non-governmental organisation	8	3.5
Incoming agency	4	1.8
Other*	12	5.3
Total	**227**	**100.0**

*Transport, international organisation, chamber of commerce, attraction management, convention centre management, catering, other organisations.

Researchers, lecturers and/or consultants were again, as in previous research, asked to state their area/s of interest (Table 24). Multiple responses were enabled, and the numbers of the answers are presented, and their shares in the total volume of answers are shown. It can be

seen that the respondents are most interested in mountain tourism and innovativeness in tourism, which together represent more than 60% of the answers (Table 24).

Table 24: Areas of interest of the mountain destination development survey respondents

Interests	Responses	
	N	%
Mountain tourism	57	34.8
Innovativeness in tourism	44	26.8
Sport tourism	17	10.4
Sustainable tourism	15	9.1
Innovativeness	13	7.9
Tourism marketing and management	8	4.9
Other	10	6.1
Total	**164**	**100.0**

3.6.1 Importance of elements

The identification of important elements for measuring mountain destination development enables the reduction in the number of elements used in the next part of the research. A one-sample t-test was used for the identification of important elements for measuring mountain destination development.

Altogether, 61 elements were tested for their importance (Appendix 9); 48 elements were retained, with means higher than 5.25. The threshold 5.25 was used in order to keep the highest 25% of the Likert scale, which means that the respondents believe that these elements are important (Matthews et al., 2008). The means of these elements were then tested to ascertain whether they are statistically significantly higher than 5.25. The results show statistical significance at 0.05 or higher level for 37 elements (Table 25). The most important identified elements for measuring mountain destination development are environmental pollution, air quality, share of very satisfied visitors, perceived quality of tourist services, share of returning visitors and perceived value for money of tourist services. The first 37 elements (Table 25) can be considered to be important for measuring mountain destination development and are used in the next part of the analysis, in which factors for measuring mountain destination development are identified.

Table 25: One-sample t-test of the elements for measuring mountain destination development

Element	Mean	Std. Deviation	t	Sig. (2-tailed)
Environmental pollution	6.27	1.131	11.949	0.000
Air quality	6.27	1.272	10.574	0.000
Share of very satisfied visitors	6.25	1.243	10.659	0.000
Perceived quality of tourist services	6.22	1.144	11.232	0.000
Share of returning visitors	6.21	1.223	10.357	0.000
Perceived value for money of tourist services	6.13	1.185	9.864	0.000
Visitor satisfaction with environmental issues	6.06	1.248	8.613	0.000

(table continues)

(continued)

Element	Mean	Std. Deviation	t	Sig. (2-tailed)
Satisfaction of local population with tourism development	6.03	1.234	8.352	0.000
Integration of all stakeholders in tourism development	5.91	1.291	6.765	0.000
Water pollution from sewage	5.89	1.424	5.952	0.000
Hotel occupancy rate	5.88	1.221	6.841	0.000
Availability of tourism infrastructural services	5.85	1.167	6.757	0.000
Water consumption in tourism sector	5.84	1.292	6.063	0.000
Contribution of tourism sector to economic growth	5.83	1.270	6.024	0.000
Share of recycled waste in tourism sector	5.83	1.203	6.354	0.000
Usage of clean energy (wind, sun, geothermal, photovoltaic, etc.) in tourism sector	5.82	1.305	5.744	0.000
Energy consumption in tourism sector	5.80	1.219	5.990	0.000
Daily visitor expenditure	5.75	1.277	5.194	0.000
Amount of soil erosion	5.75	1.373	4.839	0.000
Frequency of environmental accidents related to tourism	5.67	1.471	3.749	0.000
Average length of stay	5.66	1.339	4.053	0.000
Income-earning opportunities in tourism for host communities	5.65	1.187	4.512	0.000
CO_2 emissions in tourism sector	5.64	1.307	3.969	0.000
Growth rate in daily visitor expenditure	5.60	1.284	3.578	0.000
Growth rate in average length of stay	5.59	1.362	3.329	0.001
Market share growth in terms of nights spent	5.57	1.261	3.338	0.001
Availability of local credit to local business	5.57	1.195	3.546	0.001
Seasonality of employment in tourism sector	5.56	1.382	2.925	0.004
Share of recycled water in tourism sector	5.54	1.406	2.759	0.006
Contribution of tourism to poverty reduction	5.53	1.226	3.049	0.003
Employment growth in tourism	5.52	1.212	2.947	0.004
Visits to parks, recreation areas	5.51	1.300	2.658	0.009
Price mark-up for tourism products	5.50	1.252	2.647	0.009
Average wage in tourism sector compared to other sectors of the economy	5.49	1.236	2.523	0.013
Lodging revenues	5.46	1.206	2.289	0.023
Market share growth in terms of tourist arrivals	5.44	1.241	1.998	0.047
The employment of locals compared to non-locals in tourism-related activities	5.42	1.325	1.702	0.091
Percentage of income leakage out of the community	5.40	1.225	1.588	0.114
Presence of social services	5.39	1.158	1.557	0.121
Local market demand for tourism products	5.37	1.276	1.281	0.202
Number of environmental certificates in tourism sector	5.35	1.278	1.076	0.283
Visitor expenditure per capita	5.34	1.233	0.983	0.327
Growth rate in visitor expenditure per capita	5.33	1.253	0.797	0.426
Frequency of accidents related to outdoor activities	5.33	1.413	0.777	0.438
Share of reservations in total number of inquiries	5.30	1.340	0.483	0.630
Number of visits to the destination's website	5.30	1.307	0.554	0.580
Market share growth in terms of tourist earnings	5.29	1.271	0.440	0.661
Growth rate of tourist arrivals per capita	5.26	1.313	0.117	0.907

3.6.2 Grouping important elements into factors

EFA has been conducted in order to group elements for measuring mountain destination development into factors. It has been conducted based on 37 elements that have been identified as important for measuring mountain destination development. As in the previous two analyses, the Kaiser-Meyer-Olkin measure of sampling adequacy is very high (0.929), which suggests the appropriateness of factor analysis. The ability to proceed with the analysis is confirmed with the significance of Bartlett's Test of Sphericity (p = 0.000), which indicates that sufficient correlations exist among the elements (Hair et al., 2010).

The principal axis factoring extraction method with promax rotation has been used. Table 26 shows the correlations between the four factors. In Appendix 10, correlations between the elements for measuring mountain destination development are presented.

Table 26: Correlation matrix of the factors for measuring mountain destination development

Factor	Factor 1*	Factor 2**	Factor 3***	Factor 4****
Factor 1*	1.000	0.468	0.654	0.570
Factor 2**	0.468	1.000	0.633	0.571
Factor 3***	0.654	0.633	1.000	0.618
Factor 4****	0.570	0.571	0.618	1.000

Extraction method: principal axis factoring.
Rotation method: promax with Kaiser normalisation.
*Preservation of natural environment
**Tourist traffic and expenditure
***Visitor satisfaction
****Socio-economic prosperity

A range of criteria have been used to determine the number of factors to extract. The suggested solution with four factors with eigenvalues greater than 1.0 was tested. As Hair et al. (2010) suggested, items with factor loadings lower than 0.5, the minimum necessary for practical significance, and cross-loadings higher than 0.4, were eliminated, one by one. A four-factor solution, with 28 elements being retained, has been produced, representing approximately 68.3% of the total variance (Table 27), which is acceptable in social sciences (Hair et al., 2010). Moreover, the variances of each original element were reasonably explained by the four-factor solution, which is advocated by the communalities of the 28 elements ranging from 0.496 to 0.828. Cronbach's alpha for the four factors varied from 0.898 to 0.945, which exceeds lower limit of 0.7 and suggests high internal consistency (Hair et al., 2010). The identified factors comply also with their guidelines of five elements per factor. The four identified factors were named based on the elements that they are comprised of (Table 27). The factor socio-economic prosperity addresses one dimension of the measurement of sustainability, while the measurement of sustainability in regard to natural environment is included in the factor preservation of natural environment. The other two factors that are important for measuring mountain destination development are tourist traffic and expenditure and visitor satisfaction.

The first factor that measures mountain destination development in a sustainable manner is the preservation of the natural environment. It incorporates water consumption in tourism sector, water pollution from sewage, share of recycled water and waste in tourism sector, energy consumption and usage of clean energy (wind, sun, geothermal, photovoltaic etc.) in tourism sector. The respondents have also identified air quality and CO_2 emissions in the tourism sector, frequency of environmental accidents related to tourism and amount of soil erosion at the destination to be important elements for measuring mountain destination development. The next factor that measures sustainable mountain destination development is socio-economic prosperity. Employment growth, the seasonality of employment and average wage in tourism sector, compared to other sectors of the economy, lodging revenues and contribution of tourism sector to economic growth are all elements of socio-economic prosperity, and can be important elements for measuring mountain destination development. Then there are two factors that measure mountain destination development in a more standard way; these factors are tourist traffic and expenditure, and visitor satisfaction. In terms of tourist traffic and expenditure, the important elements for measuring mountain destination development that have been identified are average length of stay, growth rate in average length of stay and in daily visitor expenditure, market share growth in terms of tourist arrivals and in terms of nights spent, hotel occupancy rate and visits to parks and recreation areas. Visitor satisfaction can be determined by measuring the share of very satisfied visitors, the share of returning visitors and the perceived quality and value for money of tourist services. The availability of tourism infrastructural services and visitor satisfaction with environmental issues also provide insight into visitor satisfaction, which can be used to measure mountain destination development.

Table 27: Rotated factor loadings, communalities of elements, share of explained variance and reliability tests for mountain destination development

Element	Factor 1*	Factor 2**	Factor 3***	Factor 4****	Commu-nality
Water consumption in tourism sector	**0.834**	-0.068	0.113	-0.060	0.806
Amount of soil erosion	**0.846**	0.027	0.051	-0.236	0.605
Usage of clean energy (wind, sun, geothermal, photovoltaic etc.) in tourism sector	**0.844**	-0.058	-0.067	0.131	0.729
Energy consumption in tourism sector	**0.841**	0.007	0.044	0.033	0.797
Frequency of environmental accidents related to tourism	**0.764**	0.003	0.005	0.071	0.654
Share of recycled waste in tourism sector	**0.759**	-0.062	-0.091	0.243	0.686
CO_2 emissions in tourism sector	**0.720**	0.026	-0.032	0.080	0.578
Share of recycled water in tourism sector	**0.700**	0.050	-0.341	0.267	0.496
Air quality	**0.638**	0.041	0.399	-0.191	0.740
Water pollution from sewage	**0.621**	-0.038	0.242	0.006	0.614
Growth rate in average length of stay	0.033	**0.928**	-0.051	-0.090	0.747
Market share growth in terms of nights spent	-0.154	**0.908**	-0.046	0.125	0.792
Market share growth in terms of tourist arrivals	-0.138	**0.879**	-0.071	0.128	0.729
Average length of stay	0.027	**0.777**	0.138	-0.047	0.735
Visits to parks, recreation areas	0.367	**0.618**	-0.010	-0.102	0.613
Hotel occupancy rate	0.002	**0.567**	0.265	0.031	0.614
Growth rate in daily visitor expenditure	0.125	**0.539**	0.157	0.037	0.563
Share of returning visitors	-0.088	0.104	**0.835**	0.003	0.725
Share of very satisfied visitors	-0.004	0.086	**0.832**	0.026	0.816
Perceived value for money of tourist services	-0.122	-0.073	**0.829**	0.236	0.752
Perceived quality of tourist services	0.032	0.030	**0.815**	0.083	0.828
Visitor satisfaction with environmental issues	0.303	-0.062	**0.619**	0.022	0.682
Availability of tourism infrastructural services	0.132	0.035	**0.577**	0.101	0.582
Average wage in tourism sector compared to other sectors of the economy	0.067	-0.061	0.161	**0.719**	0.698
Contribution of tourism sector to economic growth	-0.009	-0.067	0.299	**0.675**	0.713
Seasonality of employment in tourism sector	0.019	0.175	0.065	**0.638**	0.653
Lodging revenues	-0.010	0.084	0.180	**0.616**	0.625
Employment growth in tourism	0.265	0.117	-0.117	**0.570**	0.559
Share of variance explained (%)	50.902	9.618	4.357	3.450	
Cronbach's alpha	0.945	0.927	0.936	0.898	

Extraction method: principal axis factoring.
Rotation method: promax with Kaiser normalisation.
*Preservation of natural environment
**Tourist traffic and expenditure
***Visitor satisfaction
****Socio-economic prosperity

In order to test for validity and reliability of the four-factor solution, convergent and discriminant validity tests have been performed (Table 28). T-values are well in excess of 2.58 in absolute terms, showing that all factor loadings are statistically significant (at $p<0.01$ or better). The presented relationships between factors and their elements are hence validated and the convergent validity is supported. T-values (more than 2.58 in absolute terms) indicate

that all error variances are also significant (at $p<0.01$ or better), adding further validity evidence, since zero measurement error is a source of concern (Diamantopoulos & Siguaw, 2000).

SMCs range between 0.380 and 0.892, which demonstrates adequately high indicator reliability. The recommended level of CR set at 0.7 by Hair et al. (2010) is highly exceeded, since it ranges between 0.898 and 0.944. This proves a high level of internal consistency and offers further support for convergent validity.

Discriminant validity has been estimated by pairing factors, and then comparing a two-factor model with a model in which the variables form only one factor. In all situations, the two-factor χ^2 is significantly better than the one-factor χ^2. We can hence confirm that the factors for measuring mountain destination development do not perfectly correlate and that discriminant validity is supported (Hair et al., 2010).

Table 28: CFA validity and reliability analysis for mountain destination development

Mountain destination development	Loading	Compl. stand. loading	t-value	Error variance	t-value	CR and SMC
Preservation of natural environment						**0.944**
Water consumption in tourism sector	1.000	0.944	-	0.181	6.539	0.892
Amount of soil erosion	0.801	0.711	12.334	0.932	8.990	0.506
Usage of clean energy (wind, sun, geothermal, photovoltaic etc.) in tourism sector	0.887	0.829	16.969	0.532	8.599	0.688
Energy consumption in tourism sector	0.943	0.944	25.678	0.162	6.554	0.891
Frequency of environmental accidents related to tourism	0.928	0.770	14.365	0.880	8.847	0.593
Share of recycled waste in tourism sector	0.768	0.779	14.712	0.569	8.818	0.607
CO_2 emissions in tourism sector	0.825	0.770	14.357	0.695	8.847	0.593
Share of recycled water in tourism sector	0.710	0.617	9.775	1.225	9.126	0.380
Air quality	0.821	0.788	15.075	0.613	8.787	0.621
Water pollution from sewage	0.854	0.732	12.999	0.941	8.947	0.536
Tourist traffic and expenditure						**0.928**
Growth rate in average length of stay	1.000	0.844	-	0.534	7.790	0.713
Market share growth in terms of nights spent	0.946	0.863	14.555	0.406	7.514	0.745
Market share growth in terms of tourist arrivals	0.901	0.835	13.778	0.466	7.897	0.698
Average length of stay	0.995	0.855	14.315	0.483	7.646	0.730
Visits to parks, recreation areas	0.824	0.729	11.190	0.790	8.627	0.532
Hotel occupancy rate	0.824	0.776	12.269	0.593	8.392	0.603
Growth rate in daily visitor expenditure	0.817	0.731	11.225	0.768	8.621	0.534
Visitor satisfaction						**0.938**
Share of returning visitors	1.000	0.832	-	0.460	8.288	0.693
Share of very satisfied visitors	1.090	0.892	15.251	0.315	7.510	0.796
Perceived value for money of tourist services	1.005	0.863	14.402	0.360	7.980	0.744
Perceived quality of tourist services	1.041	0.925	16.266	0.188	6.551	0.856
Visitor satisfaction with environmental issues	1.002	0.817	13.184	0.518	8.405	0.667
Availability of tourism infrastructural services	0.848	0.740	11.373	0.617	8.774	0.547
Socio-economic prosperity						**0.898**
Average wage in tourism sector compared to other sectors of the economy	1.000	0.837	-	0.457	7.343	0.701
Contribution of tourism sector to economic growth	1.035	0.843	13.446	0.467	7.249	0.711
Seasonality of employment in tourism sector	1.057	0.791	12.228	0.714	7.918	0.626
Lodging revenues	0.926	0.795	12.304	0.536	7.885	0.631
Employment growth in tourism	0.851	0.727	10.830	0.693	8.391	0.528

3.7 Limitations and implications for theory, practice and further research

A limitation of the research is incorporating only the destination level perspective. The firm level and destination level perspectives might differ, and these dissimilarities should be further researched. Identified elements and factors of environments, innovativeness and development might be of different importance for the destination as a whole and for a single company. Such research might even resolve the question of the missing economic environment. Another way to tackle this issue is to replicate the research in another time period to examine if there are differences in the opinions regarding not only the importance of mountain destination environments, but also innovativeness and development. Such an analysis enables the inclusion of the dynamic aspect (Frees, 2004).

The sample is heavily concentrated on only three different lines of work; education, destination management and local tourism organisations, and research. The results might have been different if there were more respondents from other lines of work; the opinions from different sectors could be compared in further research. Another limitation is the fact that the research examined the opinions only from the supply side. Otto and Ritchie (1996) stated that success should be determined also on the basis of the most significant factors of competitiveness expressed by the visitors. Dwyer and Kim (2003) also expressed the need to include visitors' inputs. They argued that the interrelationships between consumer preferences and destination attributes should be researched in order to increase the socio-economic prosperity. Further research should therefore attempt to define important elements and factors of mountain destination environments, innovativeness and development as perceived by tourists. Based on their opinions, different market segments could also be identified. Dwyer and Kim (2003) called for the development of suitable measures of destination competitiveness from the viewpoint of different types of tourists. Enright and Newton (2005) claimed that "an approach that refines the market segments in greater detail would provide valuable and fruitful results" in terms of identifying destination competitiveness factors. The added value of also expanding this research on the demand side could be in receiving opinions from both the supply side and the demand side. Such an approach could have the highest degree of accuracy (Formica & Uysal, 2006).

Since the research that has been performed is quantitative, further research should bring in elements of the qualitative research. In the social sciences, it is good to combine both types of research, since such a mixed methods approach can best serve to address the research issues and provide answers that neither quantitative nor qualitative research can provide separately (Tashakkori & Teddlie, 2010). The quantitative data that has been used in this research can be transformed into the data that can be analysed qualitatively (Tashakkori & Teddlie, 1998). It has been difficult to conduct the research due to the economic crisis; therefore, in-depth interpretation of the results is needed. All stakeholders in mountain destinations should thus be shown the research results, so that they can discuss them in semi-structured interviews. Pechlaner and Volgger (2012) and Pechlaner, Volgger and Herntrei (2012) have indicated that

a good tool for qualitative analysis could be the GABEK (*Ger.* Ganzheitliche Bewältigung von Komplexität) toolset, which can help in implementing theoretical concepts and enables practice-oriented qualitative research.

The research is specifically adjusted to mountain destinations, which differ from other destinations in many aspects that have been identified in the literature review. They are vulnerable to human influences in terms of their natural and socio-cultural environments; the effects of climate change and brain drain are such examples. The aesthetics of the natural environment play a crucial role, as well as the terrain features that enable numerous outdoor activities. Nevertheless, the model has potential for generalisability. The model could be used for the identification of important elements and factors in other kinds of destinations. This would require some changes to the model; elements and factors should be adapted to each specific kind of destination that is being researched. The model could be easily adapted for use in rural destinations. Therefore, with some changes to the model, it could be used not only for mountain destinations, but for other kinds of destinations as well.

The findings of the research fill the gap in the current literature with the identification of important elements and factors of mountain destination environments, innovativeness and development. The results also provide knowledge for destination managers and other stakeholders in mountain destinations. Changing conditions are causing troubles in mountain destinations, and the identified important elements and factors can serve as a guide for steering mountain destinations in the proper direction and help with adapting to changing conditions. Research can aid in identifying strengths, weaknesses, opportunities and threats at mountain destinations. Since the identified elements and factors cover many aspects of a destination, they can help in the improvement of a destination's overall condition. Specific sectors can be improved as well, by concentrating only on the particular elements and factors. Attracting and retaining tourists, as well as the destination's management and marketing can be improved by incorporating the important elements and factors into the destination's decision making process; such actions can enable destinations to advance their environments and innovativeness, which may lead to improved destination development.

The identified elements and factors of mountain destination environments, innovativeness and development constitute a basis for further research of mountain destinations. The literature review and the conducted analyses helped uncover the need for the testing of a comprehensive mountain destination innovativeness model; there is a need for operationalisation of these elements and factors. Research can use the elements to measure the performance of mountain destination environments, innovativeness and development in different mountain destinations. It would also be highly intriguing to explore interactions between mountain destination environments, innovativeness and development; the impact of innovative activities and environments on destination development can be determined. This would contribute to increasing the existing knowledge in the field. Based on the literature review findings and research results, it is suggested that a suitable method used for such analysis would be SEM. Therefore, SEM is used in the next part of the empirical analysis to determine whether

mountain destination environments influence mountain destination innovativeness and development, and whether mountain destination innovativeness influences mountain destination development. It is also determined whether the effect of tourism environments on mountain destination development is mediated by mountain destination innovativeness.

4 DETERMINING THE RELATIONSHIPS BETWEEN THE CONSTRUCTS OF THE MOUNTAIN DESTINATION INNOVATIVENESS MODEL

The second part of the empirical research focuses on the empirical testing of the relationships between the constructs mountain destination environments, innovativeness and development. The constructs and the corresponding factors and elements used for the analysis have been identified in the first part of the research (3rd chapter). The research therefore firstly provides an in-depth analysis of the importance of the elements within the model, builds the factors based on these important elements, and then tests the influence of environments and innovativeness on mountain destination development and the influence of environments on mountain destination innovativeness. The research consequently not only tests the new model, based on a comprehensive literature review, and meticulously defines elements and factors within the constructs mountain destination environments, innovativeness and development, but also offers the direction of influences between the constructs within the model.

The performance measurement of the elements of mountain destination environments, innovativeness and development is very complex; the data gathered on a destination level is usually incomplete and cannot be easily compared with other destinations. Therefore, the elements had to be graded based on the opinions of the respondents, who compared their destination to other destinations. This is not the best solution, but due to the different standards of measurement of quantitative indicators, which create difficulties in their comparison, and the overall lack of indicators, it is one of the few that can produce evidence regarding the influence of environments and innovativeness on mountain destination development. A web-based survey (Appendix 11) was used for data gathering; it was sent to mountain destination managers in Austria, France, Germany, Italy, Slovenia and Switzerland. Table 29 describes the criteria for altitude and slope that the mountain destinations used for the analysis fulfil. In order to avoid the problem with the language barrier, the survey was available in English, French, German, Italian and Slovenian. The research has attempted to determine whether innovativeness in mountain destinations, considered together with mountain destination environments, possibly leads to improvement of quality and efficiency, attraction and appeal, better implementation of policies and adaptation to the constraints or opportunities.

Table 29: Mountain destination altitude and slope criteria

Class (elevation in m)	Additional criteria
> 2500	
1500–2499	> 2° slope within 3 km radius
1000–1499	>5° slope within 3 km radius and/or local elevation range; local elevation range >300 m within 7 km radius
300–999	local elevation range >300 m within 7 km radius
0–299	standard deviation > 50 m for cardinal points

Source: Nordic Centre for Spatial Development, 2004.

4.1 Problem definition, purpose and goals of research

The literature review has made it evident that there is insufficient research in terms of the connections among different aspects of mountain destinations. Mutual influences between different building blocks of mountain destinations should therefore be further researched. The purpose of the second part of the research is to improve knowledge regarding the relationships among different constructs present in mountain destinations and to offer direction on how to advance mountain destination development. Based on the purpose of the research, the goals are to determine whether a better state of mountain destination environments leads to a better state of mountain destination innovativeness and whether better states of mountain destination environments and innovativeness lead to a better state of mountain destination development. Whether the effect of mountain destination environments on mountain destination development is mediated by mountain destination innovativeness is also determined (Figure 8). Factors and elements of mountain destination environments, innovativeness and development that are used in the analysis are in Table 30, Table 31 and Table 32.

Figure 8: Research-based MDIM

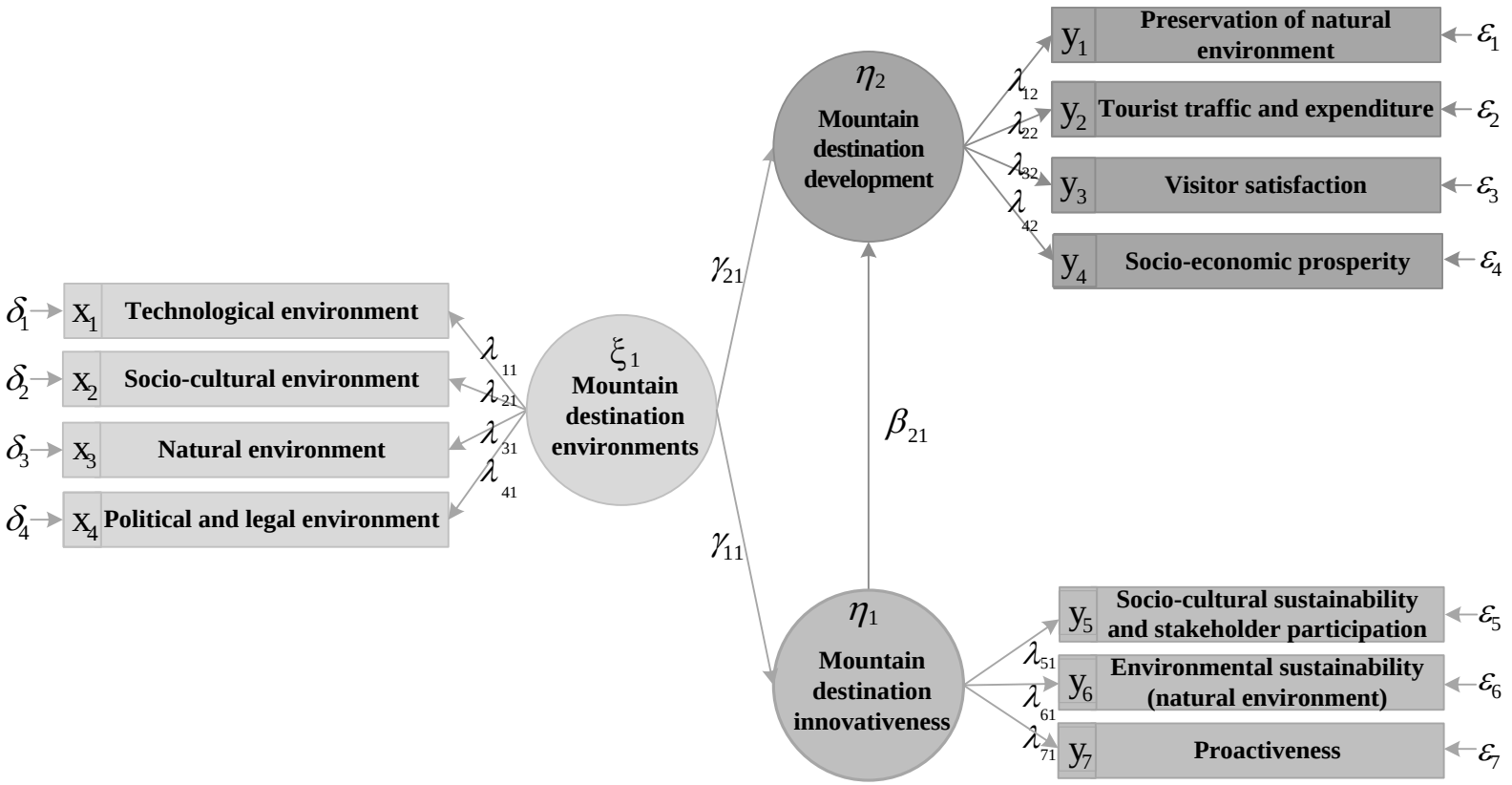


Table 30: Research-based factors and elements of mountain destination environments

Technological environment
Mobile phone signal coverage
Presence of Internet connection facilities and Internet coverage
Acceptance of credit cards and presence of ATMs
Efficient health/medical facilities
Efficient electricity infrastructure
Efficient water supply infrastructure
Socio-cultural environment
Presence of multilingual written instructions/guides (traffic signs, maps and restaurant menus)
Ease of oral communication (in English or other languages)
Local managerial and staff skills
Hospitality of local population
Support for tourism development by local population
Natural environment
Carrying capacity
Variety and diversity of terrains for different sports
Favourable climate conditions
Visual appeal
Political and legal environment
Support of government at the regional level
Support of government at the municipality level
Efficiency of decision making
Efficiency of regulatory framework

Table 31: Research-based factors and elements of mountain destination innovativeness

Socio-cultural sustainability and stakeholder participation
The local population's support for change
The local population's capacity to change
Participation of all stakeholders in tourism planning
Collaboration of all stakeholders in decision-making processes
Taking into account the interests of the local community
Organisational structure that supports involvement of all stakeholders
Availability of knowledge resources and education
Respect for the socio-cultural authenticity of host communities (conservation of cultural heritage and traditional values)
Offering local products in combination with experiencing local craftsmanship
Environmental sustainability
Energy policies that support usage of alternative sources of energy
Environmental policies that promote sustainable development
Making optimal use of environmental resources (environmental sustainability)
Transportation policies that favour alternative transportation modes and public transportation
Maintaining ecological processes and helping to conserve natural resources and biodiversity
Exploiting opportunities created by changing climate conditions
Implementing new practices in environmental management
Adapting to changing climate conditions
Proactiveness
Dynamic content on the web portal
Creation of distinctive image of the destination
Logistics adapted to changing demand (last minute reservations, new reservations systems, etc.)
Web portal providing rich user experience
Tourism products adapted to changing demand (last minute reservations, increased price sensitivity, etc.)
Formation of destination's innovation strategy
Creation of innovative vision
Ease of access to information through a highly developed communication system

Table 32: Research-based factors and elements for measuring mountain destination development

Preservation of natural environment
Water consumption in tourism sector
Amount of soil erosion
Usage of clean energy (wind, sun, geothermal, photovoltaic etc.) in tourism sector
Energy consumption in tourism sector
Frequency of environmental accidents related to tourism
Share of recycled waste in tourism sector
CO_2 emissions in tourism sector
Share of recycled water in tourism sector
Air quality
Water pollution from sewage
Tourist traffic and expenditure
Growth rate in average length of stay
Market share growth in terms of nights spent
Market share growth in terms of tourist arrivals
Average length of stay
Visits to parks, recreation areas
Hotel occupancy rate
Growth rate in daily visitor expenditure
Visitor satisfaction
Share of returning visitors
Share of very satisfied visitors
Perceived value for money of tourist services
Perceived quality of tourist services
Visitor satisfaction with environmental issues
Availability of tourism infrastructural services
Socio-economic prosperity
Average wage in tourism sector compared to other sectors of the economy
Contribution of tourism sector to economic growth
Seasonality of employment in tourism sector
Lodging revenues
Employment growth in tourism

4.2 Hypotheses

The first question that arises is whether an improved state of mountain destination environments impacts mountain destination innovativeness and development. Additional research is needed on destination level interactions with innovativeness (Volo, 2005). The effective usage of tourism environments can impact destination competitiveness and development (Crouch & Ritchie, 1999). Two research hypotheses can be derived:

H_1: Mountain destination environments positively influence mountain destination innovativeness.

H_2: Mountain destination environments positively influence mountain destination development.

The next question is whether the higher performance of mountain destination innovativeness contributes to mountain destination development. Innovativeness affects destination development (Dobni, 2008; Haugland et al., 2011; Volo, 2005; Zach & Fesenmaier, 2009). Weiermair (2003) and Paget, Dimanche and Mounet (2010) acknowledged the impact of innovativeness on mountain destination development. Flagestad and Hope (2001) stated that mountain destination development depends on strategies for creating competitive advantages, which can include innovativeness. The following hypothesis is given:

H_3: Mountain destination innovativeness positively influences mountain destination development.

The last question is whether the effect of mountain destination environments on mountain destination development is partially mediated by mountain destination innovativeness. Three conditions must be satisfied for a construct to act as a mediator. First, the path from the independent construct (mountain destination environments) to the mediator (mountain destination innovativeness) must be significant. Second, the path from the mediator to the dependent construct (mountain destination development) must be significant. Third, the introduction of a mediator lowers the path loading between the independent construct and dependent construct. If the direct path loading is still significant, the mediator has a partial effect; if not, then the effect is fully mediated (Baron & Kenny, 1986). The hypothesis is:

H_4: Mountain destination innovativeness partially mediates the relationship between mountain destination environments and mountain destination development.

4.3 Data and methods

The data for research were gathered by surveying mountain destination managers in Austria, France, Germany, Italy, Slovenia and Switzerland. The majority of the respondents were from Alpine destinations, an area covered by the Alpine Convention (Ruffini, Streifeneder, & Eiselt, 2004). Managers from destination management organisations[3] possess knowledge for such research (Crouch, 2011). About 100 mountain destination managers were contacted in each country. The country of origin of the respondents and the number of completed surveys received from each country are presented in Table 33. Switzerland is the country with the highest number of respondents, followed by Slovenia and Austria. Together they represent 69.3% of the sample.

[3]National tourism administrations, state or provincial tourism offices, regional tourism organizations, convention and visitor bureaus and similar types of bodies.

Table 33: Country of origin of the mountain destination environments, innovativeness and development survey respondents

Country*	CH	SI	AT	IT	DE	FR	Sum
Number of cases	31	30	27	18	11	10	**127**
Share (%)	24.4	23.6	21.3	14.2	8.7	7.9	**100.0**

*Two-letter codes supplied by the ISO.

Seven-point[4] Likert items have been used for measuring the state of mountain destination innovativeness, mountain destination environments and the state of mountain destination development, compared to other mountain tourism destinations. Respondents were therefore asked to grade the state of elements of the MDIM in their own destination in comparison to other mountain destinations. Using competitors to benchmark the performance measure is a widely used practice (Crouch, 2011; Enright & Newton, 2005). Enright, Scott and Dodwell (1997) stated that destinations are not competitive or uncompetitive *per se*, but against competing destinations.

First, validity and reliability analyses have been performed, since it must be proven that the factors identified in the third chapter are a good fit for the data gathered from this sample. This has been performed with a confirmatory factor analysis (CFA). CFA has also been used to evaluate the measurement model, since such an analysis is recommended before continuing with the SEM analysis. For inputting the factors to LISREL, summated scales for each factor have been created by averaging the elements comprising each factor. This technique is experiencing increased application (Chen & Tsai, 2007; Chi & Qu, 2008) and is mainly advocated for two reasons (Hair et al., 2010): it provides a means of overcoming to some extent the measurement error inherent in all measured variables, and has the ability to represent the multiple aspects of a concept in a single measure.

Respondents graded 72 elements that formed eleven factors. Mountain destination environments were measured with 19 elements, which were formed into four factors. These factors have then been input to LISREL as summated scales to build the mountain destination environments construct. Mountain destination innovativeness was measured with 25 elements, which were formed into three factors. These factors have then been input to LISREL as summated scales to build the mountain destination innovativeness construct. Mountain destination development was measured with 28 elements, which were formed into four factors. These factors have been input to LISREL as summated scales to build the mountain destination development construct.

LISREL analyses covariance structures and has been used for the construction and testing of the MDIM (Figure 8). LISREL has been widely used to determine structural relationships; it has been used to measure performance (Vaughan, 1999; Vaughan & Tague-Sutcliffe, 1997) and innovativeness (Eickelpasch, Lejpras, & Stephan, 2007; Y.-H. Huang et al., 2009).

[4] 1 = Much worse, 2 = Worse, 3 = Somewhat worse, 4 = About the same, 5 = Somewhat better, 6 = Better, 7 = Much better.

Reisinger and Turner (1999) claimed that LISREL has not been frequently used in tourism. Nevertheless, some researchers such as Lindberg and Johnson (1997), Gursoy and Rutherford (2004), Yoon and Uysal (2005), Chen and Tsai (2007), and Žabkar, Brenčič and Dmitrović (2010) used LISREL in their research connected to tourism destinations. Research areas in which LISREL has been used indicate that it is an appropriate tool for measuring the impact of mountain destination environments and innovativeness on mountain destination development; a mountain tourism destination has been used as a unit of observation.

4.4 Validity and reliability of factors

Before proceeding with SEM, a CFA has been conducted in order to prove that the factors, identified with the three previously performed EFAs, fit the data gathered from this survey. Validity and reliability tests have been performed for the 11 factors to determine convergent and discriminant validity (Table 34, Table 35 and Table 36). All factor loadings are significant (at $p<0.01$ or better), indicated by the t-values well in excess of 2.58 in absolute terms, thus validating the proposed relationships between factors and their elements. This supports convergent validity. Furthermore, error variances are also significant (at $p<0.01$ or better), indicated again by the t-values well in excess of 2.58 in absolute terms, providing additional validity evidence, since zero measurement error is a cause for concern (Diamantopoulos & Siguaw, 2000).

For mountain destination environments, SMCs range between 0.374 and 0.793, for mountain destination innovativeness they range between 0.173 and 0.839, and for mountain destination development they range between 0.062 and 0.796, all of which indicate fairly high indicator reliability. CR for mountain destination environments ranges between 0.808 and 0.912, for mountain destination innovativeness it ranges between 0.896 and 0.945, and for mountain destination development it ranges between 0.760 and 0.860. All reliabilities greatly exceed the recommended level of 0.7 by Hair et al. (2010), revealing a high level of internal consistency and providing support for convergent validity.

Discriminant validity has been assessed by pairing factors together and comparing a two-factor model with a model where variables make up only one factor. In all instances the two-factor $\chi 2$ significantly surpasses the one-factor $\chi 2$. We can therefore conclude that the factors of mountain destination environments, innovativeness and development are not perfectly correlated and that discriminant validity is supported (Hair et al., 2010).

Table 34: CFA validity and reliability analysis for mountain destination environments (2nd sample)

Mountain destination environments	Loading	Compl. stand. loading	t-value	Error variance	t-value	CR and SMC
Technological environment						**0.912**
Mobile phone signal coverage	1.000	0.719	-	0.803	8.973	0.517
Presence of Internet connection facilities and Internet coverage	1.054	0.706	9.531	0.961	9.034	0.499
Acceptance of credit cards and presence of ATMs	1.222	0.785	10.614	0.799	8.540	0.616
Efficient health/medical facilities	1.231	0.823	11.131	0.622	8.140	0.677
Efficient electricity infrastructure	1.219	0.882	11.919	0.365	7.005	0.778
Efficient water supply infrastructure	1.169	0.845	11.437	0.469	7.805	0.715
Socio-cultural environment						**0.838**
Presence of multilingual written instructions/guides (traffic signs, maps and restaurant menus)	1.000	0.781	-	0.922	7.379	0.609
Ease of oral communication (in English or other languages)	0.942	0.801	11.041	0.714	7.023	0.641
Local managerial and staff skills	0.739	0.745	10.264	0.627	7.873	0.556
Hospitality of local population	0.657	0.612	8.276	1.040	8.905	0.374
Support for tourism development by local population	0.608	0.617	8.352	0.864	8.879	0.380
Natural environment						**0.808**
Carrying capacity	1.000	0.652	-	0.588	8.326	0.425
Variety and diversity of terrains for different sports	1.420	0.785	8.478	0.547	6.516	0.616
Favourable climate conditions	1.270	0.764	8.353	0.500	6.921	0.584
Visual appeal	1.022	0.657	7.501	0.597	8.282	0.432
Political and legal environment						**0.911**
Support of government at the regional level	1.000	0.826	-	0.541	7.986	0.682
Support of government at the municipality level	0.933	0.781	12.486	0.644	8.496	0.610
Efficiency of decision making	1.007	0.891	15.108	0.306	6.465	0.793
Efficiency of regulatory framework	1.009	0.888	15.053	0.315	6.546	0.789

Table 35: CFA validity and reliability analysis for mountain destination innovativeness (2nd sample)

Mountain destination innovativeness	Loading	Compl. stand. loading	t-value	error variance	t-value	CR and SMC
Socio-cultural sustainability and stakeholder participation						**0.896**
The local population's support for change	1.000	0.761	-	0.763	8.799	0.579
The local population's capacity to change	1.030	0.810	11.889	0.581	8.363	0.657
Participation of all stakeholders in tourism planning	0.917	0.765	11.118	0.625	8.769	0.585

(table continues)

(continued)

Mountain destination innovativeness	Loading	Compl. stand. loading	t-value	error variance	t-value	CR and SMC
Collaboration of all stakeholders in decision-making processes	1.064	0.854	12.651	0.439	7.723	0.730
Taking into account the interests of the local community	0.752	0.704	10.118	0.601	9.112	0.496
Organisational structure that supports involvement of all stakeholders	1.042	0.811	11.905	0.591	8.353	0.658
Availability of knowledge resources and education	0.727	0.600	8.454	0.988	9.452	0.359
Respect for the socio-cultural authenticity of host communities (conservation of cultural heritage and traditional values)	0.498	0.416	5.730	1.238	9.733	0.173
Offering local products in combination with experiencing local craftsmanship	0.708	0.512	7.135	1.473	9.616	0.263
Environmental sustainability						**0.933**
Energy policies that support usage of alternative sources of energy	1.000	0.809	-	0.692	8.927	0.655
Environmental policies that promote sustainable development	1.007	0.913	15.856	0.267	7.303	0.833
Making optimal use of environmental resources (environmental sustainability)	0.989	0.916	15.935	0.248	7.201	0.839
Transportation policies that favour alternative transportation modes and public transportation	0.886	0.671	10.302	1.259	9.483	0.451
Maintaining ecological processes and helping to conserve natural resources and biodiversity	0.791	0.785	12.685	0.511	9.077	0.617
Exploiting opportunities created by changing climate conditions	0.693	0.692	10.711	0.687	9.432	0.479
Implementing new practices in environmental management	0.912	0.844	14.055	0.444	8.632	0.712
Adapting to changing climate conditions	0.737	0.713	11.136	0.691	9.373	0.509
Proactiveness						**0.945**
Dynamic content on the web portal	1.000	0.810	-	0.619	8.901	0.657
Creation of distinctive image of the destination	1.046	0.822	13.552	0.620	8.807	0.676
Logistics adapted to changing demand (last minute reservations, new reservations systems, etc.)	1.045	0.785	12.686	0.805	9.061	0.617
Web portal providing rich user experience	1.038	0.818	13.449	0.631	8.842	0.669
Tourism products adapted to changing demand (last minute reservations, increased price sensitivity, etc.)	0.983	0.797	12.945	0.659	8.994	0.635
Formation of destination's innovation strategy	1.260	0.882	15.044	0.537	8.066	0.778
Creation of innovative vision	1.228	0.855	14.346	0.658	8.480	0.731
Ease of access to information through a highly developed communication system	1.059	0.834	13.825	0.583	8.707	0.695

Table 36: CFA validity and reliability analysis for mountain destination development (2nd sample)

Mountain destination development	Loading	Compl. stand. loading	t-value	error variance	t-value	CR and SMC
Preservation of natural environment						**0.760**
Water consumption in tourism sector	1.000	0.487	-	0.650	8.590	0.237
Amount of soil erosion	0.972	0.489	4.574	0.610	8.584	0.239
Usage of clean energy (wind, sun, geothermal, photovoltaic etc.) in tourism sector	1.431	0.496	4.614	1.275	8.556	0.246
Energy consumption in tourism sector	1.349	0.613	5.201	0.611	7.893	0.376
Frequency of environmental accidents related to tourism	0.821	0.249	2.736	2.066	9.172	0.062
Share of recycled waste in tourism sector	1.545	0.664	5.399	0.615	7.454	0.440
CO_2 emissions in tourism sector	1.331	0.567	4.989	0.759	8.205	0.321
Share of recycled water in tourism sector	1.286	0.489	4.578	1.064	8.582	0.239
Air quality	0.926	0.350	3.622	1.242	8.997	0.123
Water pollution from sewage	1.345	0.466	4.435	1.324	8.672	0.217
Tourist traffic and expenditure						**0.860**
Growth rate in average length of stay	1.000	0.558	-	0.574	8.882	0.311
Market share growth in terms of nights spent	1.860	0.860	7.742	0.315	6.743	0.740
Market share growth in terms of tourist arrivals	1.676	0.784	7.384	0.456	7.724	0.615
Average length of stay	1.192	0.610	6.316	0.624	8.744	0.372
Visits to parks, recreation areas	1.151	0.441	4.964	1.424	9.090	0.195
Hotel occupancy rate	1.958	0.735	7.115	0.846	8.156	0.540
Growth rate in daily visitor expenditure	1.555	0.750	7.198	0.488	8.046	0.562
Visitor satisfaction						**0.824**
Share of returning visitors	1.000	0.670	-	0.656	8.179	0.449
Share of very satisfied visitors	1.120	0.784	8.763	0.421	7.032	0.614
Perceived value for money of tourist services	0.864	0.601	7.007	0.703	8.535	0.362
Perceived quality of tourist services	1.227	0.837	9.163	0.345	6.004	0.700
Visitor satisfaction with environmental issues	0.647	0.475	5.653	0.767	8.922	0.226
Availability of tourism infrastructural services	1.025	0.574	6.716	1.146	8.643	0.329
Socio-economic prosperity						**0.833**
Average wage in tourism sector compared to other sectors of the economy	1.000	0.546	-	0.998	8.864	0.298
Contribution of tourism sector to economic growth	1.272	0.681	6.621	0.794	8.366	0.464
Seasonality of employment in tourism sector	1.053	0.561	5.836	1.026	8.827	0.314
Lodging revenues	1.643	0.892	7.575	0.294	4.940	0.796
Employment growth in tourism	1.400	0.817	7.316	0.414	6.956	0.668

4.5 Validity and reliability of constructs

Before we can continue with the evaluation of the structural model itself, it is necessary to conduct a proper evaluation of the measurement model. Therefore, a CFA was conducted on the measurement model, with all constructs allowed to be inter-correlated freely. The validity and reliability tests have been performed for the three constructs to determine convergent and discriminant validity (Table 37). All factor loadings are significant (at $p<0.01$ or better), indicated by the t-values well in excess of 2.58 in absolute terms, thus validating the proposed relationships among constructs and their factors, and supporting convergent validity.

SMCs range between 0.257 and 0.735, indicating fairly high indicator reliability. CR ranges between 0.752 and 0.832, greatly exceeding the recommended level of 0.7 by Hair et al. (2010), revealing a high level of internal consistency and providing additional support for convergent validity.

Discriminant validity has been assessed by pairing constructs and comparing a two-construct model with a model in which factors make up only one construct. In all instances, the two-construct $\chi 2$ significantly surpasses the one-construct $\chi 2$. We can, therefore, conclude that the constructs mountain destination environments, mountain destination innovativeness and mountain destination development are not perfectly correlated and that discriminant validity is supported (Hair et al., 2010).

Table 37: CFA validity and reliability analysis for the measurement model

Constructs and factors	Loading	Compl. stand. loading	t-value	Error variance	t-value	CR and SMC
Exogenous: Mountain destination environments						**0.752**
Technological environment	1.000	0.612	-	0.784	7.085	0.735
Socio-cultural environment	1.080	0.716	6.223	0.521	6.411	0.512
Natural environment	0.595	0.470	4.486	0.587	7.540	0.221
Political and legal environment	1.308	0.806	6.678	0.433	5.174	0.650
Endogenous: Mountain destination innovativeness						**0.832**
Socio-cultural sustainability and stakeholder participation	1.000	0.798	-	0.318	5.776	0.637
Environmental sustainability	1.040	0.742	8.500	0.491	6.446	0.551
Proactiveness	1.347	0.826	9.509	0.472	5.291	0.682
Endogenous: Mountain destination development						**0.787**
Preservation of natural environment	1.000	0.507	-	0.293	7.498	0.257
Tourist traffic and expenditure	1.953	0.769	5.411	0.267	6.032	0.591
Visitor satisfaction	1.719	0.702	5.189	0.308	6.678	0.492
Socio-economic prosperity	2.262	0.777	5.435	0.340	5.926	0.604

4.6 SEM analyses

After the measurement model was tested for validity and reliability, path coefficients have been established. The path coefficients of mountain destination innovativeness and mountain destination environments allow us to determine the contribution of these constructs to mountain destination development. The contribution of mountain destination environments to mountain destination innovativeness has also been measured. Structural equations for the MDIM are shown in Table 38.

Table 38: Structural equations for the MDIM

Measurement equations for exogenous factors	Structural equations	Measurement equations for endogenous factors	Abbreviations
$x_1 = \lambda_{11}*\xi_1 + \delta_1$	$\eta_1 = \gamma_{11}*\xi_1$	$y_1 = \lambda_{12}*\eta_2 + \varepsilon_1$	x: factor of an exogenous construct
$x_2 = \lambda_{21}*\xi_1 + \delta_2$		$y_2 = \lambda_{22}*\eta_2 + \varepsilon_2$	y: factor of an endogenous construct
$x_3 = \lambda_{31}*\xi_1 + \delta_3$	$\eta_2 = \gamma_{21}*\xi_1 + \beta_{21}*\eta_1$	$y_3 = \lambda_{32}*\eta_2 + \varepsilon_3$	δ: error for x-factor
$x_4 = \lambda_{41}*\xi_1 + \delta_4$		$y_4 = \lambda_{42}*\eta_2 + \varepsilon_4$	ε: error for y-factor
		$y_5 = \lambda_{51}*\eta_1 + \varepsilon_5$	ξ: exogenous construct
		$y_6 = \lambda_{61}*\eta_1 + \varepsilon_6$	η: endogenous construct
		$y_7 = \lambda_{71}*\eta_1 + \varepsilon_7$	λ: relationship between constructs and their factors
			γ: relationship between exogenous and endogenous constructs
			β: relationship between endogenous constructs

First, the data were examined to determine potential violations of assumptions underlying a structural equation model. Then, structural equation modelling with the maximum likelihood (ML) estimation method has been applied for testing the model, in which four hypotheses were developed based on a comprehensive review of the literature. Various goodness-of-fit measures have been assessed to determine whether the proposed conceptual model is acceptable.

4.6.1 Data examination

Data examination has been conducted using pre-processor for LISREL (PRELIS), which is included in the LISREL software package, for the purpose of determining potential violations of structural equation modelling assumptions, in particular the assumption of multivariate normality. This assumption is crucial for choosing the appropriate estimation technique in further analysis. As can be seen in Table 39, two factors show departure from normality: proactiveness is slightly platykurtic, and tourist traffic and expenditure is slightly leptokurtic. The multivariate tests (Table 40) confirm these findings and multivariate normality is not warranted. Curran, West and Finch (1996) found significant problems arising when univariate kurtoses exceed 7.0 (the threshold of moderate non-normality), which suggests that the

kurtoses in our case are less than moderately non-normal and might not cause significant problems. Taking this into consideration, two estimation methods have been used and compared. The first option was the ML, which is the most widely used and considered to be relatively robust against moderate departures from multivariate normality (Diamantopoulos & Siguaw, 2000). The back-up choice was the Satorra-Bentler, mainly because it makes adjustments based on the degree of kurtosis. The results showed no obvious differences in the goodness-of-fit measures, indicating that the non-normality due to excess kurtoses does not pose a significant threat to the analysis. The ML method in this case has withstood the test of robustness and has been chosen as the preferred method of estimation in the LISREL software package, using a covariance matrix as an input (Table 41).

Table 39: Test of univariate normality

	Skewness		**Kurtosis**		**Skewness and Kurtosis**	
Factor	**Z-Score**	**P-Value**	**Z-Score**	**P-Value**	**Chi-Square**	**P-Value**
Technological environment	-0.400	0.689	-1.140	0.254	1.459	0.482
Socio-cultural environment	0.627	0.531	0.376	0.707	0.535	0.765
Natural environment	0.196	0.844	-1.365	0.172	1.902	0.386
Political and legal environment	-1.068	0.285	0.209	0.835	1.185	0.553
Socio-cultural sustainability and stakeholder participation	0.161	0.872	-0.451	0.652	0.229	0.892
Environmental sustainability	-0.742	0.458	0.621	0.534	0.937	0.626
Proactiveness	-0.816	0.414	-2.942	0.003	9.319	0.009
Preservation of natural environment	0.281	0.779	-0.079	0.937	0.085	0.958
Tourist traffic and expenditure	1.856	0.063	2.105	0.035	7.876	0.019
Visitor satisfaction	0.842	0.400	-0.092	0.926	0.717	0.699
Socio-economic prosperity	1.193	0.233	0.149	0.881	1.446	0.485

Table 40: Test of multivariate normality

Skewness			**Kurtosis**			**Skewness and Kurtosis**	
Value	**Z-Score**	**P-Value**	**Value**	**Z-Score**	**P-Value**	**Chi-Square**	**P-Value**
18.282	3.832	0.000	153.835	3.502	0.000	26.950	0.000

Table 41: Covariance matrix of the factors of the research-based MDIM

Factors	x_1	x_2	x_3	x_4	y_1	y_2	y_3	y_4	y_5	y_6	y_7
x_1	1.253										
x_2	0.539	1.069									
x_3	0.477	0.353	0.753								
x_4	0.630	0.601	0.325	1.235							
y_1	0.194	0.183	0.125	0.265	0.394						
y_2	0.222	0.368	0.115	0.473	0.164	0.652					
y_3	0.348	0.378	0.296	0.380	0.208	0.358	0.607				
y_4	0.447	0.463	0.267	0.542	0.226	0.463	0.358	0.857			
y_5	0.245	0.521	0.080	0.580	0.162	0.400	0.328	0.420	0.876		
y_6	0.338	0.489	0.129	0.667	0.282	0.400	0.293	0.484	0.571	1.094	
y_7	0.424	0.587	0.221	0.802	0.241	0.529	0.414	0.586	0.767	0.769	1.485

x_1: technological environment; x_2: socio-cultural environment; x_3: natural environment; x_4: political and legal environment; y_1: preservation of natural environment; y_2: tourist traffic and expenditure; y_3: visitor satisfaction; y_4: socio-economic prosperity; y_5: socio-cultural sustainability and stakeholder participation; y_6: environmental sustainability; y_7: proactiveness.

4.6.2 Overall model fit

The traditional measure of overall model fit is the chi-square, the value of which (χ^2=89.450 with 41 degrees of freedom) is statistically significant (P=0.000). However, the chi-square statistic is sensitive to sample size, and in the case of small samples does not discriminate between good and poor fitting models. An example of a statistic that minimises the impact of sample size is Wheaton, Muthen, Alwin and Summers' (1977) relative chi-square (χ^2/df). In our model, the relative chi-square is 2.18, which falls under the threshold of 3 (Kline, 2005), indicating a good overall model fit.

Another measure to assess the model fit is the root mean square error of approximation (RMSEA), regarded as "one of the most informative fit indices" (Diamantopoulos & Siguaw, 2000) due to its sensitivity to the number of estimated parameters in the model. The RMSEA value is 0.098 (with a 90% confidence interval of 0.0711–0.126), indicating a mediocre fit (MacCallum, Browne, & Sugawara, 1996). However, the RMSEA tends to substantially over-reject true-population models with small sample sizes (N<250); thus it is not the most reliable fit index in this case (Hu & Bentler, 1999).

The goodness-of-fit index (GFI) and the adjusted goodness-of-fit index (AGFI) values are 0.884 and 0.813, respectively, indicating a poor fit. However, given the often detrimental effect of sample size on these two fit indices, they should not be relied upon as a standalone index (Hooper, Coughlan, & Mullen, 2008), and are not recommended for evaluating model fit by Hu and Bentler (1999).

Among other fit indices, especially when dealing with smaller sample sizes (N<250), Hu and Bentler (1999) suggested including the standardised root mean square residual (SRMR<0.08) in combination with either the comparative fit index (CFI>0.95), the incremental fit index

(IFI>0.95), or the non-normed fit index (NNFI>0.95). The values for these indices are 0.0673, 0.963, 0.963 and 0.950, all indicating a good model fit.

Taking into account all of the mentioned goodness-of-fit measures, including their strengths and weaknesses, we can conclude that though not achieving the most desirable levels of fit, the hypothesised model (as shown in Figure 9) does represent a quite acceptable fit to the empirical data. The fit indices are summarised in Table 42.

Table 42: Goodness-of-fit measures for the research-based MDIM

Goodness-of-fit measures	Criteria	Value
χ^2	p>0.05	89.450 (P=0.000)
χ^2/df	<3.00	2.180
RMSEA	<0.05	0.098
GFI	>0.90	0.884
AGFI	>0.90	0.813
SRMR	<0.08	0.067
CFI	>0.95	0.963
IFI	>0.95	0.963
NNFI	>0.95	0.950

4.6.3 Measurement model fit

When evaluating the measurement part of the model, the focus is on the relationships between the constructs and their factors. First, the validity of the model can be assessed by examining the magnitude and significance of the paths between each construct and its factors (Diamantopoulos & Siguaw, 2000). In our model, all factor loadings are significant (at p<0.01 or better), indicated by the *t*-values well in excess of 2.58 in absolute terms, thus validating the proposed relationships among constructs and their factors. Secondly, the reliability of the factors can be assessed by looking at the SMCs of the factors (Diamantopoulos & Siguaw, 2000). The SMCs for y-factors range from 0.257 to 0.682 and for x-factors from 0.221 to 0.650, indicating fairly high reliability of the measurement model. In addition to the reliability of individual factors, CR for each construct can be calculated (Diamantopoulos & Siguaw, 2000). As shown in Table 43, all three constructs surpass the threshold value of 0.6 (Diamantopoulos & Siguaw, 2000). We can therefore conclude that all factors provide reliable measurement of the related constructs.

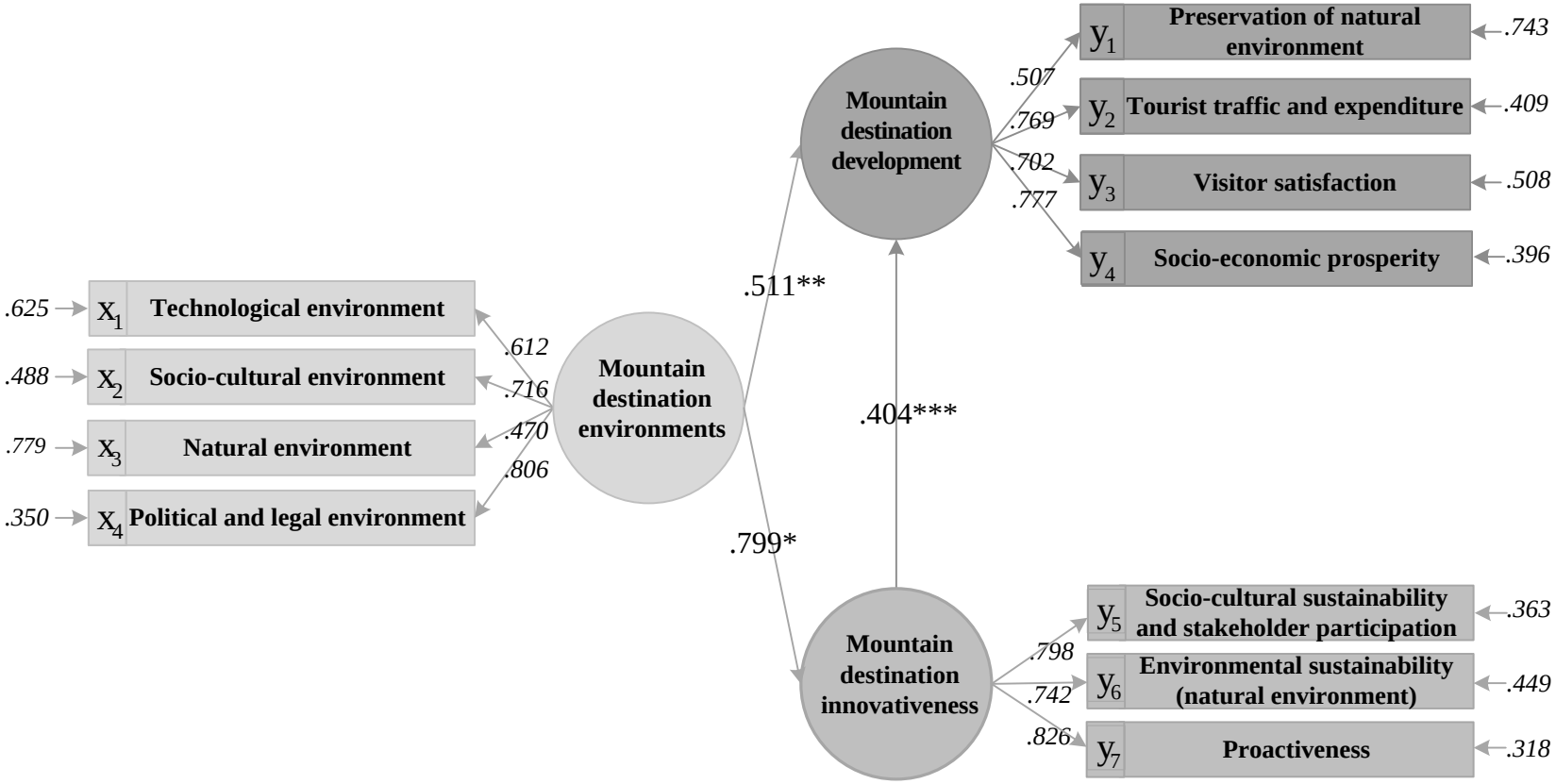
Table 43: Validity and reliability analysis for the measurement part of the SEM

Constructs and factors	Loading	Compl. stand. loading	t-value	Error variance	t-value	CR and SMC
Exogenous: Mountain destination environments						**0.752**
Technological environment	1.000	0.612	-	0.784	7.085	0.735
Socio-cultural environment	1.080	0.716	6.223	0.521	6.411	0.512
Natural environment	0.595	0.470	4.486	0.587	7.540	0.221
Political and legal environment	1.308	0.806	6.678	0.433	5.174	0.650
Endogenous: Mountain destination innovativeness						**0.832**
Socio-cultural sustainability and stakeholder participation	1.000	0.798	-	0.318	5.776	0.637
Environmental sustainability	1.040	0.742	8.500	0.491	6.446	0.551
Proactiveness	1.347	0.826	9.509	0.472	5.291	0.682
Endogenous: Mountain destination development						**0.787**
Preservation of natural environment	1.000	0.507	-	0.293	7.498	0.257
Tourist traffic and expenditure	1.953	0.769	5.411	0.267	6.032	0.591
Visitor satisfaction	1.719	0.702	5.189	0.308	6.678	0.492
Socio-economic prosperity	2.262	0.777	5.435	0.340	5.926	0.604

4.6.4 Structural model parameters

When evaluating the structural part of the model, the focus is on the relationships between the endogenous and exogenous constructs (Figure 9). SEM results show that all the paths proposed in the model are statistically significant (at $p<0.05$ or better), indicated by *t*-values well in excess of 1.96 in absolute terms, and of the appropriate direction (positive) (Diamantopoulos & Siguaw, 2000). The results in Figure 9 show that mountain destination environments positively influence mountain destination innovativeness and mountain destination development. Moreover, mountain destination innovativeness positively influences mountain destination development. And, since the introduction of the innovativeness construct lowers the path loading between the environments and development constructs from the initial 0.886 ($t=4.495$), it can also be concluded that mountain destination innovativeness partially mediates the relationship between mountain destination environments and mountain destination development. All three conditions for a construct to act as a mediator have been fulfilled: the paths are significant and the introduction of a mediator lowers the path loading between the independent and dependent construct, while the direct path loading is still significant; hence the mediator has a partial effect. All hypotheses are therefore confirmed, indicating causal relationships among mountain destination environments, mountain destination innovativeness, and mountain destination development.

Figure 9: Estimated research-based MDIM



*Completely standardised coefficient; t-value = 5.798

**Completely standardised coefficient; t-value = 2.619

***Completely standardised coefficient; t-value = 2.274

The structural model has also been assessed by examining the SMCs, which show the amount of variance in each dependent construct that is accounted for by the independent construct(s) in each of the two structural equations. The SMC for mountain destination innovativeness is 0.638, indicating that 63.8% of the variance in mountain destination innovativeness is explained by mountain destination environments. In contrast, mountain destination innovativeness and mountain destination environments explain 75.5% of the variance in mountain destination development (SMC = 0.755). Both SMCs indicate high reliability of the structural model (Diamantopoulos & Siguaw, 2000).

4.7 Limitations and implications for theory, practice and further research

The second part of the research shares some limitations with the first part of the research. A limitation, shared by both parts of the research, is the focus solely on the destination perspective; the perspectives at the company level at the destination might also differ in regard to performance measures. Again, the demand side is not included in the research. Further research can therefore focus on consumer evaluations in regard to destination attributes. However, there are considerable barriers to such an approach, such as the knowledge of the tourists regarding the destination elements. Nevertheless, with careful and consistent transformation of the elements into the consumers' perspective, these barriers can be substantially reduced. Contrary to the first part of the research, the second part of the research does not include the opinions from other stakeholders in mountain destinations, since it concentrates only on mountain destination managers. Therefore, it would be very interesting for further research to examine the opinions of other stakeholders in mountain destinations. With such an approach, there is a possibility of benchmarking the results from different stakeholder groups.

The recommendation for the first part of the analysis regarding the replication of the research in another time period is also valid for the second part of the analysis. Measuring the performance of mountain destination environments and innovativeness, and evaluating mountain destination development at another moment in time create the dynamic aspect, since the relationships are studied over time (Frees, 2004). Furthermore, it may be the case that environments and innovativeness have a lagged effect on mountain destination development. However, incorporating a time delay effect into the SEM would make it overly complicated (Vaughan, 1999). Nevertheless, future research has potential for improvement in this area, and incorporating the time delay might provide even more accurate results.

Further research should also focus on transforming the quantitative data into data suitable for qualitative analysis, since the second part of the research is quantitative, as was the first part. Using qualitative research helps complement and enhance the results gathered with quantitative research (Tashakkori & Teddlie, 2010). Therefore, using such mixed methods could prove most accurate in evaluating the influence of tourism environments and

innovativeness on mountain destination development. The GABEK toolset could be used for qualitative analysis (Pechlaner & Volgger, 2012; Pechlaner et al., 2012).

Another limitation is that the Harman's single factor test indicated that there might be a certain degree of common method bias in the data. However, one general factor does not account for the majority of the covariance among the measures, a limit set by Podsakoff, MacKenzie, Lee and Podsakoff (2003).

The second part of the research is based on the answers given by destination managers at mountain destinations. The size of the sample (N = 127) is a drawback for research and it affects the goodness-of-fit measures. Since the sample was rather small, the relationships were only tested between the constructs mountain destination environments, innovativeness and development. If further research was to be performed on a larger scale, this limitation could be eliminated. Knowing the relationships between the factors of mountain destination environments, innovativeness and development could carry huge potential for getting to know the underlying connections between environments, innovativeness and development at mountain destinations. On the other hand, future research can even consider including the MDIM in a wider, more comprehensive model that would contemplate more aspects and influences in mountain destinations.

Another limitation is that the model has been tested only on mountain destinations in Europe. Mountain destinations have different characteristics than other kinds of destinations, but they also differ between themselves depending on their location. In order to confirm the potential for wider application of the model, similar studies should be replicated elsewhere, for instance, in mountain destinations in North America. Despite the fact that the model is fine-tuned to the specifics of mountain destinations, with some changes to the model, it could also be used to measure the influence of tourism environments and innovativeness on destination development in some other types of destinations. The model therefore carries the potential for generalisability, although some additional research is required for each new type of destination being analysed, in order to determine the elements specific for the chosen kind of destination.

The value of the second part of the research in terms of its academic contribution is the validation of the influence of mountain destination environments on mountain destination innovativeness, the influence of both environments and innovativeness on mountain destination development, and the mediating role of innovativeness between environments and development, which represents the base for further research in regard to mountain destinations. The research also sets the grounds for further research of different dimensions of destination competitiveness; it advocates innovativeness being included, and tourism destination environments being better defined when measuring destination competitiveness and development. The research therefore enhances existing destination competitiveness models; further research could test for differences in the explanatory power of a classic destination competitiveness model and a model that includes innovativeness.

Knowing the mutual relationships between environments, innovativeness and development in combination with the possibility of performance evaluation of the constructs, factors and elements for each mountain destination, represents value for mountain destination managers and other stakeholders at mountain destinations. In this way, they gain knowledge in regard to sustainable mountain destination development and get help with the identification of problematic areas. Evaluating the performance of elements and factors of mountain destination environments, innovativeness and development in combination with their importance can further assist destination managers in their efforts to improve mountain destination development. Combining importance and performance better reveals strengths, weaknesses, opportunities and threats, and helps prepare for the changing business environment. Through such analysis, destination managers can determine which factors to focus on, identify the areas in which they are doing a good job and areas that need to be improved. Knowing the state of the environments, innovativeness and development at a destination, how they influence each other, and which factors and elements are important can enable destination managers to shape their destination's development in a sustainable and innovative way, while avoiding the problems posed by the economic uncertainty and a volatile business environment.

CONCLUSIONS

Tourism suppliers at destinations are facing increasingly fierce global competition in an era of constant change and globalisation. This calls for cooperation, the improvement of environments, and innovativeness within destinations in order to keep pace with other destinations, to remain competitive, and to develop properly. Tourism literature is progressively starting to focus on destinations as units of analysis, due to the fact that a destination is perceived as an entity in the eyes of increasing numbers of tourists who are more and more starting to demand an integral destination experience.

This dissertation explores mountain destinations, which differ from other kinds of destinations in many aspects. Since people have been living in the mountains for thousands of years, specific characteristics have been developed in the socio-cultural environment. Locals are sometimes not prepared to cooperate; there is a major problem of brain drain and the abandonment of settlements. Tourism does provide a solution for these issues, but only if it is developed in a sustainable manner. Innovativeness can greatly aid to this issue. The political and legal environment also has its specific features; some mountain regions are quite autonomous in their decision making, which should be directed towards improving sustainability and innovativeness in order to properly develop mountain tourism. Innovations in the technological environment can significantly improve the current state of mountain destinations. Since the natural environment is extremely fragile in mountain destinations, measures to minimise the negative human impacts should be taken. This is true for tourism as well. Again, sustainability is crucial for solving this problem and innovativeness can help considerably.

In the second part of the research, focus is put only on destinations in the Alpine area, due to the fact that mountain destinations in that area tend to be similar to each other and therefore more suitable to use as units of analysis. Mountain destinations in the Alps have been subjected to many political pressures in the past and some still are, although many of them have been given autonomy in their decision making. Therefore, proper political and legal environment for fostering innovativeness and Alpine destination development is of high importance. The same is true for the socio-cultural environment, which has its specific features due to the fact that in many destinations, different nationalities reside together. Such rich cultural heritage can be an enabler as well as a challenge for improving innovativeness and development. The profound natural beauty of the Alps has attracted tourists from bigger cities for centuries. Flora, fauna and the aesthetics of the landscapes should be preserved for being able to provide the increasing number of environmentally conscious tourists the product they demand. Due to the vicinity of highly developed areas, many Alpine destinations have already implemented sustainable innovations and embraced the changes in the technological environment, which has contributed to the development of low-impact tourism.

Despite the fact that much research has been done in the last decade regarding the destinations and their competitiveness and development, the mountain destination literature is still lacking

in terms of the creation and testing of a comprehensive model that takes into account the aspects of mountain destination environments, mountain destination innovativeness, and the corresponding mountain destination development. This doctoral dissertation fills the gap in the literature with identification of important elements and factors of mountain destination environments and innovativeness, and the elements and factors important for measuring mountain destination development. Not only are these important elements and factors identified by tourism researchers in the fields of innovativeness, destination management and mountain destinations, and all stakeholders at mountain destinations, the constructs mountain destination environments, innovativeness and development, comprised of the identified important elements and factors, are tested for their mutual relationships, which provides knowledge regarding the influence of environments and innovativeness on destination development and the influence of environments on innovativeness. The research therefore consists of two main parts. The first part corresponds to the identification of important elements and factors of mountain destination environments, innovativeness and development; the second part explores the relationships between these constructs.

For the first part of the research, a literature review was performed in order to identify the theory-based elements and groups of elements of mountain destination environments, innovativeness and development. Destination development theory, mountain tourism research and destination competitiveness models have all been taken into account in the development of these elements. All stakeholders and aspects of destinations have been considered. This provides strong foundations for the identification of elements and consequential factors in environments, innovativeness and development that cover all crucial dimensions of destinations. Next, web-based surveys have been conducted on international samples of researchers in the field of tourism, mountain destination managers and other stakeholders in mountain destinations. These surveys were conducted in order to identify important elements and factors of mountain destination environments, innovativeness and development. The factors that are composed of identified important elements were determined with EFAs, and can contribute to a better understanding of the underlying dimensions of mountain destination environments, innovativeness and development. The first part of the research is therefore not based on the Delphi technique, but employs a fresh and innovative approach. The results answer the research questions that were focused on the search of important elements of mountain destination environments, innovativeness and development and whether the identified important elements form coherent factors of mountain destination environments, innovativeness and development.

- The results of the empirical analysis show that the identified factors of environments are the technological environment, the socio-cultural environment, the natural environment, and the political and legal environment. Technological changes have influenced destinations tremendously in the last decade. Mountain destinations in particular have to adapt to and embrace the changes in technological environment in order to remain competitive and fulfil tourists' changing demands. Technology can even help mountain destinations develop in a sustainable manner. The socio-cultural environment is an

important determinant of success for mountain destinations as well. Local populations can possess characteristics that attract tourists, or they can be an important factor in tourist experience and hence, influence destination development. The natural environment is probably the most important factor in mountain destinations, since for majority of tourists the decision whether to visit a mountain destination relies upon the characteristics of the natural environment. Moreover, the political and legal environment has also been identified as a factor that influences mountain destination development through its policies and regulatory framework. Tourism environments in mountain destinations have shown high sensitivity to environmental influences, which are even more evident in mountain destinations than in other kinds of destinations. That is why the technological as well as the political and legal environments must be supportive of sustainable destination development.

- Furthermore, the results show that mountain destination innovativeness incorporates the factors of socio-cultural sustainability and stakeholder participation, environmental sustainability (natural environment) and proactiveness. Sociocultural sustainability has been identified as a factor contributing to mountain destination innovativeness and development due to the complexity of mountain destinations in terms of their socio-cultural aspects and the need for inclusion of stakeholders in decision making as well as the overall need for improvement of the quality of life at mountain destinations. Another factor of innovativeness that was identified in the research is the environmental sustainability that concerns only the natural environment, which is one of the most important developmental imperatives and should be preserved for future generations; principles of sustainability should be applied. The last factor within the construct mountain destination innovativeness is proactiveness, which is mainly concerned with innovativeness in strategy and technology; both are in fact crucial for improving mountain destination innovativeness and development. The distinctive characteristic of mountain destinations is therefore the importance of being innovative in terms of sustainability, strategy and technology, which have proven to be the main drivers of mountain destination innovativeness and development.

- The research also identified the elements and factors that measure mountain destination development in a sustainable and holistic manner. The factors that measure mountain destination development are preservation of natural environment, socio-economic prosperity, tourist traffic and expenditure, and visitor satisfaction. The research therefore identifies different aspects of mountain destination development and provides a tool for measuring them. The preservation of natural environment has been identified as a factor comprising important elements that measure sustainable mountain destination development from the natural dimension. Since both the natural environment and innovativeness in regard to environmental sustainability have been identified as important factors of mountain destination environments and innovativeness, it is only logical that the measures of preservation of natural environment should be put in place. Measures of socio-economic prosperity are crucial as well, since the final goal of sustainable mountain destination

development should also be improvement of the quality of life of the local residents. Tourist traffic and expenditure is a factor that measures mountain destination development from the economic point of view, whereas visitor satisfaction provides the measures of destination development from the tourists' perspective, which is also an important determinant of mountain destination development. The distinctive characteristic of mountain destinations is the high importance of measures of sustainable development, such as the preservation of natural resources and the prosperity of local population. Similar to other kinds of destinations, the number of tourists, their expenditure and satisfaction are important as well.

The second part of the research searches for relationships between the constructs mountain destination environments, innovativeness and development. The literature review suggested that there might be important influences between these three constructs. Mountain destinations are facing economic uncertainty and pressures to become more sustainable. Mountain destination environments are fragile and very specific. Mountain destinations usually possess elements of profound natural beauty, which are susceptible to many negative environmental influences. That is why mountain destinations have to evaluate their environments and try to improve them in order to promote destination development. Having proper environmental conditions can also help destinations focus on important innovative activities with all the necessary support that greatly increases the success rate of innovativeness. The research, conducted in six European countries with significant numbers of mountain destinations, confirms the hypotheses, which were concerned with the relationships between the constructs mountain destination environments, innovativeness and development within the MDIM. It was hypothesised that mountain destination environments positively influence mountain destination innovativeness, that mountain destination environments positively influence mountain destination development, that mountain destination innovativeness positively influences mountain destination development, and that mountain destination innovativeness partially mediates the relationship between mountain destination environments and mountain destination development.

- The second part of the research confirms that a better state of mountain destination environments positively influences mountain destination innovativeness.

- Moreover, a better state of mountain destination environments also contributes to improved mountain destination development.

- A better state of mountain destination innovativeness positively influences mountain destination development.

- The research confirms that, in fact, the influence of environments on mountain destination development is partially mediated by innovativeness, since all conditions for a construct to act as a mediator have been fulfilled; the paths are significant and the introduction of a mediator lowers the path loading between the independent and dependent construct. The mediator has a partial effect due to the fact that the direct path loading is still significant.

Both the first and the second part of the research provide value for tourism researchers, mountain destination managers and other stakeholders in mountain destinations. The first part of the research provides fruitful findings for researchers in the fields of mountain tourism, destination management and innovativeness as it fills the gap in the current literature with the identification of important elements and factors of mountain destination environments, innovativeness and development. A shift towards sustainable development has occurred in the recent years, and the respondents have indicated the need for the inclusion of sustainability elements. The second part of the research provides knowledge for researchers, since the constructs take into account many aspects of mountain destinations, and the confirmation of their mutual relationships paves the way for more detailed research in regard to mountain destination environments, innovativeness and development. The findings of the research represent an addition to the existing destination competitiveness models. The research has its roots in these models and expands them by including the factors of innovativeness. Furthermore, the destination environments are represented more clearly. The findings regarding the influence and the mediating effect of innovativeness on destination development indicate that innovativeness should be considered when discussing destination competitiveness and development.

Practical implications of the results of the first part of the research are in the provision of knowledge for stakeholders in mountain destinations, especially destination managers. Many mountain destinations are having problems developing tourism properly and adapting it to changing conditions. Attracting and retaining tourists has also proven troublesome for some. The identified elements and factors cover many aspects of destinations and can facilitate the improvement of a destination's overall condition, as well as the performance of some specific sectors within the destination. The identified important elements and factors can help destinations reinvent themselves by improving attractiveness, management and marketing; they enable destinations to advance their environments and innovativeness, which possibly leads to improved destination development. The value of the second part of the research for mountain destination managers and other stakeholders in mountain destinations is that it enables destinations to evaluate the state of their environments, the state of their innovative activities and the state of their development, while knowing their mutual influences. It provides the means of identifying and possibly improving the problematic areas in order to increase sustainable mountain destination development. The MDIM has even wider applicability; mountain destinations are able to grade the performance of elements of mountain destination environments, innovativeness and development in combination with their importance. Such approaches can better reveal strengths, weaknesses, opportunities and threats, and help prepare appropriate business and strategic plans to respond to the environmental situation. They enable destinations to identify key factors to focus on, which areas they excel and which they need to improve to consequently achieve growth and sustainability. Evaluation of important elements and factors of environments, innovativeness and development and knowing their mutual influences can enable decision makers at destinations to prioritise, modify and adopt actions to provide pleasurable vacation experience

of tourists. The findings enable mountain destinations to address the challenges posed by the rapidly changing business environment, battle economic uncertainty and support sustainable destination development.

REFERENCES

1. Alberti, E., Chiappa, D., Moschioni, G., Saggin, B., & Tarabini, M. (2006). Whole body vibration in mountain-rescue operations. *Journal of Sound and Vibration, 298*(3), 580–593. doi: 10.1016/j.jsv.2006.06.016
2. Alexandre, O., Favry, E., Grossuti, J., Kohler, Y., Massaruto, A., & Vanier, M. (2006). *Impact and further development of policies and instruments.* Final report of question 6. Vienna, Udine, Grenoble: CIPRA-International.
3. Alpine Convention. (2007). *Transport and mobility in the Alps.* Report on the state of the Alps, Alpine Signals – Special Edition 1. Innsbruck: Permanent Secretariat of the Alpine Convention.
4. Alpine Convention. (2009a). *The Alps – Eight countries, a single territory.* Innsbruck: Permanent Secretariat of the Alpine Convention.
5. Alpine Convention. (2009b). *Water and water management issues.* Report on the State of the Alps, Alpine Signals – Special Edition 2. Innsbruck: Permanent Secretariat of the Alpine Convention.
6. Alpine Convention. (2011a). *Sustainable rural development and innovation (Summary).* Report on the state of the Alps, Alpine Signals - Special Edition 3. Innsbruck: Permanent Secretariat of the Alpine Convention.
7. Alpine Convention. (2011b). *Towards decarbonising the Alps.* National policies and strategies, regional initiatives and local actions, Alpine Signals 6. Innsbruck: Permanent Secretariat of the Alpine Convention.
8. Amelung, B., Nicholls, S., & Viner, D. (2007). Implications of global climate change for tourism flows and seasonality. *Journal of Travel Research, 45*(3), 285–296. doi: 10.1177/0047287506295937
9. Anderson, P. (2010). Preparing for safe travel to high altitude. *ASAP study*. Retrieved May 6, 2011, from http://mayoresearch.mayo.edu/asap/upload/preparing_for_safe_travel.pdf
10. Arslanturk, Y., Balcilar, M., & Ozdemir, Z. A. (2011). Time-varying linkages between tourism receipts and economic growth in a small open economy. *Economic Modelling, 28*(1–2), 664–671. doi: 10.1016/j.econmod.2010.06.003
11. Asheim, B. T., & Gertler, M. S. (2006). The geography of innovation: Regional innovation systems. In J. Fagerberg, D. C. Mowery & R. R. Nelson (Eds.), *The Oxford handbook of innovation* (pp. 291–317). Oxford: University Press.
12. B'Far, R. (2005). *Mobile computing principles: Designing and developing mobile applications with UML and XML*. Cambridge: Cambridge University Press.
13. Bailey, E., & Richardson, R. (2010). A new economic framework for tourism decision making. *Tourism and Hospitality Research, 10*(4), 367–376. doi: 10.1057/thr.2010.14
14. Balbi, S., Perez, P., & Giupponi, C. (2010). A spatial agent-based model to explore scenarios of adaptation to climate change in an alpine tourism destination. *Paper Series No. 05/WP/10*. Retrieved August 13, 2010 from http://www.dse.unive.it/fileadmin/templates/dse/wp/WP_2010/WP_DSE_balbi_giupponi_perez_05_10.pdf
15. Bark, R., Colby, B., & Dominguez, F. (2010). Snow days? Snowmaking adaptation and the future of low latitude, high elevation skiing in Arizona, USA. *Climatic Change, 102*(3), 467–491. doi: 10.1007/s10584-009-9708-x
16. Baron, R. M., & Kenny, D. A. (1986). The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology, 51*(6), 1173–1182. doi: 10.1037/0022-3514.51.6.1173

17. Barquet, A., Osti, L., & Brida, J. G. (2010). Residents' attitudes and perceptions of tourism impacts and their policy implications. *Working Paper Series*, 1–14. Retrieved August 15, 2011, from http://ssrn.com/abstract=1559991
18. Barros, C. P., & Machado, L. P. (2010). The length of stay in tourism. *Annals of Tourism Research, 37*(3), 692–706. doi: 10.1016/j.annals.2009.12.005
19. Batra, A. (2006). Tourism marketing for sustainable development. *ABAC Journal, 26*(1), 59–65.
20. Baum, T. (2007). Human resources in tourism: Still waiting for change. *Tourism Management, 28*(6), 1383–1399. doi: 10.1016/j.tourman.2007.04.005
21. Becken, S., & Simmons, D. G. (2002). Understanding energy consumption patterns of tourist attractions and activities in New Zealand. *Tourism Management, 23*(4), 343–354. doi: 10.1016/S0261-5177(01)00091-7
22. Beedie, P., & Hudson, S. (2003). Emergence of mountain-based adventure tourism. *Annals of Tourism Research, 30*(3), 625–643. doi: 10.1016/S0160-7383(03)00043-4
23. Belland, G., & Boss, E. (1994). Cultural and historical sites: Assessing the tourism potential. *ICOMOS Canada Bulletin, MOMENTUM 1994, 3*(3), 26.
24. Beritelli, P., & Jufer, M. (2004). Mobile business solutions for mountain destinations: Experiences and prospects for the future. Retrieved April 24, 2012, from http://www.ifitt.org/admin/public/uploads/beritellifinal.pdf
25. Bhuiyan, M. A. H., Islam, R., Siwar, C., & Ismail, S. M. (2010). Educational tourism and forest conservation: Diversification for child education. *Procedia - Social and Behavioral Sciences, 7*, 19–23. doi: 10.1016/j.sbspro.2010.10.003
26. Bigné, J. E., Andreu, L., & Gnoth, J. (2005). The theme park experience: An analysis of pleasure, arousal and satisfaction. *Tourism Management, 26*(6), 833–844. doi: 10.1016/j.tourman.2004.05.006
27. Blain, C., Levy, S. E., & Ritchie, J. R. B. (2005). Destination branding: Insights and practices from destination management organizations. *Journal of Travel Research, 43*(4), 328–338. doi: 10.1177/0047287505274646
28. Blake, A. (2000). The economic effects of tourism in Spain. *Tourism & Travel Research Institute Discussion Paper 2000/2*. Retrieved August 10, 2010, from https://www.nottingham.ac.uk/ttri/discussion/2000_2.PDF
29. Blanco, E., Rey-Maquieira, J., & Lozano, J. (2009). Economic incentives for tourism firms to undertake voluntary environmental management. *Tourism Management, 30*(1), 112–122. doi: 10.1016/j.tourman.2008.04.007
30. Borchgrevink, C. P., & Knutson, B. J. (1997). Norway seen from abroad: Perceptions of Norway and Norwegian tourism – An image study. *Journal of Hospitality and Leisure Marketing, 4*(4), 25–46. doi: 10.1300/J150v04n04_02
31. Bornhorst, T., Ritchie, J. R. B., & Sheehan, L. (2010). Determinants of tourism success for DMOs & destinations: An empirical examination of stakeholders' perspectives. *Tourism Management, 31*(5), 572–589. doi: 10.1016/j.tourman.2009.06.008
32. Bossel, H. (1999). *Indicators for sustainable development: Theory, method, applications*. Winnipeg: International Institute for Sustainable Development.
33. Bourdeau, P. (2009). Mountain tourism in a climate of change. In R. Jandl, A. Borsdorf, H. Van Miegroet, R. Lackner & R. Psenner (Eds.), *Global change and sustainable development in mountain regions* (pp. 39–52). Innsbruck: Innsbruck University Press.
34. Bowdin, G., Allen, J., O'Toole, W., Harris, R., & McDonnell, I. (2004). *Events management*. Milton: John Wiley & Sons Australia Ltd.
35. Bramwell, B., & Lane, B. (Eds.). (2000). *Tourism collaboration and partnership: Politics, practice and sustainability*. Clevedon: Channel View Publications.

36. Brandth, B., & Haugen, M. S. (2011). Farm diversification into tourism - Implications for social identity? *Journal of Rural Studies, 27*(1), 35–44. doi: 10.1016/j.jrurstud.2010.09.002
37. Breen, H., Bull, A., & Walo, M. (2001). A comparison of survey methods to estimate visitor expenditure at a local event. *Tourism Management, 22*(5), 473–479. doi: 10.1016/S0261-5177(01)00005-X
38. Breu, T., Maselli, D., & Hurni, H. (2005). Knowledge for sustainable development in the Tajik Pamir Mountains. *Mountain Research and Development, 25*(2), 139–146. doi: 10.1659/0276-4741(2005)025[0139:kfsdit]2.0.co;2
39. Briassoulis, H. (2002). Sustainable tourism and the question of the commons. *Annals of Tourism Research, 29*(4), 1065–1085. doi: 10.1016/S0160-7383(02)00021-X
40. Buckley, R. (2002). Tourism ecolabels. *Annals of Tourism Research, 29*(1), 183–208. doi: 10.1016/S0160-7383(01)00035-4
41. Buhalis, D. (1998). Strategic use of information technologies in the tourism industry. *Tourism Management, 19*(5), 409-421. doi: 10.1016/S0261-5177(98)00038-7
42. Buhalis, D. (2000). Marketing the competitive destination of the future. *Tourism Management, 21*(1), 97–116. doi: 10.1016/S0261-5177(99)00095-3
43. Buhalis, D. (2003). *eTourism: Information technology for strategic tourism management*. London: Pearson Education Limited.
44. Buhalis, D., & Costa, C. (Eds.). (2006). *Tourism business frontiers: Consumers, products and industry*. Oxford: Butterworth-Heinemann Elsevier Ltd.
45. Buhalis, D., & Law, R. (2008). Progress in information technology and tourism management: 20 years on and 10 years after the Internet - The state of eTourism research. *Tourism Management, 29*, 609–623. doi: 10.1016/j.tourman.2008.01.005
46. Cai, L. A. (2002). Cooperative branding for rural destinations. *Annals of Tourism Research, 29*(3), 720–742. doi: 10.1016/S0160-7383(01)00080-9
47. Camisón, C., & Monfort-Mir, V. M. (2012). Measuring innovation in tourism from the Schumpeterian and the dynamic-capabilities perspectives. *Tourism Management, 33*(4), 776–789. doi: 10.1016/j.tourman.2011.08.012
48. Caprio, E., Chamberlain, D. E., Isaia, M., & Rolando, A. (2011). Landscape changes caused by high altitude ski-pistes affect bird species richness and distribution in the Alps. *Biological Conservation, 144*(12), 2958–2967. doi: 10.1016/j.biocon.2011.08.021
49. Castellani, V., & Sala, S. (2010). Sustainable performance index for tourism policy development. *Tourism Management, 31*(6), 871–880. doi: 10.1016/j.tourman.2009.10.001
50. Chadeeand, D., & Mieczkowski, Z. (1987). An empirical analysis of the effects of the exchange rate on Canadian tourism. *Journal of Travel Research, 26*(1), 13–17. doi: 10.1177/004728758702600103
51. Chalip, L., & McGuirty, J. (2004). Bundling sport events with the host destination. *Journal of Sport Tourism, 9*(3), 267–282. doi: 10.1080/1477508042000320241
52. Chaoqun, C. (2011). Researches on application of the renewable energy technologies in the development of low-carbon rural tourism. *Energy Procedia, 5*, 1722–1726. doi: 10.1016/j.egypro.2011.03.293
53. Charters, T., & Saxon, E. (2007). *Tourism and mountains: A practical guide to good practice*. Paris: UNEP.
54. Chaudhary, V., & Mathur, P. (2004). Composite avalanche control scheme developed for the lower Himalayan zone: a case history. *Cold Regions Science and Technology, 39*(2–3), 243–255. doi: 10.1016/j.coldregions.2004.05.007

55. Chen, C.-F., & Tsai, D. (2007). How destination image and evaluative factors affect behavioral intentions? *Tourism Management, 28*(4), 1115–1122. doi: 10.1016/j.tourman.2006.07.007
56. Cheng, W.-L., Chen, Y.-S., Zhang, J., Lyons, T. J., Pai, J.-L., & Chang, S.-H. (2007). Comparison of the Revised Air Quality Index with the PSI and AQI indices. *Science of the Total Environment, 382*(2–3), 191–198. doi: 10.1016/j.scitotenv.2007.04.036
57. Chi, C. G.-Q., & Qu, H. (2008). Examining the structural relationships of destination image, tourist satisfaction and destination loyalty: An integrated approach. *Tourism Management, 29*(4), 624–636. doi: 10.1016/j.tourman.2007.06.007
58. Choi, H. C., & Sirakaya, E. (2006). Sustainability indicators for managing community tourism. *Tourism Management, 27*(6), 1274–1289. doi: 10.1016/j.tourman.2005.05.018
59. Choong-Ki, L., Var, T., & Blaine, T. W. (1996). Determinants of inbound tourist expenditures. *Annals of Tourism Research, 23*(3), 527–542. doi: 10.1016/0160-7383(95)00073-9
60. Church, A., & Coles, T. (Eds.). (2007). *Tourism, power, and space* (1st ed.). Oxon: Routledge.
61. Clarimont, S., & Vlès, V. (2009). Pyrenean tourism confronted with sustainable development: Partial and hesitant integration. *Revue de gèographie alpine/ Journal of Alpine Research, 97–3*. Retrieved May 8, 2010, from http://rga.revues.org/978. doi: 10.4000/rga.978
62. Coccossis, H., & Mexa, A. (Eds.). (2004). *The challenge of tourism carrying capacity assessment: Theory and practice*. Hants: Ashgate Publishing Limited.
63. Cohen, E., & Avieli, N. (2004). Food in tourism: Attraction and impediment. *Annals of Tourism Research, 31*(4), 755–778. doi: 10.1016/j.annals.2004.02.003
64. Connell, J. (2005). Toddlers, tourism and Tobermory: Destination marketing issues and television-induced tourism. *Tourism Management, 26*(5), 763–776. doi: 10.1016/j.tourman.2004.04.010
65. Costello, A. B., & Osborne, J. (2005). Best practices in exploratory factor analysis: Four recommendations for getting the most from your analysis. *Practical Assessment Research & Evaluation, 10*(7), 173–178. Retrieved September 26, 2010, from http://www.pareonline.net/pdf/v10n7.pdf
66. Crouch, G. I. (2006). *Destination competitiveness: Insights into attribute importance.* In proceedings of International Conference of Trends, Impacts and Policies on Tourism Development, Hellenic Open University, Heraklion, Crete.
67. Crouch, G. I. (2007). *Modelling destination competitiveness: A survey and analysis of the impact of competitiveness attributes*. Gold Coast, Queensland: Cooperative Research Centre for Sustainable Tourism Pty Ltd.
68. Crouch, G. I. (2011). Destination competitiveness: An analysis of determinant attributes. *Journal of Travel Research, 50*(1), 27–45. doi: 10.1177/0047287510362776
69. Crouch, G. I., & Ritchie, J. R. B. (1999). Tourism, competitiveness and societal prosperity. *Journal of Business Research, 44*(3), 137–152. doi: 10.1016/S0148-2963(97)00196-3
70. Cruz, R. (2011). Preserving the natural environment. Retrieved February 15, 2012, from http://www.pikespeakqualityoflife.org/uploads/8/8/7/4/8874289/2011_qli_natural_environment.pdf
71. Curran, P. J., West, S. G., & Finch, J. F. (1996). The robustness of test statistics to nonnormality and specification error in confirmatory factor analysis. *Psychological Methods, 1*(1), 16–29. doi: 10.1037/1082-989X.1.1.16
72. Curto, J. (2006). *Resident perceptions of tourism in rapidly growing mountain tourism destinations*. Waterloo: University of Waterloo.

73. Dallen, J. T. (2005). *Shopping tourism, retailing, and leisure* (1st ed.). Clevedon: Channel View Publications.
74. Dalton, G. J., Lockington, D. A., & Baldock, T. E. (2009). Case study feasibility analysis of renewable energy supply options for small to medium-sized tourist accommodations. *Renewable Energy, 34*(4), 1134–1144. doi: 10.1016/j.renene.2008.06.018
75. Dávid, L. (2011). Tourism ecology: Towards the responsible, sustainable tourism future. *Worldwide Hospitality and Tourism Themes, 3*(3), 210–216. doi: 10.1108/17554211111142176
76. Davis, C. R. (1984). *The myth of autochthony: Ecology, ethnohistory, and symbols of ethnicity in a French Alpine community*. Pittsburgh: University of Pittsburgh.
77. Debarbieux, B., & Price, M. F. (2008). Representing mountains: From local and national to global common good. *Geopolitics, 13*(1), 148–168. doi: 10.1080/14650040701783375
78. Demunter, C. (2008). Are recent evolutions in tourism compatible with sustainable development? *Statistics in focus, 1*, 1–8.
79. Devesa, M., Laguna, M., & Palacios, A. (2010). The role of motivation in visitor satisfaction: Empirical evidence in rural tourism. *Tourism Management, 31*(4), 547–552. doi: 10.1016/j.tourman.2009.06.006
80. Diamantopoulos, A., & Siguaw, J. (2000). *Introducing Lisrel*. London: Sage Publications.
81. Dickson, T. J., & Huyton, J. (2008). Customer service, employee welfare and snowsports tourism in Australia. *International Journal of Contemporary Hospitality Management, 20*(2), 199–214. doi: 10.1108/09596110810852177
82. Divisekera, S. (2010). Economics of tourist's consumption behaviour: Some evidence from Australia. *Tourism Management, 31*(5), 629–636. doi: 10.1016/j.tourman.2009.07.001
83. Długosz, Z. (2011). Population ageing in Europe. *Procedia - Social and Behavioral Sciences, 19*, 47–55. doi: 10.1016/j.sbspro.2011.05.106
84. Dmitrović, T., Cvelbar, L. K., Kolar, T., Brencic, M. M., Ograjenšek, I., & Žabkar, V. (2009). Conceptualizing tourist satisfaction at the destination level. *International Journal of Culture, Tourism and Hospitality Research, 3*(2), 116–126. doi: 10.1108/17506180910962122
85. Dobni, C. B. (2008). Measuring innovation culture in organizations: The development of a generalized innovation culture construct using exploratory factor analysis. *European Journal of Innovation Management, 11*(4), 539–559. doi: 10.1108/14601060810911156
86. Dodge, D. (2005). *Financial system efficiency: Getting the regulatory framework right. Speech to the Toronto CFA Society.* September 22, 2005, Toronto, Ontario.
87. Dolnicar, S., & Leisch, F. (2008). Selective marketing for environmentally sustainable tourism. *Tourism Management, 29*(4), 672–680. doi: 10.1016/j.tourman.2007.07.010
88. Doloreux, D. (2003). Regional innovation systems in the periphery: The case of the Beauce in Québec (Canada). *International Journal of Innovation Management, 7*(1), 67–94. doi: doi:10.1142/S1363919603000738
89. Draper, D. (2000). Toward sustainable mountain communities: Balancing tourism development and environmental protection in Banff and Banff National Park, Canada. *Ambio, 29*, 408–415. doi: 10.1579/0044-7447-29.7.371
90. Dredge, D. (2006). Policy networks and the local organisation of tourism. *Tourism Management, 27*(2), 269–280. doi: 10.1016/j.tourman.2004.10.003

91. Dwyer, L., Edwards, D., Mistilis, N., Roman, C., & Scott, N. (2009). Destination and enterprise management for a tourism future. *Tourism Management, 30*(1), 63–74. doi: 10.1016/j.tourman.2008.04.002
92. Dwyer, L., Forsyth, P., & Rao, P. (2000). The price competitiveness of travel and tourism: A comparison of 19 destinations. *Tourism Management, 21*(1), 9–22. doi: 10.1016/S0261-5177(99)00081-3
93. Dwyer, L., & Kim, C. (2003). Destination competitiveness: Determinants and indicators. *Current Issues in Tourism, 6*(5), 369–414. doi: 10.1080/13683500308667962
94. Dwyer, L., Knežević Cvelbar, L., Edwards, D., & Mihalič, T. (2012). Fashioning a destination tourism future: The case of Slovenia. *Tourism Management, 33*(2), 305–316. doi: 10.1016/j.tourman.2011.03.010
95. Edgell, D. L., DelMastro Allen, M., Smith, G., & Swanson, J. (2008). *Tourism policy and planning: Yesterday, today and tomorrow* (1st ed.). Oxford: Butterworth-Heinemann Elsevier Ltd.
96. Edquist, C. (2006). Systems of innovation: Perspectives and challenges. In J. Fagerberg, D. C. Mowery & R. R. Nelson (Eds.), *The Oxford handbook of innovation* (pp. 181–208). Oxford: University Press.
97. Edwards, P. J., & Abivardi, C. (1998). The value of biodiversity: Where ecology and economy blend. *Biological Conservation, 83*(3), 239–246. doi: 10.1016/S0006-3207(97)00141-9
98. Eickelpasch, A., Lejpras, A., & Stephan, A. (2007). Hard and soft location factors, innovativeness and firm performance. *Electronic Working Paper Series, 109*. Retrieved August 15, 2010, from http://www.infra.kth.se/cesis/documents/WP109.pdf
99. El Gayar, N. F., Saleh, M., Atiya, A., El-Shishiny, H., Zakhary, A. A. Y. F., & Habib, H. A. A. M. (2011). An integrated framework for advanced hotel revenue management. *International Journal of Contemporary Hospitality Management, 23*(1), 84–98. doi: 10.1108/09596111111101689
100. Enright, M. J., & Newton, J. (2004). Tourism destination competitiveness: A quantitative approach. *Tourism Management, 25*(6), 777–788. doi: 10.1016/j.tourman.2004.06.008
101. Enright, M. J., & Newton, J. (2005). Determinants of tourism destination competitiveness in Asia Pacific: Comprehensiveness and universality. *Journal of Travel Research, 43*(4), 339–350. doi: 10.1177/0047287505274647
102. Enright, M. J., Scott, E. E., & Dodwell, D. (1997). *The Hong Kong advantage*. Hong Kong: Oxford University Press.
103. European Commission. (2000). *Towards quality coastal tourism – Integrated quality management (IQM) of coastal tourist destinations*. Luxembourg: Office for Official Publications of the European Communities.
104. European Commission. (2002). *Assessing tourism potential*. Brussels: EU Publications Office. Retrieved May 2, 2011, from http://ec.europa.eu/enterprise/sectors/tourism/files/studies/using_natural_cultural_heritage/tourism_potential_en.pdf.
105. European Commission. (2005). *Commission Regulation (EC) No 1737/2005 of 21 October 2005 amending Regulation (EC) No 1726/1999 as regards the definition and transmission of information on labour costs (1)*. Retrieved May 1, 2011, from http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2005:279:0011:0031:EN:PDF.
106. European Commission. (2009). *Making public support for innovation in the EU more effective: Lessons learned from a public consultation for action at Community level.* Luxembourg: Publications Office of the European Union.

107. Falk, M. (2010). A dynamic panel data analysis of snow depth and winter tourism. *Tourism Management, 31*(6), 912–924. doi: 10.1016/j.tourman.2009.11.010
108. Fallon, L. D., & Kriwoken, L. K. (2003). Community involvement in tourism infrastructure - The case of the Strahan Visitor Centre, Tasmania. *Tourism Management, 24*(3), 289–308. doi: 10.1016/S0261-5177(02)00072-9
109. Farrell, B. H., & Runyan, D. (1991). Ecology and tourism. *Annals of Tourism Research, 18*(1), 26–40. doi: 10.1016/0160-7383(91)90037-C
110. Farrell, B. H., & Twining-Ward, L. (2004). Reconceptualizing tourism. *Annals of Tourism Research, 31*(2), 274–295. doi: 10.1016/j.annals.2003.12.002
111. Flagestad, A., & Hope, C. A. (2001). Strategic success in winter sports destinations: A sustainable value creation perspective. *Tourism Management, 22*(5), 445–461. doi: 10.1016/S0261-5177(01)00010-3
112. Flagestad, A., Hope, C. A., Nordin, S., & Svensson, B. (2005). The tourist destination: A local innovation system? The creation of a model. In P. Keller & T. Bieger (Eds.), *Innovation in tourism - Creating customer value* (Vol. 47, pp. 199–211). Brainerd: AIEST.
113. Fleischer, A., & Felsenstein, D. (2000). Support for rural tourism: Does it make a difference? *Annals of Tourism Research, 27*(4), 1007–1024. doi: 10.1016/S0160-7383(99)00126-7
114. Font, X. (2002). Certification systems and standards in tourism. *Annals of Tourism Research, 29*(3), 869–870. doi: 10.1016/S0160-7383(02)00010-5
115. Font, X., & Tribe, J. (Eds.). (2000). *Forest tourism and recreation: Case studies in environmental management*. Oxon: CABI Publishing.
116. Formica, S., & Uysal, M. (1996). The revitalization of Italy as a tourist destination. *Tourism Management, 17*(5), 323–331. doi: 10.1016/0261-5177(96)00032-5
117. Formica, S., & Uysal, M. (2006). Destination attractiveness based on supply and demand evaluations: An analytical framework. *Journal of Travel Research, 44*(4), 418–430. doi: 10.1177/0047287506286714
118. Franch, M., Martini, U., Buffa, F., & Parisi, G. (2008). 4L tourism (landscape, leisure, learning and limit): Responding to new motivations and expectations of tourists to improve the competitiveness of Alpine destinations in a sustainable way. *Tourism Review, 63*(1), 4–14. doi: 10.1108/16605370810861008
119. Frees, E. W. (2004). *Longitudinal and panel data: Analysis and applications in the social sciences*. Cambridge: Cambridge University Press.
120. Fry, J. (2007). Snowmaking changed the face of skiing. *Ski, 71*(6), 89–94.
121. Funnell, D. C., & Parish, R. (2001). *Mountain environments and communities* (1st ed.). London: Routledge.
122. Funnell, D. C., & Price, M. F. (2003). Mountain geography: A review. *The Geographical Journal, 169*, 183–190.
123. Fux, M., Mathieu, D., & Myrach, T. (2007). Cooperative customer relationship management (CRM) in Alpine tourist destinations. *ECIS 2007 Proceedings*. Retrieved November 4, 2011, from http://is2.lse.ac.uk/asp/aspecis/20070057.pdf
124. Garretsen, H., Lensink, R., & Sterken, E. (2004). Growth, financial development, societal norms and legal institutions. *Journal of International Financial Markets, Institutions and Money, 14*(2), 165–183. doi: 10.1016/j.intfin.2003.06.002
125. Garrod, B., & Fyall, A. (1998). Beyond the rhetoric of sustainable tourism? *Tourism Management, 19*(3), 199–212. doi: 10.1016/S0261-5177(98)00013-2
126. Geva, A., & Goldman, A. (1991). Satisfaction measurement in guided tours. *Annals of Tourism Research, 18*(2), 177–185. doi: 10.1016/0160-7383(91)90002-S

127. Gill, A. M., & Williams, P. W. (1994). Managing growth in mountain tourism communities. *Tourism Management, 15*(3), 212–220. doi: 10.1016/0261-5177(94)90107-4
128. Gill, A. M., & Williams, P. W. (2011). Rethinking resort growth: Understanding evolving governance strategies in Whistler, British Columbia. *Journal of Sustainable Tourism, 19*(4–5), 629–648. doi: 10.1080/09669582.2011.558626
129. Glover, P. (2011). Celebrity endorsement in tourism advertising: Effects on destination image. *Journal of Hospitality and Tourism Management, 16*(1), 16–23. doi: 10.1375/jhtm.16.1.16
130. Glover, P., & Prideaux, B. (2009). Implications of population ageing for the development of tourism products and destinations. *Journal of Vacation Marketing, 15*(1), 25–37. doi: 10.1177/1356766708098169
131. Go, F. M., & Govers, R. (2000). Integrated quality management for tourist destinations: A European perspective on achieving competitiveness. *Tourism Management, 21*(1), 79–88. doi: 10.1016/S0261-5177(99)00098-9
132. Godde, P. M. (1999). *Community-based mountain tourism: Practices for linking conservation with enterprise.* Synthesis of an Electronic Conference. Retrieved August 15 2010, from http://fama2.us.es:8080/turismo/turismonet1/economia%20del%20turismo/turismo%20sostenible/COMMUNITY%20BASED%20MOUNTAIN%20TOURISM.PDF
133. Godde, P. M., Price, M. F., & Zimmermann, F. M. (Eds.). (2000). *Tourism and development in mountain regions*. Wallingford: CABI Publishing.
134. Gómez Martín, M. B. (2005). Weather, climate and tourism a geographical perspective. *Annals of Tourism Research, 32*(3), 571–591. doi: 10.1016/j.annals.2004.08.004
135. Goodwin, H. (2011). Tourism and poverty reduction: Pathways to prosperity. *Tourism Management, 32*(5), 1236. doi: 10.1016/j.tourman.2010.06.018
136. Gössling, S., Peeters, P., Hall, C. M., Ceron, J.-P., Dubois, G., Lehmann, L. V., & Scott, D. (2012). Tourism and water use: Supply, demand, and security. An international review. *Tourism Management, 33*(1), 1–15. doi: 10.1016/j.tourman.2011.03.015
137. Govers, R., Go, F. M., & Kumar, K. (2007). Virtual destination image a new measurement approach. *Annals of Tourism Research, 34*(4), 977–997. doi: 10.1016/j.annals.2007.06.001
138. Greiner, A., Feichtinger, G., Haunschmied, J. L., Kort, P. M., & Hartl, R. F. (2001). Optimal periodic development of a pollution generating tourism industry. *European Journal of Operational Research, 134*(3), 582–591. doi: 10.1016/S0377-2217(00)00279-4
139. Gretzel, U., Yuan, Y.-L., & Fesenmaier, D. R. (2000). Preparing for the new economy: Advertising strategies and change in destination marketing organizations. *Journal of Travel Research, 39*(2), 146–156. doi: 10.1177/004728750003900204
140. Gunn, C. A. (1988). *Tourism planning*. New York: Taylor and Francis.
141. Gunya, A. (2007). Cross-border cooperation at local level in the Alps, the Caucasus and the mountains of Central Asia. *Input for the Sixth Ministerial Conference "Environment for Europe", Belgrade 2007*. Retrieved November 14, 2011, from http://www.mtnforum.org/sites/default/files/pub/949.pdf
142. Gursoy, D., & Rutherford, D. G. (2004). Host attitudes toward tourism: An improved structural model. *Annals of Tourism Research, 31*(3), 495–516. doi: 10.1016/j.annals.2003.08.008
143. Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). *Multivariate data analysis* (7th ed.). Upper Saddle River, NJ: Prentice Hall.

144. Hall, C. M. (2008). *Tourism planning: Policies, processes and relationships* (2nd ed.). Harlow: Pearson Education Limited.
145. Hall, C. M., & Boyd, S. W. (Eds.). (2005). *Nature-based tourism in peripheral areas: Development or disaster?* Clevedon: Channel View Publications.
146. Hall, C. M., & Williams, A. M. (2008). *Tourism and innovation*. Abingdon, Oxon: Routledge.
147. Hamel, G. (2006). The why, what and how of innovation management. *Harvard Business Review, 84*(2), 72–84.
148. Hardiman, N., & Burgin, S. (2011). Canyoning adventure recreation in the Blue Mountains World Heritage Area (Australia): The canyoners and canyoning trends over the last decade. *Tourism Management, 32*(6), 1324–1331. doi: 10.1016/j.tourman.2011.01.002
149. Haugland, S. A., Ness, H., Grønseth, B.-O., & Aarstad, J. (2011). Development of tourism destinations: An integrated multilevel perspective. *Annals of Tourism Research, 38*(1), 268–290. doi: 10.1016/j.annals.2010.08.008
150. Heagle, A. L. B., Naterer, G. F., & Pope, K. (2011). Small wind turbine energy policies for residential and small business usage in Ontario, Canada. *Energy Policy, 39*(4), 1988–1999. doi: 10.1016/j.enpol.2011.01.028
151. Higham, J. (2003). Tourism and development in mountain regions. *Tourism Management, 24*(4), 491–492. doi: 10.1016/s0261-5177(02)00119-x
152. Hinch, T., & de la Barre, S. (2004). Culture, sport and tourism: The case of the Arctic winter games. In J. Higham (Ed.), *Sport tourism destinations: Issues, opportunities and analysis* (pp. 260–273). Oxford: Butterworth-Heinemann Elsevier Ltd.
153. Hinch, T., & Higham, J. E. S. (2004). *Sport tourism development*. Clevedon: Channel View Publications.
154. Hipp, C., & Grupp, H. (2005). Innovation in the service sector: The demand for service-specific innovation measurement concepts and typologies. *Research Policy, 34*(4), 517–535. doi: 10.1016/j.respol.2005.03.002
155. Hjalager, A.-M. (1997). Innovation patterns in sustainable tourism: An analytical typology. *Tourism Management, 18*(1), 35–41. doi: 10.1016/S0261-5177(96)00096-9
156. Hjalager, A.-M. (2002). Repairing innovation defectiveness in tourism. *Tourism Management, 23*(5), 465–474. doi: 10.1016/S0261-5177(02)00013-4
157. Hjalager, A.-M. (2010). A review of innovation research in tourism. *Tourism Management, 31*(1), 1–12. doi: 10.1016/j.tourman.2009.08.012
158. Ho, K., Jacobs, L., & Cox, J. (2003). Go away! Don't bother me! I don't want your money! *Journal of Services Marketing, 17*(4), 379–392. doi: 10.1108/08876040310482784
159. Hong, W.-C. (2008). *Competitiveness in the tourism sector: A comprehensive approach from economic and management points*. Heidelberg: Physica-Verlag.
160. Hooper, D., Coughlan, J., & Mullen, M. (2008). Structural equation modelling: Guidelines for determining model fit. *Electronic Journal of Business Research Methods, 6*(1), 53–60.
161. Hu, L.-t., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling: A Multidisciplinary Journal, 6*(1), 1–55. doi: 10.1080/10705519909540118
162. Huang, S.-M., Ou, C.-S., Chen, C.-M., & Lin, B. (2006). An empirical study of relationship between IT investment and firm performance: A resource-based perspective. *European Journal of Operational Research, 173*(3), 984–999. doi: 10.1016/j.ejor.2005.06.013

163. Huang, Y.-H., Li, E. Y., & Chen, J. S. (2009). Information synergy as the catalyst between information technology capability and innovativeness: Empirical evidence from the financial service sector. *Information Research, 14*(1), paper 394. Retrieved March 22 2010, from http://informationr.net/ir/14-1/paper394.html
164. Hudson, B. J. (1998). Waterfalls resources for tourism. *Annals of Tourism Research, 25*(4), 958–973. doi: 10.1016/S0160-7383(98)00043-7
165. Hudson, S. (1996). The 'greening' of ski resorts: A necessity for sustainable tourism, or a marketing opportunity for skiing communities? *Journal of Vacation Marketing, 2*(2), 176–185. doi: 10.1177/135676679600200207
166. Hudson, S., & Miller, G. A. (2005). The responsible marketing of tourism: The case of Canadian mountain holidays. *Tourism Management, 26*(2), 133–142. doi: 10.1016/j.tourman.2003.06.005
167. Hult, G. T. M., Hurley, R. F., & Knight, G. A. (2004). Innovativeness: Its antecedents and impact on business performance. *Industrial Marketing Management, 33*(5), 429–438. doi: 10.1016/j.indmarman.2003.08.015
168. Hurley, R. F., & Hult, G. T. M. (1998). Innovation, market orientation, and organizational learning: An integration and empirical examination. *Journal of Marketing, 62*, 42–54.
169. Hutcheson, G. D., & Sofroniou, N. (1999). *The multivariate social scientist: Introductory statistics using generalized linear models*. London: SAGE Publications Ltd.
170. Huybers, T., & Bennett, J. (2003). Inter-firm cooperation at nature-based tourism destinations. *Journal of Socio-Economics, 32*(5), 571–587. doi: 10.1016/j.socec.2003.08.011
171. ISCAR. (2008). *Research agenda to the multi-annual working programme of the Alpine conference (MAP 2005–2010).* Bern: International Scientific Committee on Research in the Alps (ISCAR).
172. Ives, J. D. (1992). Preface. In P. B. Stone (Ed.), *The state of the world's mountains: A global report* (pp. xiii–xvi). London: Zed Books Ltd.
173. James, P. (1997). The sustainability circle: A new tool for product development and design. *Journal of Sustainable Product Design,* (2), 52–57.
174. Janke, J. R. (2010). Multicriteria GIS modeling of wind and solar farms in Colorado. *Renewable Energy, 35*(10), 2228–2234. doi: 10.1016/j.renene.2010.03.014
175. Jansky, L., Ives, J. D., Furuyashiki, K., & Watanabe, T. (2002). Global mountain research for sustainable development. *Global Environmental Change, 12*(3), 231–239. doi: 10.1016/S0959-3780(02)00015-8
176. Jayswal, T. (2008). *Events tourism: Potential to build a brand destination.* In proceedings of Conference on Tourism in India-Challenges Ahead, Kozhikode, India, 15–17 May 2008.
177. Jolly, D., & Dimanche, F. (2009). Investing in technology for tourism activities: Perspectives and challenges. *Technovation, 29*(9), 576–579. doi: 10.1016/j.technovation.2009.05.004
178. Jorna, R. J. (2006). *Sustainable innovation: The organisational, human and knowledge dimension*. Sheffield: Greenleaf Publishing Limited.
179. Jurkiewicz, C. L., Massey, T. K., Jr., & Brown, R. G. (1998). Motivation in public and private organizations: A comparative study. *Public Productivity & Management Review, 21*(3), 230–250.
180. Jurowski, C., & Gursoy, D. (2004). Distance effects on residents' attitudes toward tourism. *Annals of Tourism Research, 31*(2), 296–312. doi: 10.1016/j.annals.2003.12.005

181. Kals, E., Schumacher, D., & Montada, L. (1999). Emotional affinity toward nature as a motivational basis to protect nature. *Environment and Behavior, 31*(2), 178–202. doi: 10.1177/00139169921972056
182. Kaltenborn, B. P., Riese, H., & Hundeide, M. (1999). National park planning and local participation: Some reflections from a mountain region in southern Norway. *Mountain Research and Development, 19*(1), 51–61.
183. Kamakura, W. A., & Moon, S. (2009). Quality-adjusted price comparison of non-homogeneous products across Internet retailers. *International Journal of Research in Marketing, 26*(3), 189–196. doi: 10.1016/j.ijresmar.2009.03.004
184. Kandampully, J. (2002). Innovation as the core competency of a service organization: The role of technology, knowledge and networks. *European Journal of Innovation Management, 5*(1), 18–26. doi: 10.1108/14601060210415144
185. Kanniainen, V., & Vesala, T. (2005). Entrepreneurship and labor market institutions. *Economic Modelling, 22*(5), 828–847. doi: 10.1016/j.econmod.2005.05.002
186. Karamanis, D. (2011). Management of moderate wind energy coastal resources. *Energy Conversion and Management, 52*(7), 2623–2628. doi: 10.1016/j.enconman.2011.01.002
187. Katinas, V., & Markevicius, A. (2006). Promotional policy and perspectives of usage renewable energy in Lithuania. *Energy Policy, 34*(7), 771–780. doi: 10.1016/j.enpol.2004.07.011
188. Kaynak, E., & Marandu, E. E. (2011). Variations in tourism market potential in an emerging economy: Theoretical perspectives and analytical insights. *Journal of Quality Assurance in Hospitality & Tourism, 12*(1), 1–27. doi: 10.1080/1528008x.2011.541814
189. Kelly, J., Haider, W., Williams, P. W., & Englund, K. (2007). Stated preferences of tourists for eco-efficient destination planning options. *Tourism Management, 28*(2), 377–390. doi: 10.1016/j.tourman.2006.04.015
190. Kline, R. B. (2005). *Principles and practice of structural equation modeling*. New York: The Guilford Press.
191. Kohler, T., Hurni, H., Wiesmann, U., & Kläy, A. (2002). *Mountain infrastructure: Access, communication, and energy*. Paper presented at the UNEP/Bishkek Global Mountain summit.
192. Konu, H., Laukkanen, T., & Komppula, R. (2011). Using ski destination choice criteria to segment Finnish ski resort customers. *Tourism Management, 32*(5), 1096–1105. doi: 10.1016/j.tourman.2010.09.010
193. Koscak, M. (1998). Integral development of rural areas, tourism and village renovation, Trebnje, Slovenia. *Tourism Management, 19*(1), 81–85. doi: 10.1016/S0261-5177(97)00096-4
194. Kozak, M., & Martin, D. (2012). Tourism life cycle and sustainability analysis: Profit-focused strategies for mature destinations. *Tourism Management, 33*(1), 188–194. doi: 10.1016/j.tourman.2011.03.001
195. Krakover, S. (2000). Partitioning seasonal employment in the hospitality industry. *Tourism Management, 21*(5), 461–471. doi: 10.1016/S0261-5177(99)00101-6
196. Kreutzmann, H. (2001). Development indicators for mountain regions. *Mountain Research and Development, 21*(2), 132–139. doi: 10.1659/0276-4741(2001)021[0132:difmr]2.0.co;2
197. Kruk, E., Hummel, J., & Banskota, K. (Eds.). (2007). *Facilitating sustainable mountain tourism*. Nepal: International Centre for Integrated Mountain Development (ICIMOD).
198. Kuniyal, J. C. (2002). Mountain expeditions: Minimising the impact. *Environmental Impact Assessment Review, 22*(6), 561–581. doi: 10.1016/S0195-9255(02)00031-8

199. Kurek, S., & Rachwał, T. (2011). Development of entrepreneurship in ageing populations of The European Union. *Procedia - Social and Behavioral Sciences, 19*(0), 397–405. doi: 10.1016/j.sbspro.2011.05.147
200. Kurihara, T., & Okamoto, N. (2010). Foreign visitor's evaluation on tourism environment. *Journal of the Eastern Asia Society for Transportation Studies, 8*(0), 912–925.
201. Kylänen , M., & Rusko, R. (2011). Unintentional coopetition in the service industries: The case of Pyhä-Luosto tourism destination in the Finnish Lapland. *European Management Journal, 29*(3), 193–205. doi: 10.1016/j.emj.2010.10.006
202. Lagos, D., & Courtis, P. G. (2008). Business clusters formation as a means of improving competitiveness in the tourism sector. *European Research Studies Journal, 11*(1–2), 111–121.
203. Lama, W. B., & Sattar, N. (2004). Mountain tourism and the conservation of biological and cultural diversity. In M. F. Price, L. Jansky & A. A. Iatsenia (Eds.), *Key issues for mountain areas* (pp. 111–148). Tokyo: United Nations University Press.
204. Lambooy, J. (2005). Innovation and knowledge: Theory and regional policy. *European Planning Studies, 13*(8), 1137–1152. doi: 10.1080/09654310500336444
205. Landauer, M., Pröbstl, U., & Haider, W. (2012). Managing cross-country skiing destinations under the conditions of climate change - Scenarios for destinations in Austria and Finland. *Tourism Management, 33*(4), 741–751. doi: 10.1016/j.tourman.2011.08.007
206. Larsen, J., Urry, J., & Axhausen, K. W. (2007). Networks and tourism: Mobile Social Life. *Annals of Tourism Research, 34*(1), 244–262. doi: 10.1016/j.annals.2006.08.002
207. Lasanta, T., Laguna, M., & Vicente-Serrano, S. M. (2007). Do tourism-based ski resorts contribute to the homogeneous development of the Mediterranean mountains? A case study in the Central Spanish Pyrenees. *Tourism Management, 28*(5), 1326–1339. doi: 10.1016/j.tourman.2007.01.003
208. Lebe, S. S., & Milfelner, B. (2006). Innovative organisation approach to sustainable tourism development in rural areas. *Kybernetes: The International Journal of Systems & Cybernetics, 35*(7–8), 1136–1146. doi: 10.1108/03684920610675139
209. Lee, B. C., & Wicks, B. (2010). Tourism technology training for destination marketing organisations (DMOs): Need-based content development. *Journal of Hospitality, Leisure, Sport and Tourism Education, 9*(1), 39–52. doi: 10.3794/johlste.91.241
210. Lee, K. F. (2001). Sustainable tourism destinations: The importance of cleaner production. *Journal of Cleaner Production, 9*(4), 313–323. doi: 10.1016/S0959-6526(00)00071-8
211. Lee, S.-H., Chang, S.-C., Hou, J.-S., & Lin, C.-H. (2008). Night market experience and image of temporary residents and foreign visitors. *International Journal of Culture, Tourism and Hospitality Research, 2*(3), 217–233. doi: 10.1108/17506180810891591
212. Lee, S., Scott, D., & Kim, H. (2008). Celebrity fan involvement and destination perceptions. *Annals of Tourism Research, 35*(3), 809–832. doi: 10.1016/j.annals.2008.06.003
213. Lee, S. K., & Jang, S. S. (2011). Foreign exchange exposure of US tourism-related firms. *Tourism Management, 32*(4), 934–948. doi: 10.1016/j.tourman.2010.08.008
214. Lee, W., Gretzel, U., & Law, R. (2010). Quasi-trial experiences through sensory information on destination Web sites. *Journal of Travel Research, 49*(3), 310–322. doi: 10.1177/0047287509346991
215. Leslie, D., & Russell, H. (2006). The importance of foreign language skills in the tourism sector: A comparative study of student perceptions in the UK and continental Europe. *Tourism Management, 27*(6), 1397–1407. doi: 10.1016/j.tourman.2005.12.016

216. Li, E. Y., Chen, J. S., & Huang, Y. H. (2006). A framework for investigating the impact of IT capability and organizational capability on firm performance in the late industrializing context. *International Journal of Technology Management, 36*(1/3), 209–229. doi: http://dx.doi.org/10.1504/IJTM.2006.009969
217. Lin, T.-P. (2010). Carbon dioxide emissions from transport in Taiwan's national parks. *Tourism Management, 31*(2), 285–290. doi: 10.1016/j.tourman.2009.03.009
218. Lindberg, K., & Johnson, R. L. (1997). Modeling resident attitudes toward tourism. *Annals of Tourism Research, 24*(2), 402–424. doi: 10.1016/S0160-7383(97)80009-6
219. Linde, J., & Grab, S. (2008). Regional contrasts in mountain tourism development in Drakensberg, South Africa. *Mountain Research and Development, 28*(1), 65–71.
220. Little, C. M. (2010). *Voluntary environmental programs at an alpine ski area: Influence of recreationists' knowledge, motivations, attachment, value orientations, and specialization*. Corvallis: Oregon State University.
221. Litvin, S. W., Goldsmith, R. E., & Pan, B. (2008). Electronic word-of-mouth in hospitality and tourism management. *Tourism Management, 29*(3), 458–468. doi: 10.1016/j.tourman.2007.05.011
222. Liu, C., & Arnett, K. P. (2000). Exploring the factors associated with Web site success in the context of electronic commerce. *Information & Management, 38*(1), 23–33. doi: 10.1016/S0378-7206(00)00049-5
223. Logar, I. (2010). Sustainable tourism management in Crikvenica, Croatia: An assessment of policy instruments. *Tourism Management, 31*(1), 125–135. doi: 10.1016/j.tourman.2009.02.005
224. Lovely, M., & Popp, D. (2011). Trade, technology, and the environment: Does access to technology promote environmental regulation? *Journal of Environmental Economics and Management, 61*(1), 16–35. doi: 10.1016/j.jeem.2010.08.003
225. Lundberg, M. C. (2008). A word-of-mouth approach to informal information sharing among part-time and short-term employed front-line workers in tourism. *Journal of Vacation Marketing, 14*(1), 23–39. doi: 10.1177/1356766707084217
226. MacCallum, R. C., Browne, M. W., & Sugawara, H. M. (1996). Power analysis and determination of sample size for covariance structure modeling. *Psychological Methods, 1*(2), 130–149. doi: 10.1037/1082-989X.1.2.130
227. Macchiavelli, A. (2009). Alpine tourism: Development contradictions and conditions for innovation. *Revue de géographie alpine, 97*(1). Retrieved September 13, 2010, from http://rga.revues.org/index843.html
228. March, J. G., Gual, M., & Orozco, F. (2004). Experiences on greywater re-use for toilet flushing in a hotel (Mallorca Island, Spain). *Desalination, 164*(3), 241–247. doi: 10.1016/S0011-9164(04)00192-4
229. Marom, O., & Seidmann, A. (2011). Using "last-minute" sales for vertical differentiation on the Internet. *Decision Support Systems, 51*(4), 894–903. doi: 10.1016/j.dss.2011.02.008
230. Mastny, L. (2001). *Traveling light: New paths for international tourism*. Washington, DC: Worldwatch Institute.
231. Matthews, C., Moore, C., & Wright, M. (2008). *Why not switch? Switching costs and switching likelihood*. Paper presented at the 13th Finsia – Melbourne Centre for Financial Studies Banking and Finance Conference, Melbourne, Australia.
232. Mattsson, J., Sundbo, J., & Fussing-Jensen, C. (2005). Innovation systems in tourism: The roles of attractors and scene-takers. *Industry and Innovation, 12*(3), 357–381. doi: 10.1080/13662710500195967
233. May, V. (1995). Environmental implications of the 1992 Winter Olympic Games. *Tourism Management, 16*(4), 269–275. doi: 10.1016/0261-5177(95)00016-H

234. Maza, A., Hierro, M., & Villaverde, J. (2010). Renewable electricity consumption in the EU-27: Are cross-country differences diminishing? *Renewable Energy, 35*(9), 2094–2101. doi: 10.1016/j.renene.2010.02.012
235. McCool, S. F., Moisey, R. N., & Nickerson, N. P. (2001). What should tourism sustain? The disconnect with industry perceptions of useful indicators. *Journal of Travel Research, 40*(2), 124–131. doi: 10.1177/004728750104000202
236. McDonald, A. M., & Cranor, L. F. (2010). *Beliefs and behaviors: Internet users' understanding of behavioral advertising.* In proceedings of TPRC 2010: The 38th Research Conference on Communication, Information and Internet Policy, Arlington, VA, 1–3 October 2010.
237. Meleghy, T., Preglau, M., & Tafertshofer, A. (1985). Tourism development and value change. *Annals of Tourism Research, 12*(2), 181–199. doi: 10.1016/0160-7383(85)90056-8
238. Middleton, V. T. C., Fyall, A., Morgan, M., & Ranchhod, A. (2009). *Marketing in travel and tourism* (4th ed.). Oxford: Butterworth-Heinemann Elsevier Ltd.
239. Mihalič, T. (2000). Environmental management of a tourist destination: A factor of tourism competitiveness. *Tourism Management, 21*(1), 65–78. doi: 10.1016/S0261-5177(99)00096-5
240. Mihalič, T. (2006a). *Tourism and its environments: Ecological, economic and political sustainability issues*. Ljubljana: Faculty of Economics, University of Ljubljana.
241. Mihalič, T. (2006b). *Trajnostni turizem*. Ljubljana: Ekonomska Fakulteta Univerze v Ljubljani.
242. Mihalič, T. (2008). *Turizem: Ekonomski vidiki*. Ljubljana: Ekonomska Fakulteta Univerze v Ljubljani.
243. Mihalič, T., Knežević Cvelbar, L., Pahor, M., Slapničar, S., Žabkar, V., Dmitrović, T., Kolar, T., Logar, I., Makovec Brenčič, M., & Kuščer, K. (2009). *Oblikovanje modela merjenja uspešnosti poslovanja hotelskih podjetij*. Ljubljana: Raziskovalni center v sodelovanju z Inštitutom za turizem Ekonomske fakultete Univerze v Ljubljani.
244. Mihalič, T., & Kuščer, K. (2012). *Tourism Confidence Index 2012-1. Economic Performance and Opportunities of Slovene Tourism*. Ljubljana: Institute for Tourism, Faculty of Economics, University of Ljubljana.
245. Mihalič, T., Žabkar, V., & Knežević Cvelbar, L. (2011). A hotel sustainability business model: evidence from Slovenia. *Journal of Sustainable Tourism, iFirst 2011*, 1–19. doi: 10.1080/09669582.2011.632092
246. Miller, G. (2001). The development of indicators for sustainable tourism: Results of a Delphi survey of tourism researchers. *Tourism Management, 22*(4), 351–362. doi: 10.1016/S0261-5177(00)00067-4
247. Miller, G. H. (1994). People on the move: Trends and prospects in district migration flows. *Economic Review - Federal Reserve Bank of Kansas City, 79*(3), 39–54.
248. Milne, J. E., LeMense, J., & Virginia, R. A. (Eds.). (2009). *Mountain resorts: Ecology and the law*. Farnham: Ashgate Publishing Limited.
249. Moen, J., & Fredman, P. (2007). Effects of climate change on Alpine skiing in Sweden. *Journal of Sustainable Tourism, 15*(4), 418–437. doi: 10.2167/jost624.0
250. Morales, D. R., & Wang, J. (2010). Forecasting cancellation rates for services booking revenue management using data mining. *European Journal of Operational Research, 202*(2), 554–562. doi: 10.1016/j.ejor.2009.06.006
251. Morgan, N., Pritchard, A., & Pride, R. (Eds.). (2004). *Destination branding: Creating the unique destination proposition* (2nd ed.). Oxford: Butterworth-Heinemann Elsevier Ltd.

252. Morgera, E. (2010). Tourism for sustainable mountain development: A comparative law perspective. *University of Edinburgh School of Law Working Paper No. 26*. Retrieved Februar 20, 2011, from http://dx.doi.org/10.2139/ssrn.1658907
253. Müller, H., & Weber, F. (2008). Climate change and tourism - scenario analysis for the Bernese Oberland in 2030. *Tourism Review, 63*(3), 57–71. doi: 10.1108/16605370810901580
254. Murphy, P. E. (1985). *Tourism: A community approach*. New York and London: Methuen.
255. Murphy, P. E., Pritchard, M. P., & Smith, B. (2000). The destination product and its impact on traveller perceptions. *Tourism Management, 21*(1), 43–52. doi: doi: DOI: 10.1016/S0261-5177(99)00080-1
256. Musa, G., Hall, C. M., & Higham, J. E. S. (2004). Tourism sustainability and health impacts in high altitude adventure, cultural and ecotourism destinations: A case study of Nepal's Sagarmatha National Park. *Journal of Sustainable Tourism, 12*(4), 306–331. doi: 10.1080/09669580408667240
257. Nanni, A., Brusasca, G., Calori, G., Finardi, S., Tinarelli, G., Zublena, M., Agnesod, G., & Pession, G. (2004). Integrated assessment of traffic impact in an Alpine region. *Science of The Total Environment, 334–335*(0), 465–471. doi: 10.1016/j.scitotenv.2004.04.050
258. Narasaiah, M. L. (2005). *Poverty and environmental education* (1st ed.). New Delhi: Discovery Publishing House.
259. Nepal, S. K. (2002a). Involving indigenous peoples in protected area management: Comparative perspectives from Nepal, Thailand, and China. *Environmental Management, 30*, 748–763. doi: 10.1007/s00267-002-2710-y
260. Nepal, S. K. (2002b). Mountain ecotourism and sustainable development: Ecology, economics, and ethics. *Mountain Research and Development, 22*(2), 104–109. doi: 10.1659/0276-4741(2002)022[0104:measd]2.0.co;2
261. Nepal, S. K., & Chipeniuk, R. (2005). Mountain tourism: Toward a conceptual framework. *Tourism Geographies, 7*(3), 313–333. doi: 10.1080/14616680500164849
262. Nicolau, J. L. (2009). The smile of the tourist: The relationship between price sensitivity and expenses. *The Service Industries Journal, 29*(8), 1125–1134. doi: 10.1080/02642060902764640
263. Nordic Centre for Spatial Development. (2004). *Mountain Areas in Europe: Analysis of mountain areas in EU member states, acceding and other European countries.* Retrieved June 18, 2012, from http://ec.europa.eu/regional_policy/sources/docgener/studies/pdf/montagne/mount1.pdf
264. Nordin, S., & Svensson, B. (2007). Innovative destination governance. The Swedish ski resort of Åre. *Entrepreneurship and Innovation,* (8), 53–66. doi: 10.5367/000000007780007416
265. Norris, M., & Lecavalier, L. (2010). Evaluating the use of exploratory factor analysis in developmental disability psychological research. *Journal of autism and developmental disorders, 40*(1), 8–20. doi: 10.1007/s10803-009-0816-2
266. Novelli, M., Schmitz, B., & Spencer, T. (2006). Networks, clusters and innovation in tourism: A UK experience. *Tourism Management, 27*(6), 1141–1152. doi: 10.1016/j.tourman.2005.11.011
267. Nunkoo, R., & Ramkissoon, H. (2011). Developing a community support model for tourism. *Annals of Tourism Research, 38*(3), 964–988. doi: 10.1016/j.annals.2011.01.017

268. O'Neill, J. W., & Mattila, A. S. (2006). Strategic hotel development and positioning: The effects of revenue drivers on profitability. *Cornell Hotel and Restaurant Administration Quarterly, 47*(2), 146–154. doi: 10.1177/0010880405281519
269. Okumus, B., Okumus, F., & McKercher, B. (2007). Incorporating local and international cuisines in the marketing of tourism destinations: The cases of Hong Kong and Turkey. *Tourism Management, 28*(1), 253–261. doi: 10.1016/j.tourman.2005.12.020
270. Orams, M. B. (2002). Feeding wildlife as a tourism attraction: A review of issues and impacts. *Tourism Management, 23*(3), 281–293. doi: 10.1016/S0261-5177(01)00080-2
271. Otto, J. E., & Ritchie, J. R. B. (1996). The service experience in tourism. *Tourism Management, 17(3)*, 165–174. doi: 10.1016/0261-5177(96)00003-9
272. Page, S. J. (2012). *Tourism management* (4th ed.). Oxford: Elsevier Ltd.
273. Paget, E., Dimanche, F., & Mounet, J.-P. (2010). A tourism innovation case: An actor-network approach. *Annals of Tourism Research, 37*(3), 828–847. doi: 10.1016/j.annals.2010.02.004
274. Pak, A., & Chung, C.-W. (2010). A Wikipedia matching approach to contextual advertising. *World Wide Web, 13*(3), 251–274. doi: 10.1007/s11280-010-0084-2
275. Palmer, A., & Mathel, V. (2010). Causes and consequences of underutilised capacity in a tourist resort development. *Tourism Management, 31*(6), 925–935. doi: 10.1016/j.tourman.2009.12.001
276. Papadimitriou, D., & Gibson, H. (2008). Benefits sought and realized by active mountain sport tourists in Epirus, Greece: Pre- and post-trip analysis. *Journal of Sport & Tourism, 13*(1), 37–60. doi: 10.1080/14775080801972056
277. Pechlaner, H., Fischer, E., & Hammann, E.-M. (2005). Creating the valuable basis of competitive advantages of destinations. In P. Keller & T. Bieger (Eds.), *Innovation in tourism - Creating customer value* (Vol. 47, pp. 103–115). St. Gallen: AIEST.
278. Pechlaner, H., Hölzl, B., & Tallinucci, V. (2004). *Cross-level destination management and the transfer of knowledge.* In proceedings of Fifth European Conference on Organizational Knowledge, Learning and Capabilities, Innsbruck, Austria, 2–4 April 2004.
279. Pechlaner, H., & Sauerwein, E. (2002). Strategy implementation in the Alpine tourism industry. *International Journal of Contemporary Hospitality Management, 14*(4), 157–168. doi: 10.1108/09596110210427003
280. Pechlaner, H., & Tschurtschenthaler, P. (2003). Tourism policy, tourism organizations and change management in Alpine regions and destinations: A European perspective. *Current Issues in Tourism, 6*(6), 508–539. doi: 10.1080/13683500308667967
281. Pechlaner, H., & Volgger, M. (2012). How to promote cooperation in the hospitality industry: Generating practitioner-relevant knowledge using the GABEK qualitative research strategy. *International Journal of Contemporary Hospitality Management, 24*(6), 925–945. doi: 10.1108/09596111211247245
282. Pechlaner, H., Volgger, M., & Herntrei, M. (2012). Destination management organizations as interface between destination governance and corporate governance. *Anatolia: An International Journal of Tourism and Hospitality Research, 23*(2), 151–168. doi: 10.1080/13032917.2011.652137
283. Pechlaner, H., Zeni, A., & Raich, F. (2007). Congress tourism and leisure tendencies with special focus on economic aspects. *Tourism Review, 62*(3/4), 32–38. doi: 10.1108/16605370780000319
284. Pellinen, J. (2003). Making price decisions in tourism enterprises. *International Journal of Hospitality Management, 22*(2), 217–235. doi: 10.1016/S0278-4319(03)00019-7

285. Perch-Nielsen, S., Amelung, B., & Knutti, R. (2010). Future climate resources for tourism in Europe based on the daily Tourism Climatic Index. *Climatic Change, 103*(3), 363–381. doi: 10.1007/s10584-009-9772-2
286. Perez-Salom, J. R. (2000). Sustainable tourism: Emerging global and regional regulation. *Georgetown International Environmental Law Review, 13*(4), 801–836.
287. Perez, E. A., & Juaneda, S. C. (2000). Tourist expenditure for mass tourism markets. *Annals of Tourism Research, 27*(3), 624–637. doi: 10.1016/S0160-7383(99)00101-2
288. Perry, J. L., & Porter, L. W. (1982). Factors affecting the context for motivation in public organizations. *The Academy of Management Review, 7*(1), 89–98.
289. Pesonen, J., Komppula, R., Kronenberg, C., & Peters, M. (2011). Understanding the relationship between push and pull motivations in rural tourism. *Tourism Review, 66*(3), 32–49. doi: 10.1108/16605371111175311
290. Peters, M. (1993). Succession in tourism family business: The motivation of succeeding family members. *Tourism Review, 60*(4), 12–18. doi: 10.1108/eb058461
291. Petrick, J. F. (2004). First timers' and repeaters' perceived value. *Journal of Travel Research, 43*(1), 29–38. doi: 10.1177/0047287504265509
292. Podsakoff, P. M., MacKenzie, S. B., Lee, J.-Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology, 88*(5), 879–903. doi: 10.1037/0021-9010.88.5.879
293. Porter, M. E. (1990). *The Competitive Advantage of Nations*. New York: The Free Press.
294. Prashyanusorn, V., Kaviya, S., & Yupapin, P. P. (2010). Surveillance system for sustainable tourism with safety and privacy protection. *Procedia - Social and Behavioral Sciences, 2*(1), 74–78. doi: 10.1016/j.sbspro.2010.01.016
295. Price, M., Wachs, T., & Byers, E. (1999). *Mountains of the world: Tourism and sustainable mountain development (Mountain Agenda)*. Switzerland: CDE Institute of Geography, University of Berne.
296. Pucher, J., Dill, J., & Handy, S. (2010). Infrastructure, programs, and policies to increase bicycling: An international review. *Preventive Medicine, 50, Supplement*, 106–125. doi: 10.1016/j.ypmed.2009.07.028
297. Pyo, S. (2005). Knowledge map for tourist destinations - Needs and implications. *Tourism Management, 26*(4), 583–594. doi: 10.1016/j.tourman.2004.03.001
298. Qu, H., Kim, L. H., & Im, H. H. (2011). A model of destination branding: Integrating the concepts of the branding and destination image. *Tourism Management, 32*(3), 465–476. doi: 10.1016/j.tourman.2010.03.014
299. Radu, D., Huidumac, C., Rossela, N. D., & Costel, N. (2010). The correlation between the number of tourists and the number of nights spent in the hotel: Analysis indicator of hotel business efficiency. *Communications of the IBIMA, 2010*(2010), 1–6. Retrieved May 5, 2011, from http://www.ibimapublishing.com/journals/CIBIMA/2010/813597/813597.pdf
300. Reilly, J., Williams, P., & Haider, W. (2010). Moving towards more eco-efficient tourist transportation to a resort destination: The case of Whistler, British Columbia. *Research in Transportation Economics, 26*(1), 66–73. doi: 10.1016/j.retrec.2009.10.009
301. Reinius, S. W., & Fredman, P. (2007). Protected areas as attractions. *Annals of Tourism Research, 34*(4), 839–854. doi: 10.1016/j.annals.2007.03.011
302. Reisinger, Y., & Turner, L. (1999). Structural equation modeling with LISREL: Application in tourism. *Tourism Management, 20*(1), 71–88. doi: 10.1016/S0261-5177(98)00104-6

303. Reisinger, Y., & Turner, L. W. (2003). *Cross-cultural behaviour in tourism: Concepts and analysis*. Oxford: Butterworth-Heinemann Elsevier Ltd.
304. Rescia, A. J., Pons, A., Lomba, I., Esteban, C., & Dover, J. W. (2008). Reformulating the social-ecological system in a cultural rural mountain landscape in the Picos de Europa region (northern Spain). *Landscape and Urban Planning, 88*(1), 23–33. doi: 10.1016/j.landurbplan.2008.08.001
305. Rey-Maquieira, J., Lozano, J., & Gómez, C. M. (2009). Quality standards versus taxation in a dynamic environmental model of a tourism economy. *Environmental Modelling & Software, 24*(12), 1483–1490. doi: 10.1016/j.envsoft.2009.05.012
306. Rigall-I-Torrent, R., & Fluvià, M. (2011). Managing tourism products and destinations embedding public good components: A hedonic approach. *Tourism Management, 32*(2), 244–255. doi: 10.1016/j.tourman.2009.12.009
307. Ritchie, J. R. B., & Crouch, G. I. (2000). The competitive destination: A sustainability perspective. *Tourism Management, 21(1),* 1–7.
308. Ritchie, J. R. B., & Crouch, G. I. (2003). *The competitive destination: A sustainable tourism perspective*. Wallingford: CABI Publishing.
309. Ritchie, R. J. B., & Ritchie, J. R. B. (2002). A framework for an industry supported destination marketing information system. *Tourism Management, 23*(5), 439–454. doi: 10.1016/S0261-5177(02)00007-9
310. Rixen, C., Stoeckli, V., & Ammann, W. (2003). Does artificial snow production affect soil and vegetation of ski pistes? A review. *Perspectives in Plant Ecology, Evolution and Systematics, 5*(4), 219–230. doi: 10.1078/1433-8319-00036
311. Roberts, L., & Hall, D. (2001). *Rural tourism and recreation: Principles to practice*. Oxon, UK: CABI Publishing.
312. Robson, J., & Robson, I. (1996). From shareholders to stakeholders: Critical issues for tourism marketers. *Tourism Management, 17*(7), 533–540. doi: 10.1016/S0261-5177(96)00070-2
313. Rønningen, M. (2010). Innovative processes in a nature-based tourism case: The role of a tour-operator as the driver of innovation. *Scandinavian Journal of Hospitality & Tourism, 10*(3), 190-206. doi: 10.1080/15022250.2010.491255
314. Rosen, C. (2000). *World Resources 2000-2001: People and ecosystems: The fraying web of life*. Oxford: Elsevier Science.
315. Ruffini, F. V., Streifeneder, T., & Eiselt, B. (2004). *Sistem kazalcev in koncept za Poročilo o stanju Alp: Priloga III – Definicija obsega območja Alpske konvencije.* Retrieved February 15, 2012, from http://www.umweltbundesamt.de/ius/alpen/AnhangIII_si.pdf
316. Ruiz-Molina, M.-E., Gil-Saura, I., & Moliner-Velázquez, B. (2010). Good environmental practices for hospitality and tourism: The role of information and communication technologies. *Management of Environmental Quality: An International Journal, 21*(4), 464–476. doi: 10.1108/14777831011049106
317. Sainaghi, R. (2006). From contents to processes: Versus a dynamic destination management model (DDMM). *Tourism Management, 27*(5), 1053–1063. doi: 10.1016/j.tourman.2005.09.010
318. Sandbrook, C. G. (2010). Local economic impact of different forms of nature-based tourism. *Conservation Letters, 3*(1), 21–28. doi: 10.1111/j.1755-263X.2009.00085.x
319. Sautter, E. T., & Leisen, B. (1999). Managing stakeholders a tourism planning model. *Annals of Tourism Research, 26*(2), 312–328. doi: 10.1016/S0160-7383(98)00097-8
320. Schianetz, K., Kavanagh, L., & Lockington, D. (2007). The learning tourism destination: The potential of a learning organisation approach for improving the

sustainability of tourism destinations. *Tourism Management, 28*(6), 1485–1496. doi: 10.1016/j.tourman.2007.01.012
321. Schubert, S. F., Brida, J. G., & Risso, W. A. (2011). The impacts of international tourism demand on economic growth of small economies dependent on tourism. *Tourism Management, 32*(2), 377–385. doi: 10.1016/j.tourman.2010.03.007
322. Schumpeter, J. A. (1934). *The theory of economic development: An inquiry into profits, capital, credit, interest and the business cycle* Cambridge, MA: Harvard University Press.
323. Scott, D., Jones, B., & Konopek, J. (2007). Implications of climate and environmental change for nature-based tourism in the Canadian Rocky Mountains: A case study of Waterton Lakes National Park. *Tourism Management, 28*(2), 570–579. doi: 10.1016/j.tourman.2006.04.020
324. Scott, D., Tian, S., Wang, P., & Munson, W. (1995). *Tourism satisfaction and the cumulative nature of tourists' experiences*. Paper presented at the 1995 Leisure Research Symposium, San Antonio, Texas.
325. Seaton, A. V., & Palmer, C. (1997). Understanding VFR tourism behaviour: The first five years of the United Kingdom tourism survey. *Tourism Management, 18*(6), 345–355. doi: 10.1016/S0261-5177(97)00033-2
326. Selby, A., Petäjistö, L., & Huhtala, M. (2011). The realisation of tourism business opportunities adjacent to three national parks in southern Finland: Entrepreneurs and local decision-makers matter. *Forest Policy and Economics, 13*(6), 446–455. doi: 10.1016/j.forpol.2011.04.002
327. Sequeira, T. N., & Nunes, P. M. (2008). Does tourism influence economic growth? A dynamic panel data approach. *Applied Economics, 40*(18), 2431–2441. doi: 10.1080/00036840600949520
328. Shanker, D. (2008). *ICT and tourism: Challenges and opportunities*. Paper presented at the Conference on Tourism in India – Challenges Ahead, Indian Institute of Management Kozhikode, India.
329. Sharma, S., Aragón-Correa, J. A., & Rueda-Manzanares, A. (2007). The contingent influence of organizational capabilities on proactive environmental strategy in the service sector: An analysis of North American and European ski resorts. *Canadian Journal of Administrative Sciences / Revue Canadienne des Sciences de l'Administration, 24*(4), 268–283. doi: 10.1002/cjas.35
330. Sharpley, R., & Forster, G. (2003). The implications of hotel employee attitudes for the development of quality tourism: The case of Cyprus. *Tourism Management, 24*(6), 687–697. doi: 10.1016/S0261-5177(03)00044-X
331. Sheehan, L. R., & Ritchie, J. R. B. (2005). Destination Stakeholders Exploring Identity and Salience. *Annals of Tourism Research, 32*(3), 711–734. doi: 10.1016/j.annals.2004.10.013
332. Simon, A., Bernardo, M., Karapetrovic, S., & Casadesús, M. (2011). Integration of standardized environmental and quality management systems audits. *Journal of Cleaner Production, 19*(17–18), 2057–2065. doi: 10.1016/j.jclepro.2011.06.028
333. Smerecnik, K. R., & Andersen, P. A. (2011). The diffusion of environmental sustainability innovations in North American hotels and ski resorts. *Journal of Sustainable Tourism, 19*(2), 171–196. doi: 10.1080/09669582.2010.517316
334. Smith, E., Webber, D., & White, S. (2011). Employment characteristics of UK tourism industries in 2008. *Economic & Labour Market Review*. doi: 10.1057/elmr.2011.5
335. Soliva, R., Rønningen, K., Bella, I., Bezak, P., Cooper, T., Flø, B. E., Marty, P., & Potter, C. (2008). Envisioning upland futures: Stakeholder responses to scenarios for

Europe's mountain landscapes. *Journal of Rural Studies, 24*(1), 56–71. doi: 10.1016/j.jrurstud.2007.04.001
336. Song, H., & Li, G. (2008). Tourism demand modelling and forecasting – A review of recent research. *Tourism Management, 29*(2), 203–220. doi: 10.1016/j.tourman.2007.07.016
337. Souffriau, W., Vansteenwegen, P., Vertommen, J., Berghe, G. V., & Van Oudheusden, D. (2008). A personalized tourist trip design algorithm for mobile tourist guides. *Applied Artificial Intelligence, 22*(10), 964–985. doi: 10.1080/08839510802379626
338. Stamboulis, Y., & Skayannis, P. (2003). Innovation strategies and technology for experience-based tourism. *Tourism Management, 24*(1), 35–43. doi: 10.1016/S0261-5177(02)00047-X
339. Standeven, J., & De Knop, P. (1999). *Sport tourism*. Champaign: Human Kinetics Publishers.
340. Stauss, B., & Seidel, W. (1995). Prozessuale zufriedenheitsermittlung und zufriedenheitsdynamik bei dienstleistungen. In H. Simon & C. Homburg (Eds.), *Kundenzufriedenheit: Konzepte-methoden-erfahrungen* (pp. 179–203). Wiesbaden: Gablev.
341. Steiger, R. (2011). The impact of snow scarcity on ski tourism: An analysis of the record warm season 2006/2007 in Tyrol (Austria). *Tourism Review, 66*(3), 4–13. doi: 10.1108/16605371111175285
342. Stevens, B. F. (1992). Price value perceptions of travelers. *Journal of Travel Research, 31*(2), 44–48. doi: 10.1177/004728759203100208
343. Strandberg, U. (2007). Introduction: Striving for economic prosperity, requiring political legitimacy. *European Review, 15*(3), 321–333. doi: 10.1017/S1062798707000336
344. Stucki, E. W., Roque, O., Schuler, M., & Perlik, M. (2004). *Contents and impacts of mountain policies Switzerland.* National report for the study on "Analysis of mountain areas in the European Union and in the applicant countries". Holzikofenweg: SECO Federal Department of Economic Affairs.
345. Sun, Y.-Y., & Stynes, D. J. (2006). A note on estimating visitor spending on a per-day/night basis. *Tourism Management, 27*(4), 721–725. doi: 10.1016/j.tourman.2005.04.008
346. Sundbo, J. (1997). Management of innovation in services. *The Service Industries Journal, 17*(3), 432–455. doi: 10.1080/02642069700000028
347. Sundbo, J., Orfila-Sintes, F., & Sørensen, F. (2007). The innovative behaviour of tourism firms - Comparative studies of Denmark and Spain. *Research Policy, 36*(1), 88–106. doi: 10.1016/j.respol.2006.08.004
348. Swan, J., Scarbrough, H., & Robertson, M. (2003). Linking knowledge, networking and innovation processes: A conceptual model. In L. V. Shavinina (Ed.), *The international handbook on innovation* (pp. 680–694). Oxford: Elsevier Science Ltd.
349. Tam, J. L. M. (2004). Customer satisfaction, service quality and perceived value: An integrative model. *Journal of Marketing Management, 20*(7–8), 897–917. doi: 10.1362/0267257041838719
350. Tang, C.-H. H., & Jang, S. S. (2009). The tourism-economy causality in the United States: A sub-industry level examination. *Tourism Management, 30*(4), 553–558. doi: 10.1016/j.tourman.2008.09.009
351. Tangeland, T., Vennesland, B., & Nybakk, E. (In Press). Second-home owners' intention to purchase nature-based tourism activity products – A Norwegian case study. *Tourism Management*.

352. Tao, L., & Fuying, X. (2010). A study on community participation in rural tourism based on stakeholder theory. Retrieved September 4, 2010, from http://www.seiofbluemountain.com/upload/product/200910/2009glhy14a9.pdf
353. Tarí, J. J., Claver-Cortés, E., Pereira-Moliner, J., & Azorín, J. F. M. (2009). Is it worthwhile to be a quality certified hotel? Evidence from Spain. *International Journal of Quality & Reliability Management, 26*(9), 850–864. doi: 10.1108/02656710910995055
354. Tashakkori, A., & Teddlie, C. (1998). *Mixed methodology: Combining qualitative and quantitative approaches*. Thousand Oaks, CA: Sage Publications, Inc.
355. Tashakkori, A., & Teddlie, C. (Eds.). (2010). *Handbook of mixed methods in social & behavioral research* (2nd ed.). Thousand Oaks, CA: Sage Publications, Inc.
356. Tether, B. S. (2005). Do services innovate (differently)? Insights from the European Innobarometer Survey. *Industry and Innovation, 12*(2), 153–184. doi: 10.1080/13662710500087891
357. Thissen, F., Fortuijn, J. D., Strijker, D., & Haartsen, T. (2010). Migration intentions of rural youth in the Westhoek, Flanders, Belgium and the Veenkoloniën, The Netherlands. *Journal of Rural Studies, 26*(4), 428–436. doi: 10.1016/j.jrurstud.2010.05.001
358. Thrane, C. (2008). Earnings differentiation in the tourism industry: Gender, human capital and socio-demographic effects. *Tourism Management, 29*(3), 514–524. doi: 10.1016/j.tourman.2007.05.017
359. Thrane, C., & Farstad, E. (2011). Domestic tourism expenditures: The non-linear effects of length of stay and travel party size. *Tourism Management, 32*(1), 46–52. doi: 10.1016/j.tourman.2009.11.002
360. Tidd, J., Bessant, J., & Pavitt, K. (2009). *Managing innovation – Integrating technological, market and organizational change* (4th ed.). Chichester: John Wiley & Sons.
361. Tinsley, R., & Lynch, P. (2001). Small tourism business networks and destination development. *International Journal of Hospitality Management, 20*(4), 367–378. doi: 10.1016/S0278-4319(01)00024-X
362. Tödtling, F., Lehner, P., & Kaufmann, A. (2009). Do different types of innovation rely on specific kinds of knowledge interactions? *Technovation, 29*(1), 59–71. doi: 10.1016/j.technovation.2008.05.002
363. Tomljenovic, R., & Faulkner, B. (2000). Tourism and older residents in a sunbelt resort. *Annals of Tourism Research, 27*(1), 93–114. doi: 10.1016/S0160-7383(99)00062-6
364. Troxell, W. O. (2005). *Energy management innovation in the US ski industry.* Research project. Retrieved April 15, 2011, from http://cfpub.epa.gov/ncer_abstracts/index.cfm/fuseaction/display.abstractDetail/abstract/7149/report/0
365. Tsai, H., Song, H. Y., & Wong, K. K. F. (2009). Tourism and hotel competitiveness research. *Journal of Travel & Tourism Marketing, 26*(5–6), 522–546. doi: 10.1080/10548400903163079
366. Tsaur, S.-H., Lin, Y.-C., & Lin, J.-H. (2006). Evaluating ecotourism sustainability from the integrated perspective of resource, community and tourism. *Tourism Management, 27*(4), 640–653. doi: 10.1016/j.tourman.2005.02.006
367. United Nations. (1992). *Agenda 21.* In proceedings of United Nations Conference on Environment & Development, Rio De Janerio, Brazil, 3–14 June.
368. UNWTO. (2004). *Indicators of sustainable development for tourism destinations: A guidebook*. Madrid: World Tourism Organisation.

369. UNWTO. (2010). *World tourism barometer, 8(2).* Madrid: United Nations World Tourism Organisation.
370. UNWTO, & UNEP. (2008). *Climate change and tourism - Responding to global challenges.* Madrid: United Nations World Tourism Organization and the United Nations Environment Programme.
371. van der Veen, R. (2008). Analysis of the implementation of celebrity endorsement as a destination marketing instrument. *Journal of Travel & Tourism Marketing, 24*(2–3), 213–222. doi: 10.1080/10548400802092841
372. Vanhove, N. (2011). *The economics of tourism destinations* (2nd ed.). London: Elsevier Ltd.
373. Varley, P., & Medway, D. (2011). Ecosophy and tourism: Rethinking a mountain resort. *Tourism Management, 32*(4), 902–911. doi: 10.1016/j.tourman.2010.08.005
374. Vaughan, L. Q. (1999). The contribution of information to business success: A LISREL model analysis of manufacturers in Shanghai. *Information Processing & Management, 35*(2), 193–208. doi: 10.1016/S0306-4573(98)00048-X
375. Vaughan, L. Q., & Tague-Sutcliffe, J. (1997). Measuring the impact of information on development: A LISREL-based study of small businesses in Shanghai. *Journal of American Society for Information Science, 48*(10), 917–931.
376. Velicer, W. F., & Fava, J. L. (1998). Effects of variable and subject sampling on factor pattern recovery. *Psychological Methods, 3*(2), 231–251. doi: 10.1037/1082-989X.3.2.231
377. Vogt, C. A. (2011). Customer relationship management in tourism: Management needs and research applications. *Journal of Travel Research, 50*(4), 356–364. doi: 10.1177/0047287510368140
378. Volo, S. (2005). Tourism destination innovativeness. In P. Keller & T. Bieger (Eds.), *Innovation in tourism - Creating customer value* (Vol. 47, pp. 199–211). St. Gallen: AIEST.
379. Walford, N. (2001). Patterns of development in tourist accommodation enterprises on farms in England and Wales. *Applied Geography, 21*(4), 331–345. doi: 10.1016/S0143-6228(01)00010-8
380. Wang, C. L., & Ahmed, P. K. (2004). The development and validation of the organizational innovativeness construct using confirmatory factor analysis. *European Journal of Innovation Management, 7*(4), 303–313. doi: 10.1108/14601060410565056
381. Wang, Y. (2008). Collaborative destination marketing: Roles and strategies of convention and visitors bureaus. *Journal of Vacation Marketing, 14*(3), 191–209. doi: 10.1177/1356766708090582
382. Weiermair, K. (2003). *Product improvement or innovation: What is the key to success in tourism?* Paper presented at the OECD Conference on Innovation and Growth in Tourism, Lugano, Switzerland.
383. Weiermair, K., Peters, M., & Frehse, J. (2008). Success factors for public private partnership: Cases in alpine tourism development. *Journal of Services Research,* (special issue), 7–21.
384. Wells, M. P. (1997). Economic perspectives on nature tourism, conservation and development. Report for the World Bank. *Environmental Economics Series Paper No. 55*.
385. Wheaton, B., Muthen, B., Alwin, D. F., & Summers, G. F. (1977). Assessing reliability and stability in panel models. *Sociological methodology, 8*(1), 84–136.
386. Whitlock, W., Van Romer, K., & Becker, R. H. (1991). *Nature based tourism: An annotated bibliography.* Clemson, SC: Strom Thurmond Institute, Regional Development Group.

387. Wong, C. (1998). Determining factors for local economic development: The perception of practitioners in the North West and Eastern Regions of the UK. *Regional Studies, 32*(8), 707–720. doi: 10.1080/00343409850119409
388. Woodside, A. G., Vicente, R. M., & Duque, M. (2011). Tourism's destination dominance and marketing website usefulness. *International Journal of Contemporary Hospitality Management, 23*(4), 552–564. doi: 10.1108/09596111111130038
389. World Economic Forum. (2008). *Travel & tourism competitiveness report 2008.* Retrieved June 18, 2008, from http://www.weforum.org/en/initiatives/gcp/TravelandTourismReport/index.htm.
390. Wozniak, S. (2011). Language needs analysis from a perspective of international professional mobility: The case of French mountain guides. *English for Specific Purposes, 29*(4), 243–252. doi: 10.1016/j.esp.2010.06.001
391. Wu, S.-I., Wei, P.-L., & Chen, J.-H. (2008). Influential factors and relational structure of Internet banner advertising in the tourism industry. *Tourism Management, 29*(2), 221–236. doi: 10.1016/j.tourman.2007.03.020
392. Xiang, Z., & Gretzel, U. (2010). Role of social media in online travel information search. *Tourism Management, 31*(2), 179–188. doi: 10.1016/j.tourman.2009.02.016
393. Xiao, H., & Smith, S. L. J. (2010). Professional communication in an applied tourism research community. *Tourism Management, 31*(3), 402–411. doi: 10.1016/j.tourman.2009.04.008
394. Yalcintas, M., & Kaya, A. (2009). Conservation vs. renewable energy: Cases studies from Hawaii. *Energy Policy, 37*(8), 3268–3273.
395. Yang, W. (2010). The development of tourism in the low carbon economy. *International Business Research, 3*(4), 212–215.
396. Yaw, F., Jr. (2005). Cleaner technologies for sustainable tourism: Caribbean case studies. *Journal of Cleaner Production, 13*(2), 117–134. doi: 10.1016/j.jclepro.2003.12.019
397. Yeoman, I. (Ed.). (2008). *Tomorrow's tourist: Scenarios & trends*. Oxford: Elsevier.
398. Yoon, Y., Gursoy, D., & Chen, J. S. (2001). Validating a tourism development theory with structural equation modeling. *Tourism Management, 22*(4), 363–372. doi: 10.1016/S0261-5177(00)00062-5
399. Yoon, Y., & Uysal, M. (2005). An examination of the effects of motivation and satisfaction on destination loyalty: A structural model. *Tourism Management, 26*(1), 45–56. doi: 10.1016/j.tourman.2003.08.016
400. Yuan, Y.-L., Gretzel, U., & Fesenmaier, D. R. (2006). The role of information technology use in American convention and visitors bureaus. *Tourism Management, 27*(2), 326–341. doi: 10.1016/j.tourman.2004.12.001
401. Yüksel, A. (2007). Tourist shopping habitat: Effects on emotions, shopping value and behaviours. *Tourism Management, 28*(1), 58–69. doi: 10.1016/j.tourman.2005.07.017
402. Zach, F., & Fesenmaier, D. R. (2009). Innovation in tourism: The case of destination marketing organizations. *e-Review of Tourism Research (eRTR), 7*(1), 27–36.
403. Zhang, X., Wu, B., Ling, F., Zeng, Y., Yan, N., & Yuan, C. (2010). Identification of priority areas for controlling soil erosion. *CATENA, 83*(1), 76–86. doi: 10.1016/j.catena.2010.06.012
404. Zhelezov, G. (Ed.). (2011). *Sustainable development in mountain regions: Southeastern Europe*. London: Springer.
405. Žabkar, V., Brenčič, M. M., & Dmitrović, T. (2010). Modelling perceived quality, visitor satisfaction and behavioural intentions at the destination level. *Tourism Management, 31*(4), 537–546. doi: 10.1016/j.tourman.2009.06.005

APPENDICES

Appendix 1: List of acronyms and abbreviations

AGFI – Adjusted goodness-of-fit index

ATM – Automated teller machine

CFA – Confirmatory factor analysis

CFI – Comparative fit index

CR – Construct reliability

DMO – Destination management organisation

EFA – Exploratory factor analysis

EU – European Union

GABEK – Ganzheitliche Bewältigung von Komplexität

GFI – Goodness-of-fit index

IFI – Incremental fit index

ISCAR – The International Scientific Committee on Research in the Alps

LISREL – Linear structural relations; statistical software

MDIM – Mountain destination innovativeness model

ML – Maximum likelihood

NNFI – Non-normed fit index

NTO – National tourism organisation

PRELIS – Pre-processor for LISREL

RMSEA – Root mean square error of approximation

SEM – Structural equation model/Structural equation modelling

SMC – Squared multiple correlation

SRMR – Standardised root mean square residual

UNEP – United Nations Environment Programme

UNWTO – United Nations World Tourism Organisation

WLAN – Wireless Local Area Network

Appendix 2: Survey about mountain destination environments

Thank you for deciding to take part in the survey about tourism environments of mountain destinations.
The questionnaire consists of two parts:

- demographic questions (multiple choice),
- questions about tourism environments.

Your information will be coded and will remain confidential. If you have questions at any time about the survey or the procedures, please send an email to tourism.institute@ef.uni-lj.si.
Thank you very much for your time and support. Please start with the survey now by clicking on the Continue button below.

Operating sector

1. Private sector
2. Public sector

Occupation*

1. Lecturer
2. Researcher
3. Consultant
4. Manager
5. Other _____

Areas of Interest*

1. Sport tourism
2. Mountain tourism
3. Innovativeness in tourism
4. Innovativeness
5. Other _____

Line of work*

1. Destination management, local tourism organisation
2. Local government
3. Chamber of commerce
4. Non-governmental organisation
5. Ski operator
6. Transport
7. Catering
8. Incoming agency
9. Hotel management
10. Convention centre management
11. Event management
12. Attraction management
13. Researcher/Lecturer
14. Other _____

* The questions Occupation and Areas of interest were used for the sample consisting of lecturers, researchers and consultants, and the question Line of work was used for the sample consisting of mountain destination managers.

1 ELEMENTS IN TOURISM ENVIRONMENTS OF MOUNTAIN DESTINATIONS

1.1 POLITICAL AND LEGAL ENVIRONMENT

Evaluate the following elements in tourism environments in terms of their importance for mountain destination development (1 = Very unimportant, 2 = Unimportant, 3 = Slightly unimportant 4 = Neither unimportant or important, 5 = Slightly important, 6 = Important, 7 = Very important).

	1	2	3	4	5	6	7
Support of government at the state level	❑	❑	❑	❑	❑	❑	❑
Support of government at the regional level	❑	❑	❑	❑	❑	❑	❑
Support of government at the municipality level	❑	❑	❑	❑	❑	❑	❑
Efficiency of regulatory framework	❑	❑	❑	❑	❑	❑	❑
Number of levels of decision making	❑	❑	❑	❑	❑	❑	❑
Efficiency of decision making	❑	❑	❑	❑	❑	❑	❑
Adequacy of labour market organisation	❑	❑	❑	❑	❑	❑	❑
Adequacy of tax regime	❑	❑	❑	❑	❑	❑	❑

1.2 ECONOMIC ENVIRONMENT

Evaluate the following elements in tourism environments in terms of their importance for mountain destination development (1 = Very unimportant, 2 = Unimportant, 3 = Slightly unimportant 4 = Neither unimportant or important, 5 = Slightly important, 6 = Important, 7 = Very important).

	1	2	3	4	5	6	7
Size of the economy at the destination level	❑	❑	❑	❑	❑	❑	❑
Business cooperation (business alliances and network relationships)	❑	❑	❑	❑	❑	❑	❑
Support from related industries	❑	❑	❑	❑	❑	❑	❑
Favourable exchange rate	❑	❑	❑	❑	❑	❑	❑
Price competitiveness	❑	❑	❑	❑	❑	❑	❑
Market potential (domestic and nearby)	❑	❑	❑	❑	❑	❑	❑
Market potential (long-haul)	❑	❑	❑	❑	❑	❑	❑
Investment incentives	❑	❑	❑	❑	❑	❑	❑
Presence of local businesses	❑	❑	❑	❑	❑	❑	❑
Presence of international businesses	❑	❑	❑	❑	❑	❑	❑
Local competition	❑	❑	❑	❑	❑	❑	❑
International competition	❑	❑	❑	❑	❑	❑	❑
Business ties	❑	❑	❑	❑	❑	❑	❑
Staff costs	❑	❑	❑	❑	❑	❑	❑
Property related costs	❑	❑	❑	❑	❑	❑	❑
Costs and accessibility of capital	❑	❑	❑	❑	❑	❑	❑

1.3 TECHNOLOGICAL ENVIRONMENT

Evaluate the following elements in tourism environments in terms of their importance for mountain destination development (1 = Very unimportant, 2 = Unimportant, 3 = Slightly unimportant 4 = Neither unimportant or important, 5 = Slightly important, 6 = Important, 7 = Very important).

	1	2	3	4	5	6	7
Stage of technological development	❑	❑	❑	❑	❑	❑	❑
Presence of Internet connection facilities and Internet coverage)	❑	❑	❑	❑	❑	❑	❑
Mobile phone signal coverage	❑	❑	❑	❑	❑	❑	❑
Acceptance of credit cards and presence of ATMs	❑	❑	❑	❑	❑	❑	❑
Access to technologies and technological knowledge resources	❑	❑	❑	❑	❑	❑	❑
Efficient health/medical facilities	❑	❑	❑	❑	❑	❑	❑
Efficient water supply infrastructure	❑	❑	❑	❑	❑	❑	❑
Efficient electricity infrastructure	❑	❑	❑	❑	❑	❑	❑

1.4 SOCIO-CULTURAL ENVIRONMENT

Evaluate the following elements in tourism environments in terms of their importance for mountain destination development (1 = Very unimportant, 2 = Unimportant, 3 = Slightly unimportant 4 = Neither unimportant or important, 5 = Slightly important, 6 = Important, 7 = Very important).

	1	2	3	4	5	6	7
Number of inhabitants	❑	❑	❑	❑	❑	❑	❑
Share of employed in tourism sector in total employment	❑	❑	❑	❑	❑	❑	❑
Cultural differences between host communities (local way of life) and visitors	❑	❑	❑	❑	❑	❑	❑
Presence of historical and cultural resources	❑	❑	❑	❑	❑	❑	❑
Problem of ageing population	❑	❑	❑	❑	❑	❑	❑
Problem of brain drain	❑	❑	❑	❑	❑	❑	❑
Hospitality of local population	❑	❑	❑	❑	❑	❑	❑
Support for tourism development by local population	❑	❑	❑	❑	❑	❑	❑
Local managerial and staff skills	❑	❑	❑	❑	❑	❑	❑
Presence of multilingual written instructions/guides (traffic signs, maps and restaurant menus)	❑	❑	❑	❑	❑	❑	❑
Ease of oral communication (in English or other languages)	❑	❑	❑	❑	❑	❑	❑
Presence of community institutions	❑	❑	❑	❑	❑	❑	❑
Ethnic ties (visiting friends and relatives)	❑	❑	❑	❑	❑	❑	❑
Safety of tourists at the destination	❑	❑	❑	❑	❑	❑	❑

1.5 NATURAL ENVIRONMENT

Evaluate the following elements in tourism environments in terms of their importance for mountain destination development (1 = Very unimportant, 2 = Unimportant, 3 = Slightly unimportant 4 = Neither unimportant or important, 5 = Slightly important, 6 = Important, 7 = Very important).

	1	2	3	4	5	6	7
Favourable geographical location (vicinity of big cities)	❑	❑	❑	❑	❑	❑	❑
Destination's altitude	❑	❑	❑	❑	❑	❑	❑
Variety and diversity of terrains for different sports	❑	❑	❑	❑	❑	❑	❑
Favourable climate conditions	❑	❑	❑	❑	❑	❑	❑
Size of the destination (area)	❑	❑	❑	❑	❑	❑	❑
Carrying capacity	❑	❑	❑	❑	❑	❑	❑
Visual appeal	❑	❑	❑	❑	❑	❑	❑
Diversity of flora and fauna	❑	❑	❑	❑	❑	❑	❑

1.6 PLEASE SHARE YOUR VIEWS ON ELEMENTS IN TOURISM ENVIRONMENTS OF MOUNTAIN DESTINATIONS AND SUGGEST POSSIBLE IMPROVEMENTS.

Appendix 3: Survey about mountain destination innovativeness

Thank you for deciding to take part in the survey about mountain destination innovativeness.
The questionnaire consists of three parts:

- the first part consists of demographic questions (multiple choice),
- the second part consists of questions about innovative elements in tourism attractors,
- the third part consists of questions about innovative elements in mountain destination management.

Your information will be coded and will remain confidential. If you have questions at any time about the survey or the procedures, please send an email to tourism.institute@ef.uni-lj.si.
Thank you very much for your time and support. Please start with the survey now by clicking on the Continue button below.

Operating sector

1. Private sector
2. Public sector

Occupation*

6. Lecturer
7. Researcher
8. Consultant
9. Manager
10. Other _____

Areas of Interest*

6. Sport tourism
7. Mountain tourism
8. Innovativeness in tourism
9. Innovativeness
10. Other _____

Line of work*

1. Destination management, local tourism organisation
2. Local government
3. Chamber of commerce
4. Non-governmental organisation
5. Ski operator
6. Transport
7. Catering
8. Incoming agency
9. Hotel management
10. Convention centre management
11. Event management
12. Attraction management
13. Researcher/Lecturer
14. Other _____

* The questions Occupation and Areas of interest were used for the sample consisting of lecturers, researchers and consultants, and the question Line of work was used for the sample consisting of mountain destination managers.

1 INNOVATIVE ELEMENTS IN MOUNTAIN TOURISM ATTRACTORS

1.1 INNOVATIVE ELEMENTS IN TOURISM INFRASTRUCTURE

Evaluate the following statements in terms of their importance for mountain destination innovativeness and development (1 = Very unimportant, 2 = Unimportant, 3 = Slightly unimportant 4 = Neither unimportant or important, 5 = Slightly important, 6 = Important, 7 = Very important).

	1	2	3	4	5	6	7
Unique forms of tourist accommodations	❑	❑	❑	❑	❑	❑	❑
New sports infrastructure development	❑	❑	❑	❑	❑	❑	❑
Environmentally friendly solutions for ski infrastructure	❑	❑	❑	❑	❑	❑	❑
Energy efficient ski infrastructure (solar-powered ski lifts, etc.)	❑	❑	❑	❑	❑	❑	❑
Quality audits/certification (ISO)	❑	❑	❑	❑	❑	❑	❑
Environmental audits (ISO, Eco-Management and Audit Scheme (EMAS), etc.)	❑	❑	❑	❑	❑	❑	❑
Environmentally friendly solutions for tourist accommodations	❑	❑	❑	❑	❑	❑	❑
Eco-labels and environmental awards	❑	❑	❑	❑	❑	❑	❑
Advanced snow-making equipment (possibility of producing snow in above-zero temperatures without chemical additives, etc.)	❑	❑	❑	❑	❑	❑	❑

1.2 INNOVATIVE ELEMENTS IN TOURISM SUPERSTRUCTURE

Evaluate the following statements in terms of their importance for mountain destination innovativeness and development (1 = Very unimportant, 2 = Unimportant, 3 = Slightly unimportant 4 = Neither unimportant or important, 5 = Slightly important, 6 = Important, 7 = Very important).

	1	2	3	4	5	6	7
New health-related products	❑	❑	❑	❑	❑	❑	❑
Distinctive local cuisine (using local agriculture, etc.)	❑	❑	❑	❑	❑	❑	❑
Organising new kinds of special events	❑	❑	❑	❑	❑	❑	❑
Distinctive entertainment and nightlife (adapted to new demand patterns)	❑	❑	❑	❑	❑	❑	❑
Special business and congress tourism products	❑	❑	❑	❑	❑	❑	❑
Combining different tourism products into a new kind of experience (special ski runs for experiencing gourmet cuisine while skiing, etc.)	❑	❑	❑	❑	❑	❑	❑
Adapting shops to new demand patterns (such as free-ride ski rental, etc.)	❑	❑	❑	❑	❑	❑	❑

1.3 INNOVATIVE ELEMENTS IN GENERAL INFRASTRUCTURE

Evaluate the following statements in terms of their importance for mountain destination innovativeness and development (1 = Very unimportant, 2 = Unimportant, 3 = Slightly unimportant 4 = Neither unimportant or important, 5 = Slightly important, 6 = Important, 7 = Very important).

	1	2	3	4	5	6	7
State-of-the-art safety procedures and safety infrastructure in the mountains (anti-avalanche systems, etc.)	❑	❑	❑	❑	❑	❑	❑
Improvements in destination accessibility (tunnels, reinventing the trains, etc.)	❑	❑	❑	❑	❑	❑	❑
Advances in internal transportation (electric cars, bikes, etc.).	❑	❑	❑	❑	❑	❑	❑
Ease of access to information through a highly developed communication system	❑	❑	❑	❑	❑	❑	❑
Efficient waste management	❑	❑	❑	❑	❑	❑	❑
Tourist firms' IT capabilities	❑	❑	❑	❑	❑	❑	❑
Supporting services providers' IT capabilities	❑	❑	❑	❑	❑	❑	❑

1.4 INNOVATIVE ELEMENTS IN SOCIO-CULTURAL ATTRACTORS

Evaluate the following statements in terms of their importance for mountain destination innovativeness and development (1 = Very unimportant, 2 = Unimportant, 3 = Slightly unimportant 4 = Neither unimportant or important, 5 = Slightly important, 6 = Important, 7 = Very important).

	1	2	3	4	5	6	7
Developed forms of cultural tourism (experiencing how people in the mountains lived in the past, etc.)	❑	❑	❑	❑	❑	❑	❑
Equal opportunities for all society (socio-cultural sustainability)	❑	❑	❑	❑	❑	❑	❑
Equitable distribution of tourism benefits (respect of different cultures and avoidance of any form of exploitation)	❑	❑	❑	❑	❑	❑	❑
Respect for the socio-cultural authenticity of host communities (conservation of cultural heritage and traditional values)	❑	❑	❑	❑	❑	❑	❑
Respect of societal norms and values in business and economic relationships	❑	❑	❑	❑	❑	❑	❑
The local population's support for change	❑	❑	❑	❑	❑	❑	❑
The local population's capacity to change	❑	❑	❑	❑	❑	❑	❑
Availability of knowledge resources and education	❑	❑	❑	❑	❑	❑	❑
Offering local products in combination with experiencing local craftsmanship	❑	❑	❑	❑	❑	❑	❑

1.5 INNOVATIVE ELEMENTS IN NATURAL ATTRACTORS

Evaluate the following statements in terms of their importance for mountain destination innovativeness and development (1 = Very unimportant, 2 = Unimportant, 3 = Slightly unimportant 4 = Neither unimportant or important, 5 = Slightly important, 6 = Important, 7 = Very important).

	1	2	3	4	5	6	7
Making optimal use of environmental resources (environmental sustainability)	❑	❑	❑	❑	❑	❑	❑
Maintaining ecological processes and helping to conserve natural resources and biodiversity	❑	❑	❑	❑	❑	❑	❑
Using flora as an attraction (learning about plants, etc.)	❑	❑	❑	❑	❑	❑	❑
Using fauna as an attraction (bird watching, etc.)	❑	❑	❑	❑	❑	❑	❑
Using mountain scenery as an attraction (taking photos, etc.)	❑	❑	❑	❑	❑	❑	❑
Learning about the history of the formation of the mountains (geology, etc.)	❑	❑	❑	❑	❑	❑	❑
Using mountain rivers as an attraction (extreme sports, appreciating the natural beauty, etc.)	❑	❑	❑	❑	❑	❑	❑
Adapting to changing climate conditions	❑	❑	❑	❑	❑	❑	❑
Exploiting opportunities created by changing climate conditions	❑	❑	❑	❑	❑	❑	❑

1.6 PLEASE SHARE YOUR VIEWS ON INNOVATIVE ELEMENTS IN MOUNTAIN TOURISM ATTRACTORS AND SUGGEST POSSIBLE IMPROVEMENTS.

2 INNOVATIVE ELEMENTS IN MOUNTAIN DESTINATION MANAGEMENT

2.1 INNOVATIVE ELEMENTS IN DESTINATION POLICY, PLANNING AND RESEARCH

Evaluate the following statements in terms of their importance for mountain destination innovativeness and development (1 = Very unimportant, 2 = Unimportant, 3 = Slightly unimportant 4 = Neither unimportant or important, 5 = Slightly important, 6 = Important, 7 = Very important).

	1	2	3	4	5	6	7
Participation of all stakeholders in tourism planning	❑	❑	❑	❑	❑	❑	❑
Collaboration of all stakeholders in decision-making processes	❑	❑	❑	❑	❑	❑	❑
Creation of innovative vision	❑	❑	❑	❑	❑	❑	❑
Formation of destination's innovation strategy	❑	❑	❑	❑	❑	❑	❑
Tax incentives for new products, services and processes	❑	❑	❑	❑	❑	❑	❑
Investment incentives for new products, services and processes	❑	❑	❑	❑	❑	❑	❑
Energy policies that support usage of alternative sources of energy	❑	❑	❑	❑	❑	❑	❑
Transportation policies that favour alternative transportation modes and public transportation	❑	❑	❑	❑	❑	❑	❑
Environmental policies that promote sustainable development	❑	❑	❑	❑	❑	❑	❑
Active research, communication and application of research findings	❑	❑	❑	❑	❑	❑	❑
Active education of all interested parties at the destination	❑	❑	❑	❑	❑	❑	❑
Control mechanisms for evaluating research, development and innovation policy	❑	❑	❑	❑	❑	❑	❑
Public private partnership for the transfer of know-how and availability of new solutions	❑	❑	❑	❑	❑	❑	❑

2.2 INNOVATION MANAGEMENT OF A DESTINATION

Evaluate the following statements in terms of their importance for mountain destination innovativeness and development (1 = Very unimportant, 2 = Unimportant, 3 = Slightly unimportant 4 = Neither unimportant or important, 5 = Slightly important, 6 = Important, 7 = Very important).

	1	2	3	4	5	6	7
Continuous learning and knowledge creation	❑	❑	❑	❑	❑	❑	❑
Adaptive management that enables quick response to changing environment	❑	❑	❑	❑	❑	❑	❑
Resource management (resources used in different manners to meet the emerging needs)	❑	❑	❑	❑	❑	❑	❑
Human resource development (employee empowerment and education)	❑	❑	❑	❑	❑	❑	❑
Formation of clusters	❑	❑	❑	❑	❑	❑	❑
Formation of regional innovation systems	❑	❑	❑	❑	❑	❑	❑
Taking into account the interests of the local community	❑	❑	❑	❑	❑	❑	❑
Organisational structure that supports involvement of all stakeholders	❑	❑	❑	❑	❑	❑	❑
Proximity to technological clusters, innovation centres, etc.	❑	❑	❑	❑	❑	❑	❑
Organisational culture supporting changes, development of new products, processes and services	❑	❑	❑	❑	❑	❑	❑
Destination's ability to simultaneously support both evolutionary and revolutionary technological changes	❑	❑	❑	❑	❑	❑	❑
Quick development of competences and skills in destination management organisation to match the demands of new technologies	❑	❑	❑	❑	❑	❑	❑
Implementing new practices in environmental management	❑	❑	❑	❑	❑	❑	❑

2.3 INNOVATIVE ELEMENTS IN DESTINATION MARKETING

Evaluate the following statements in terms of their importance for mountain destination innovativeness and development (1 = Very unimportant, 2 = Unimportant, 3 = Slightly unimportant 4 = Neither unimportant or important, 5 = Slightly important, 6 = Important, 7 = Very important).

	1	2	3	4	5	6	7
Contextual and behavioural advertising (target advertising to a specific user based on the searched keywords)	❑	❑	❑	❑	❑	❑	❑
Social networking, the interaction of social and commercial networks	❑	❑	❑	❑	❑	❑	❑
Including trendsetters (usually athletes) in destination marketing (also through social media)	❑	❑	❑	❑	❑	❑	❑
Real-time communication	❑	❑	❑	❑	❑	❑	❑
Using new technological developments in customer relationship management	❑	❑	❑	❑	❑	❑	❑
Application of a selective destination marketing system (control in terms of number and segment of tourists)	❑	❑	❑	❑	❑	❑	❑
Co-branding (cooperation of different brands at the destination)	❑	❑	❑	❑	❑	❑	❑
Co-marketing of service providers	❑	❑	❑	❑	❑	❑	❑
Balancing environmental actions and environmental communication (environmental marketing)	❑	❑	❑	❑	❑	❑	❑
New forms of active formal communication channels between destination management organisation and service providers	❑	❑	❑	❑	❑	❑	❑
New forms of active informal communication channels between destination management organisation and service providers	❑	❑	❑	❑	❑	❑	❑

2.4 INNOVATIVE ELEMENTS IN DESTINATION PRODUCT DEVELOPMENT

Evaluate the following statements in terms of their importance for mountain destination innovativeness and development (1 = Very unimportant, 2 = Unimportant, 3 = Slightly unimportant 4 = Neither unimportant or important, 5 = Slightly important, 6 = Important, 7 = Very important).

	1	2	3	4	5	6	7
Web portal providing rich user experience	❑	❑	❑	❑	❑	❑	❑
Dynamic content on the web portal	❑	❑	❑	❑	❑	❑	❑
Destination's products based on determined customer characteristics (context awareness)	❑	❑	❑	❑	❑	❑	❑
Destination's products supported by mobile services and applications	❑	❑	❑	❑	❑	❑	❑
User participation in product development	❑	❑	❑	❑	❑	❑	❑
Inclusion of social networking in destination's product development (blogs, Facebook, Twitter, etc.)	❑	❑	❑	❑	❑	❑	❑
Inclusion of environmental education in destination's products	❑	❑	❑	❑	❑	❑	❑
Logistics adapted to changing demand (last minute reservations, new reservations systems, etc.)	❑	❑	❑	❑	❑	❑	❑
Tourism products adapted to changing demand (last minute reservations, increased price sensitivity, etc.)	❑	❑	❑	❑	❑	❑	❑
Creation of distinctive image of the destination	❑	❑	❑	❑	❑	❑	❑

2.5 PLEASE SHARE YOUR VIEWS ON INNOVATIVE ELEMENTS IN MOUNTAIN DESTINATION MANAGEMENT AND SUGGEST POSSIBLE IMPROVEMENTS.

Appendix 4: Survey about mountain destination development

Thank you for deciding to take part in the survey about mountain destination development.
The questionnaire consists of two parts:

- demographic questions (multiple choice),
- questions about mountain destination development.

Your information will be coded and will remain confidential. If you have questions at any time about the survey or the procedures, please send an email to tourism.institute@ef.uni-lj.si.
Thank you very much for your time and support. Please start with the survey now by clicking on the Continue button below.

Operating sector

3. Private sector
4. Public sector

Occupation*

11. Lecturer
12. Researcher
13. Consultant
14. Manager
15. Other _____

Areas of Interest*

11. Sport tourism
12. Mountain tourism
13. Innovativeness in tourism
14. Innovativeness
15. Other _____

Line of work*

15. Destination management, local tourism organisation
16. Local government
17. Chamber of commerce
18. Non-governmental organisation
19. Ski operator
20. Transport
21. Catering
22. Incoming agency
23. Hotel management
24. Convention centre management
25. Event management
26. Attraction management
27. Researcher/Lecturer
28. Other _____

* The questions Occupation and Areas of interest were used for the sample consisting of lecturers, researchers and consultants, and the question Line of work was used for the sample consisting of mountain destination managers.

1 MOUNTAIN DESTINATION DEVELOPMENT

1.1 TOURIST TRAFFIC

Evaluate the following elements in terms of their importance for measuring mountain destination development (1 = Very unimportant, 2 = Unimportant, 3 = Slightly unimportant 4 = Neither unimportant or important, 5 = Slightly important, 6 = Important, 7 = Very important).

	1	2	3	4	5	6	7
Tourist arrivals per capita	❑	❑	❑	❑	❑	❑	❑
Growth rate of tourist arrivals per capita	❑	❑	❑	❑	❑	❑	❑
Tourist arrivals per employee in tourism sector	❑	❑	❑	❑	❑	❑	❑
Growth rate of tourist arrivals per employee in tourism sector	❑	❑	❑	❑	❑	❑	❑
Tourist arrivals per destination area (km^2)	❑	❑	❑	❑	❑	❑	❑
Growth rate of tourist arrivals per destination area (km^2)	❑	❑	❑	❑	❑	❑	❑
Average length of stay	❑	❑	❑	❑	❑	❑	❑
Growth rate in average length of stay	❑	❑	❑	❑	❑	❑	❑
Market share growth in terms of tourist arrivals	❑	❑	❑	❑	❑	❑	❑
Market share growth in terms of nights spent	❑	❑	❑	❑	❑	❑	❑
Hotel occupancy rate	❑	❑	❑	❑	❑	❑	❑
Visits to parks, recreation areas	❑	❑	❑	❑	❑	❑	❑

1.2 VISITOR EXPENDITURE

Evaluate the following elements in terms of their importance for measuring mountain destination development (1 = Very unimportant, 2 = Unimportant, 3 = Slightly unimportant 4 = Neither unimportant or important, 5 = Slightly important, 6 = Important, 7 = Very important).

	1	2	3	4	5	6	7
Daily visitor expenditure	❑	❑	❑	❑	❑	❑	❑
Growth rate in daily visitor expenditure	❑	❑	❑	❑	❑	❑	❑
Visitor expenditure per capita	❑	❑	❑	❑	❑	❑	❑
Growth rate in visitor expenditure per capita	❑	❑	❑	❑	❑	❑	❑
Visitor expenditure per employee in tourism sector	❑	❑	❑	❑	❑	❑	❑
Growth rate in visitor expenditure per employee in tourism sector	❑	❑	❑	❑	❑	❑	❑
Visitor expenditure per destination area (km^2)	❑	❑	❑	❑	❑	❑	❑
Growth rate in visitor expenditure per destination area (km^2)	❑	❑	❑	❑	❑	❑	❑
Market share growth in terms of tourist earnings	❑	❑	❑	❑	❑	❑	❑
Price mark-up for tourism products	❑	❑	❑	❑	❑	❑	❑

1.3 VISITOR SATISFACTION

Evaluate the following elements in terms of their importance for measuring mountain destination development (1 = Very unimportant, 2 = Unimportant, 3 = Slightly unimportant 4 = Neither unimportant or important, 5 = Slightly important, 6 = Important, 7 = Very important).

	1	2	3	4	5	6	7
Share of very satisfied visitors	❑	❑	❑	❑	❑	❑	❑
Visitor satisfaction with environmental issues	❑	❑	❑	❑	❑	❑	❑
Share of returning visitors	❑	❑	❑	❑	❑	❑	❑
Perceived quality of tourist services	❑	❑	❑	❑	❑	❑	❑
Perceived value for money of tourist services	❑	❑	❑	❑	❑	❑	❑
Share of reservations in total number of inquiries	❑	❑	❑	❑	❑	❑	❑
Share of cancelled bookings	❑	❑	❑	❑	❑	❑	❑
Number of visits to the destination's website	❑	❑	❑	❑	❑	❑	❑

1.4 ECONOMIC PROSPERITY

Evaluate the following elements in terms of their importance for measuring mountain destination development (1 = Very unimportant, 2 = Unimportant, 3 = Slightly unimportant 4 = Neither unimportant or important, 5 = Slightly important, 6 = Important, 7 = Very important).

	1	2	3	4	5	6	7
Number of unemployed tourism workers	❑	❑	❑	❑	❑	❑	❑
Employment growth in tourism	❑	❑	❑	❑	❑	❑	❑
Seasonality of employment in tourism sector	❑	❑	❑	❑	❑	❑	❑
Average wage in tourism sector compared to other sectors of the economy	❑	❑	❑	❑	❑	❑	❑
Contribution of tourism sector to economic growth	❑	❑	❑	❑	❑	❑	❑
Lodging revenues	❑	❑	❑	❑	❑	❑	❑
Annual number of new tourism businesses	❑	❑	❑	❑	❑	❑	❑
Percentage of income leakage out of the community	❑	❑	❑	❑	❑	❑	❑
Local market demand for tourism products	❑	❑	❑	❑	❑	❑	❑
Income-earning opportunities in tourism for host communities	❑	❑	❑	❑	❑	❑	❑
Availability of local credit to local business	❑	❑	❑	❑	❑	❑	❑

1.5 SOCIO-CULTURAL PROSPERITY

Evaluate the following elements in terms of their importance for measuring mountain destination development (1 = Very unimportant, 2 = Unimportant, 3 = Slightly unimportant 4 = Neither unimportant or important, 5 = Slightly important, 6 = Important, 7 = Very important).

	1	2	3	4	5	6	7
Presence of social services	❑	❑	❑	❑	❑	❑	❑
Availability of tourism infrastructural services	❑	❑	❑	❑	❑	❑	❑
Contribution of tourism to poverty reduction	❑	❑	❑	❑	❑	❑	❑
Satisfaction of local population with tourism development	❑	❑	❑	❑	❑	❑	❑
Frequency of accidents related to outdoor activities	❑	❑	❑	❑	❑	❑	❑
The employment of locals compared to non-locals in tourism-related activities	❑	❑	❑	❑	❑	❑	❑
Employment equity between males and females in tourism-related activities	❑	❑	❑	❑	❑	❑	❑
Integration of all stakeholders in tourism development	❑	❑	❑	❑	❑	❑	❑

1.6 PRESERVATION OF NATURAL ENVIRONMENT

Evaluate the following elements in terms of their importance for measuring mountain destination development (1 = Very unimportant, 2 = Unimportant, 3 = Slightly unimportant 4 = Neither unimportant or important, 5 = Slightly important, 6 = Important, 7 = Very important).

	1	2	3	4	5	6	7
Share of recycled water in tourism sector	❑	❑	❑	❑	❑	❑	❑
Water pollution from sewage	❑	❑	❑	❑	❑	❑	❑
Usage of clean energy (wind, sun, geothermal, photovoltaic etc.) in tourism sector	❑	❑	❑	❑	❑	❑	❑
Share of recycled waste in tourism sector	❑	❑	❑	❑	❑	❑	❑
Number of environmental certificates in tourism sector	❑	❑	❑	❑	❑	❑	❑
CO2 emissions in tourism sector	❑	❑	❑	❑	❑	❑	❑
Energy consumption in tourism sector	❑	❑	❑	❑	❑	❑	❑
Water consumption in tourism sector	❑	❑	❑	❑	❑	❑	❑
Environmental pollution	❑	❑	❑	❑	❑	❑	❑
Air quality	❑	❑	❑	❑	❑	❑	❑
Amount of soil erosion	❑	❑	❑	❑	❑	❑	❑
Frequency of environmental accidents related to tourism	❑	❑	❑	❑	❑	❑	❑

1.7 PLEASE SHARE YOUR VIEWS ON ELEMENTS FOR MEASURING MOUNTAIN DESTINATION DEVELOPMENT AND SUGGEST POSSIBLE IMPROVEMENTS.

Appendix 5: One-sample t-test of the elements of mountain destination environments

Elements	Mean	Std. deviation	Std. error mean
Safety of tourists at the destination	6.22	1.309	0.094
Visual appeal	6.13	1.231	0.088
Efficient water supply infrastructure	6.07	1.225	0.088
Support for tourism development by local population	6.06	1.267	0.091
Efficient electricity infrastructure	6.04	1.225	0.088
Hospitality of local population	6.00	1.297	0.093
Support of government at the municipality level	5.93	1.428	0.103
Favourable climate conditions	5.88	1.189	0.085
Support of government at the regional level	5.86	1.229	0.088
Efficiency of decision making	5.86	1.327	0.095
Market potential (domestic and nearby)	5.86	1.167	0.084
Acceptance of credit cards and presence of ATMs	5.82	1.322	0.095
Business cooperation (business alliances and network relationships)	5.78	1.285	0.092
Ease of oral communication (in English or other languages)	5.76	1.229	0.088
Presence of internet connection facilities and internet coverage)	5.75	1.373	0.099
Efficient health/medical facilities	5.71	1.278	0.092
Variety and diversity of terrains for different sports	5.66	1.237	0.089
Presence of local businesses	5.62	1.179	0.085
Mobile phone signal coverage	5.61	1.414	0.102
Diversity of flora and fauna	5.55	1.311	0.094
Presence of multilingual written instructions/guides (traffic signs, maps and restaurant menus)	5.54	1.429	0.103
Market potential (long-haul)	5.51	1.320	0.095
Presence of historical and cultural resources	5.50	1.326	0.095
Efficiency of regulatory framework	5.48	1.157	0.083
Carrying capacity	5.46	1.264	0.091
Costs and accessibility of capital	5.45	1.308	0.094
Local managerial and staff skills	5.42	1.262	0.091
Support of government at the state level	5.40	1.365	0.098
Price competitiveness	5.36	1.203	0.086
Access to technologies and technological knowledge resources	5.30	1.311	0.094
Investment incentives	5.29	1.209	0.087
Staff costs	5.29	1.220	0.088
Favourable geographical location (vicinity of big cities)	5.28	1.210	0.087
Support from related industries	5.27	1.217	0.087
Property related costs	5.25	1.222	0.088
Stage of technological development	5.22	1.280	0.092
Adequacy of tax regime	5.20	1.259	0.090
Local competition	5.19	1.074	0.077
Number of levels of decision making	5.13	1.428	0.103
Adequacy of labour market organisation	5.13	1.223	0.088
Business ties	5.10	1.173	0.084
Size of the economy at the destination level	5.06	1.387	0.100
Destination's altitude	5.04	1.408	0.101

(table continues)

(continued)

Elements	Mean	Std. deviation	Std. error mean
Presence of community institutions	4.96	1.195	0.086
Favourable exchange rate	4.88	1.295	0.093
Problem of brain drain	4.84	1.370	0.098
Size of the destination (area)	4.83	1.322	0.095
Cultural differences between host communities (local way of life) and visitors	4.81	1.410	0.101
International competition	4.78	1.422	0.102
Share of employed in tourism sector in total employment	4.72	1.354	0.097
Presence of international businesses	4.65	1.335	0.096
Problem of ageing population	4.58	1.381	0.099
Ethnic ties (visiting friends and relatives)	4.55	1.242	0.089
Number of inhabitants	4.34	1.316	0.095

Appendix 6: Correlation matrix of the elements of mountain destination environments

Element	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
1 Support of government at the regional level	**1.000**																		
2 Support of government at the municipality level	0.721 **	**1.000**																	
3 Efficiency of regulatory framework	0.543 **	0.473 **	**1.000**																
4 Efficiency of decision making	0.614 **	0.525 **	0.598 **	**1.000**															
5 Presence of Internet connection facilities and Internet coverage)	0.533 **	0.531 **	0.344 **	0.530 **	**1.000**														
6 Mobile phone signal coverage	0.497 **	0.464 **	0.369 **	0.418 **	0.803 **	**1.000**													
7 Acceptance of credit cards and presence of ATMs	0.508 **	0.542 **	0.386 **	0.431 **	0.712 **	0.772 **	**1.000**												
8 Efficient health/medical facilities	0.484 **	0.423 **	0.414 **	0.418 **	0.578 **	0.556 **	0.601 **	**1.000**											
9 Efficient water supply infrastructure	0.567 **	0.541 **	0.482 **	0.523 **	0.640 **	0.579 **	0.682 **	0.812 **	**1.000**										
10 Efficient electricity infrastructure	0.560 **	0.556 **	0.439 **	0.537 **	0.650 **	0.619 **	0.724 **	0.740 **	0.898 **	**1.000**									
11 Hospitality of local population	0.491 **	0.530 **	0.445 **	0.613 **	0.629 **	0.569 **	0.598 **	0.584 **	0.660 **	0.681 **	**1.000**								

(table continues)

(continued)

Element	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
12 Support for tourism development by local population	0.533**	0.554**	0.430**	0.634**	0.545**	0.488**	0.541**	0.584**	0.678**	0.663**	0.828**	**1.000**							
13 Local managerial and staff skills	0.362**	0.359**	0.329**	0.338**	0.412**	0.464**	0.450**	0.554**	0.520**	0.498**	0.599**	0.568**	**1.000**						
14 Presence of multilingual written instructions/guides (traffic signs, maps and restaurant menus)	0.453**	0.525**	0.300**	0.468**	0.524**	0.514**	0.533**	0.388**	0.474**	0.505**	0.611**	0.590**	0.603**	**1.000**					
15 Ease of oral communication (in English or other languages)	0.533**	0.556**	0.353**	0.600**	0.616**	0.574**	0.603**	0.510**	0.616**	0.621**	0.716**	0.680**	0.584**	0.787**	**1.000**				
16 Variety and diversity of terrains for different sports	0.456**	0.498**	0.366**	0.437**	0.404**	0.451**	0.468**	0.488**	0.545**	0.537**	0.518**	0.554**	0.377**	0.407**	0.483**	**1.000**			
17 Favourable climate conditions	0.521**	0.590**	0.457**	0.559**	0.546**	0.526**	0.605**	0.528**	0.657**	0.667**	0.615**	0.619**	0.449**	0.475**	0.613**	0.746**	**1.000**		
18 Carrying capacity	0.342**	0.391**	0.416**	0.321**	0.227**	0.281**	0.354**	0.388**	0.441**	0.427**	0.402**	0.392**	0.297**	0.235**	0.330**	0.663**	0.544**	**1.000**	
19 Visual appeal	0.551**	0.599**	0.400**	0.609**	0.524**	0.482**	0.569**	0.510**	0.679**	0.696**	0.659**	0.668**	0.458**	0.421**	0.577**	0.629**	0.731**	0.559**	**1.000**

* $p<0.05$
**$p<0.01$

Appendix 7: One-sample t-test of the elements of mountain destination innovativeness

Elements	Mean	Std. deviation	Std. error mean
Creation of innovative vision	6.14	1.097	0.078
Creation of distinctive image of the destination	6.14	1.167	0.083
Maintaining ecological processes and helping to conserve natural resources and biodiversity	6.12	1.103	0.079
Participation of all stakeholders in tourism planning	6.07	1.121	0.080
Making optimal use of environmental resources (environmental sustainability)	6.06	1.105	0.079
Formation of destination's innovation strategy	6.01	1.128	0.080
Taking into account the interests of the local community	5.98	1.174	0.084
Environmental policies that promote sustainable development	5.93	1.097	0.078
Adaptive management that enables quick response to changing environment	5.92	1.001	0.071
Human resource development (employee empowerment and education)	5.92	1.174	0.084
The local population's support for change	5.91	1.238	0.088
Web portal providing rich user experience	5.88	1.189	0.085
Dynamic content on the web portal	5.87	1.184	0.084
The local population's capacity to change	5.86	1.207	0.086
Transportation policies that favour alternative transportation modes and public transportation	5.86	1.068	0.076
Adapting to changing climate conditions	5.85	1.289	0.092
Continuous learning and knowledge creation	5.84	1.192	0.085
Collaboration of all stakeholders in decision-making processes	5.83	1.215	0.087
Ease of access to information through a highly developed communication system	5.82	1.200	0.085
Resource management (resources used in different manners to meet the emerging needs)	5.81	1.032	0.074
State-of-the-art safety procedures and safety infrastructure in the mountains (anti-avalanche systems, etc.)	5.79	1.336	0.095
Using mountain scenery as an attraction (taking photos, etc.)	5.79	1.200	0.086
Respect for the socio-cultural authenticity of host communities (conservation of cultural heritage and traditional values)	5.76	1.268	0.090
Energy policies that support usage of alternative sources of energy	5.76	1.059	0.075
Organisational structure that supports involvement of all stakeholders	5.76	1.226	0.087
Offering local products in combination with experiencing local craftsmanship	5.72	1.193	0.085
Active education of all interested parties at the destination	5.72	1.202	0.086
Tourism products adapted to changing demand (last minute reservations, increased price sensitivity, etc.)	5.70	1.101	0.078
Availability of knowledge resources and education	5.69	1.247	0.089
Exploiting opportunities created by changing climate conditions	5.69	1.395	0.099
Logistics adapted to changing demand (last minute reservations, new reservations systems, etc.)	5.68	1.168	0.083
Distinctive local cuisine (using local agriculture, etc.)	5.66	1.265	0.090
Active research, communication and application of research findings	5.64	1.281	0.091

(table continues)

(continued)

Elements	Mean	Std. deviation	Std. error mean
Public private partnership for the transfer of know-how and availability of new solutions	5.64	1.313	0.094
Implementing new practices in environmental management	5.63	1.007	0.072
Improvements in destination accessibility (tunnels, reinventing the trains, etc.)	5.62	1.339	0.095
Social networking, the interaction of social and commercial networks	5.62	1.157	0.082
Destination's products based on determined customer characteristics (context awareness)	5.62	1.225	0.087
Environmentally friendly solutions for ski infrastructure	5.60	1.332	0.095
Efficient waste management	5.60	1.353	0.096
Using mountain rivers as an attraction (extreme sports, appreciating the natural beauty, etc.)	5.60	1.163	0.083
User participation in product development	5.60	1.118	0.080
Organising new kinds of special events	5.58	1.160	0.083
Tourist firms' IT capabilities	5.58	1.149	0.082
Destination's products supported by mobile services and applications	5.57	1.170	0.083
Respect of societal norms and values in business and economic relationships	5.55	1.180	0.084
Environmentally friendly solutions for tourist accommodations	5.54	1.176	0.084
Inclusion of social networking in destination's product development (blogs, Facebook, Twitter, etc.)	5.53	1.223	0.087
Quick development of competences and skills in destination management organisation to match the demands of new technologies	5.52	1.079	0.077
Using new technological developments in customer relationship management	5.51	1.198	0.085
Advances in internal transportation (electric cars, bikes, etc.).	5.48	1.312	0.093
Investment incentives for new products, services and processes	5.48	1.204	0.086
Organisational culture supporting changes, development of new products, processes and services	5.48	1.185	0.084
Using fauna as an attraction (bird watching, etc.)	5.46	1.206	0.086
Real-time communication	5.45	1.180	0.084
Energy efficient ski infrastructure (solar-powered ski lifts, etc.)	5.44	1.303	0.093
Co-marketing of service providers	5.44	1.306	0.093
Balancing environmental actions and environmental communication (environmental marketing)	5.43	1.187	0.085
Advanced snow-making equipment (possibility of producing snow in above-zero temperatures without chemical additives, etc.)	5.40	1.686	0.120
Formation of regional innovation systems	5.40	1.162	0.083
Contextual and behavioural advertising (target advertising to a specific user based on the searched keywords)	5.40	1.297	0.092
Co-branding (cooperation of different brands at the destination)	5.40	1.319	0.094
Equitable distribution of tourism benefits (respect of different cultures and avoidance of any form of exploitation)	5.39	1.427	0.102
Inclusion of environmental education in destination's products	5.39	1.202	0.086
Supporting services providers' IT capabilities	5.38	1.209	0.086
Using flora as an attraction (learning about plants, etc.)	5.38	1.283	0.091

(table continues)

(continued)

Elements	Mean	Std. deviation	Std. error mean
New sports infrastructure development	5.35	1.217	0.087
Application of a selective destination marketing system (control in terms of number and segment of tourists)	5.35	1.133	0.081
Control mechanisms for evaluating research, development and innovation policy	5.34	1.298	0.092
Combining different tourism products into a new kind of experience (special ski runs for experiencing gourmet cuisine while skiing, etc.)	5.31	1.307	0.093
Equal opportunities for all society (socio-cultural sustainability)	5.29	1.317	0.094
Developed forms of cultural tourism (experiencing how people in the mountains lived in the past, etc.)	5.28	1.321	0.094
New forms of active informal communication channels between destination management organisation and service providers	5.26	1.183	0.084
Destination's ability to simultaneously support both evolutionary and revolutionary technological changes	5.25	1.199	0.085
New forms of active formal communication channels between destination management organisation and service providers	5.23	1.154	0.082
Adapting shops to new demand patterns (such as free-ride ski rental, etc.)	5.21	1.230	0.088
Formation of clusters	5.15	1.211	0.086
New health-related products	5.13	1.298	0.092
Tax incentives for new products, services and processes	5.11	1.306	0.093
Including trendsetters (usually athletes) in destination marketing (also through social media)	5.10	1.225	0.087
Environmental audits (ISO, Eco-Management and Audit Scheme (EMAS), etc.)	5.04	1.366	0.097
Unique forms of tourist accommodations	5.03	1.395	0.099
Quality audits/certification (ISO)	4.96	1.475	0.105
Learning about the history of the formation of the mountains (geology, etc.)	4.96	1.388	0.099
Eco-labels and environmental awards	4.92	1.446	0.103
Distinctive entertainment and nightlife (adapted to new demand patterns)	4.92	1.299	0.093
Special business and congress tourism products	4.80	1.262	0.090
Proximity to technological clusters, innovation centres, etc.	4.73	1.397	0.100

Appendix 8: Correlation matrix of the elements of mountain destination innovativeness

Element	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
1 Ease of access to information through a highly developed communication system	**1.000**																								
2 Respect for the socio-cultural authenticity of host communities (conservation of cultural heritage and traditional values)	0.357 **	**1.000**																							
3 The local population's support for change	0.361 **	0.624 **	**1.000**																						
4 The local population's capacity to change	0.350 **	0.569 **	0.859 **	**1.000**																					
5 Availability of knowledge resources and education	0.553 **	0.556 **	0.584 **	0.551 **	**1.000**																				
6 Offering local products in combination with experiencing local craftsmanship	0.476 **	0.564 **	0.478 **	0.466 **	0.560 **	**1.000**																			
7 Making optimal use of environmental resources (environmental sustainability)	0.321 **	0.516 **	0.464 **	0.374 **	0.434 **	0.434 **	**1.000**																		
8 Maintaining ecological processes and helping to conserve natural resources and biodiversity	0.349 **	0.515 **	0.398 **	0.358 **	0.348 **	0.419 **	0.774 **	**1.000**																	
9 Adapting to changing climate conditions	0.284 **	0.364 **	0.408 **	0.427 **	0.359 **	0.346 **	0.494 **	0.489 **	**1.000**																

(table continues)

(continued)

Element	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
10 Exploiting opportunities created by changing climate conditions	0.200 **	0.365 **	0.314 **	0.382 **	0.294 **	0.335 **	0.462 **	0.435 **	0.750 **	**1.000**															
11 Participation of all stakeholders in tourism planning	0.362 **	0.528 **	0.542 **	0.519 **	0.510 **	0.499 **	0.401 **	0.352 **	0.292 **	0.206 **	**1.000**														
12 Collaboration of all stakeholders in decision-making processes	0.357 **	0.532 **	0.527 **	0.507 **	0.471 **	0.540 **	0.385 **	0.313 **	0.396 **	0.329 **	0.752 **	**1.000**													
13 Creation of innovative vision	0.573 **	0.364 **	0.461 **	0.431 **	0.522 **	0.437 **	0.450 **	0.467 **	0.296 **	0.223 **	0.427 **	0.431 **	**1.000**												
14 Formation of destination's innovation strategy	0.574 **	0.416 **	0.462 **	0.427 **	0.582 **	0.497 **	0.446 **	0.446 **	0.333 **	0.279 **	0.432 **	0.491 **	0.804 **	**1.000**											
15 Energy policies that support usage of alternative sources of energy	0.206 **	0.438 **	0.333 **	0.312 **	0.378 **	0.393 **	0.566 **	0.550 **	0.479 **	0.446 **	0.331 **	0.358 **	0.383 **	0.351 **	**1.000**										
16 Transportation policies that favour alternative transportation modes and public transportation	0.317 **	0.437 **	0.354 **	0.389 **	0.448 **	0.521 **	0.528 **	0.501 **	0.435 **	0.482 **	0.406 **	0.374 **	0.463 **	0.441 **	0.725 **	**1.000**									
17 Environmental policies that promote sustainable development	0.139 *	0.436 **	0.413 **	0.362 **	0.395 **	0.325 **	0.649 **	0.601 **	0.445 **	0.422 **	0.434 **	0.442 **	0.298 **	0.298 **	0.700 **	0.600 **	**1.000**								
18 Taking into account the interests of the local community	0.423 **	0.585 **	0.535 **	0.524 **	0.568 **	0.536 **	0.374 **	0.351 **	0.325 **	0.271 **	0.552 **	0.639 **	0.504 **	0.501 **	0.412 **	0.421 **	0.425 **	**1.000**							
19 Organisational structure that supports involvement of all stakeholders	0.322 **	0.564 **	0.531 **	0.554 **	0.509 **	0.498 **	0.411 **	0.326 **	0.361 **	0.296 **	0.665 **	0.704 **	0.388 **	0.435 **	0.420 **	0.449 **	0.523 **	0.696 **	**1.000**						
20 Implementing new practices in environmental management	0.203 **	0.446 **	0.345 **	0.374 **	0.349 **	0.382 **	0.528 **	0.430 **	0.394 **	0.422 **	0.359 **	0.411 **	0.313 **	0.324 **	0.590 **	0.572 **	0.621 **	0.451 **	0.536 **	**1.000**					

(table continues)

(continued)

Element	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
21 Web portal providing rich user experience	0.459**	0.291**	0.326**	0.265**	0.371**	0.401**	0.435**	0.376**	0.199**	0.216**	0.365**	0.398**	0.503**	0.574**	0.350**	0.412**	0.405**	0.356**	0.402**	0.376**	**1.000**				
22 Dynamic content on the web portal	0.453**	0.309**	0.288**	0.333**	0.379**	0.378**	0.302**	0.402**	0.238**	0.309**	0.312**	0.300**	0.543**	0.581**	0.343**	0.445**	0.222**	0.317**	0.307**	0.315**	0.735**	**1.000**			
23 Logistics adapted to changing demand (last minute reservations, new reservations systems, etc.)	0.396**	0.309**	0.304**	0.287**	0.259**	0.315**	0.308**	0.335**	0.313**	0.297**	0.365**	0.357**	0.419**	0.415**	0.242**	0.339**	0.307**	0.350**	0.330**	0.406**	0.542**	0.556**	**1.000**		
24 Tourism products adapted to changing demand (last minute reservations, increased price sensitivity, etc.)	0.360**	0.270**	0.257**	0.261**	0.209**	0.258**	0.250**	0.288**	0.281**	0.258**	0.337**	0.366**	0.400**	0.436**	0.243**	0.288**	0.278**	0.287**	0.342**	0.357**	0.455**	0.548**	0.819**	**1.000**	
25 Creation of distinctive image of the destination	0.569**	0.393**	0.444**	0.442**	0.452**	0.446**	0.418**	0.414**	0.373**	0.330**	0.433**	0.481**	0.654**	0.661**	0.291**	0.348**	0.266**	0.495**	0.471**	0.281**	0.649**	0.635**	0.613**	0.564**	**1.000**

* $p<0.05$

**$p<0.01$

Appendix 9: One-sample t-test of the elements for measuring mountain destination development

Elements	Mean	Std. deviation	Std. error mean
Environmental pollution	6.27	1.131	0.086
Air quality	6.27	1.272	0.096
Share of very satisfied visitors	6.25	1.243	0.094
Perceived quality of tourist services	6.22	1.144	0.086
Share of returning visitors	6.21	1.223	0.092
Perceived value for money of tourist services	6.13	1.185	0.090
Visitor satisfaction with environmental issues	6.06	1.248	0.094
Satisfaction of local population with tourism development	6.03	1.234	0.093
Integration of all stakeholders in tourism development	5.91	1.291	0.098
Water pollution from sewage	5.89	1.424	0.108
Hotel occupancy rate	5.88	1.221	0.092
Availability of tourism infrastructural services	5.85	1.167	0.088
Water consumption in tourism sector	5.84	1.292	0.098
Contribution of tourism sector to economic growth	5.83	1.270	0.096
Share of recycled waste in tourism sector	5.83	1.203	0.091
Usage of clean energy (wind, sun, geothermal, photovoltaic etc.) in tourism sector	5.82	1.305	0.099
Energy consumption in tourism sector	5.80	1.219	0.092
Daily visitor expenditure	5.75	1.277	0.097
Amount of soil erosion	5.75	1.373	0.104
Frequency of environmental accidents related to tourism	5.67	1.471	0.111
Average length of stay	5.66	1.339	0.101
Income-earning opportunities in tourism for host communities	5.65	1.187	0.090
CO2 emissions in tourism sector	5.64	1.307	0.099
Growth rate in daily visitor expenditure	5.60	1.284	0.097
Growth rate in average length of stay	5.59	1.362	0.103
Market share growth in terms of nights spent	5.57	1.261	0.095
Availability of local credit to local business	5.57	1.195	0.090
Seasonality of employment in tourism sector	5.56	1.382	0.104
Share of recycled water in tourism sector	5.54	1.406	0.106
Contribution of tourism to poverty reduction	5.53	1.226	0.093
Employment growth in tourism	5.52	1.212	0.092
Visits to parks, recreation areas	5.51	1.300	0.098
Price mark-up for tourism products	5.50	1.252	0.095
Average wage in tourism sector compared to other sectors of the economy	5.49	1.236	0.093
Lodging revenues	5.46	1.206	0.091
Market share growth in terms of tourist arrivals	5.44	1.241	0.094
The employment of locals compared to non-locals in tourism-related activities	5.42	1.325	0.100
Percentage of income leakage out of the community	5.40	1.225	0.093
Presence of social services	5.39	1.158	0.088
Local market demand for tourism products	5.37	1.276	0.096
Number of environmental certificates in tourism sector	5.35	1.278	0.097

(table continues)

(continued)

Elements	Mean	Std. deviation	Std. error mean
Visitor expenditure per capita	5.34	1.233	0.093
Growth rate in visitor expenditure per capita	5.33	1.253	0.095
Frequency of accidents related to outdoor activities	5.33	1.413	0.107
Share of reservations in total number of inquiries	5.30	1.340	0.101
Number of visits to the destination's website	5.30	1.307	0.099
Market share growth in terms of tourist earnings	5.29	1.271	0.096
Growth rate of tourist arrivals per capita	5.26	1.313	0.099
Annual number of new tourism businesses	5.21	1.228	0.093
Tourist arrivals per capita	5.19	1.353	0.102
Visitor expenditure per employee in tourism sector	5.13	1.284	0.097
Growth rate in visitor expenditure per employee in tourism sector	5.09	1.242	0.094
Employment equity between males and females in tourism-related activities	5.08	1.409	0.107
Share of cancelled bookings	5.05	1.346	0.102
Number of unemployed tourism workers	5.05	1.344	0.102
Tourist arrivals per employee in tourism sector	5.00	1.254	0.095
Growth rate of tourist arrivals per employee in tourism sector	5.00	1.333	0.101
Tourist arrivals per destination area (km2)	4.89	1.468	0.111
Growth rate of tourist arrivals per destination area (km2)	4.86	1.473	0.111
Growth rate in visitor expenditure per destination area (km2)	4.76	1.476	0.112
Visitor expenditure per destination area (km2)	4.68	1.443	0.109

Appendix 10: Correlation matrix of the elements for measuring mountain destination development

Element	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
1 Average length of stay	**1.000**																											
2 Growth rate in average length of stay	0.799 **	**1.000**																										
3 Market share growth in terms of tourist arrivals	0.641 **	0.699 **	**1.000**																									
4 Market share growth in terms of nights spent	0.682 **	0.720 **	0.884 **	**1.000**																								
5 Hotel occupancy rate	0.725 **	0.582 **	0.604 **	0.664 **	**1.000**																							
6 Visits to parks, recreation areas	0.637 **	0.632 **	0.548 **	0.581 **	0.596 **	**1.000**																						
7 Growth rate in daily visitor expenditure	0.619 **	0.625 **	0.591 **	0.578 **	0.553 **	0.591 **	**1.000**																					
8 Share of very satisfied visitors	0.615 **	0.528 **	0.463 **	0.483 **	0.605 **	0.527 **	0.605 **	**1.000**																				
9 Visitor satisfaction with environmental issues	0.444 **	0.385 **	0.341 **	0.375 **	0.482 **	0.498 **	0.517 **	0.789 **	**1.000**																			
10 Share of returning visitors	0.579 **	0.482 **	0.458 **	0.506 **	0.588 **	0.451 **	0.506 **	0.788 **	0.655 **	**1.000**																		

(table continues)

(continued)

Element	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
11 Perceived quality of tourist services	0.567 **	0.511 **	0.453 **	0.465 **	0.597 **	0.565 **	0.595 **	0.803 **	0.750 **	0.761 **	**1.000**																	
12 Perceived value for money of tourist services	0.502 **	0.395 **	0.432 **	0.455 **	0.562 **	0.418 **	0.512 **	0.726 **	0.663 **	0.693 **	0.863 **	**1.000**																
13 Employment growth in tourism	0.437 **	0.415 **	0.382 **	0.379 **	0.355 **	0.446 **	0.518 **	0.486 **	0.496 **	0.398 **	0.505 **	0.454 **	**1.000**															
14 Seasonality of employment in tourism sector	0.532 **	0.470 **	0.468 **	0.500 **	0.544 **	0.464 **	0.499 **	0.548 **	0.500 **	0.520 **	0.566 **	0.567 **	0.711 **	**1.000**														
15 Average wage in tourism sector compared to other sectors of the economy	0.438 **	0.349 **	0.426 **	0.428 **	0.428 **	0.429 **	0.491 **	0.563 **	0.538 **	0.492 **	0.607 **	0.593 **	0.582 **	0.635 **	**1.000**													
16 Contribution of tourism sector to economic growth	0.472 **	0.371 **	0.447 **	0.449 **	0.495 **	0.439 **	0.423 **	0.627 **	0.535 **	0.567 **	0.618 **	0.619 **	0.555 **	0.606 **	0.763 **	**1.000**												
17 Lodging revenues	0.476 **	0.400 **	0.461 **	0.503 **	0.523 **	0.451 **	0.469 **	0.555 **	0.479 **	0.512 **	0.555 **	0.587 **	0.551 **	0.627 **	0.652 **	0.695 **	**1.000**											
18 Availability of tourism infrastructural services	0.508 **	0.398 **	0.391 **	0.428 **	0.503 **	0.470 **	0.483 **	0.666 **	0.562 **	0.643 **	0.654 **	0.639 **	0.386 **	0.536 **	0.519 **	0.587 **	0.558 **	**1.000**										
19 Share of recycled water in tourism sector	0.310 **	0.282 **	0.186 **	0.196 **	0.321 **	0.365 **	0.333 **	0.266 **	0.386 **	0.267 **	0.356 **	0.282 **	0.445 **	0.426 **	0.383 **	0.389 **	0.339 **	0.281 **	**1.000**									

(table continues)

(continued)

Element	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
20 Water pollution from sewage	0.385 **	0.296 **	0.329 **	0.305 **	0.409 **	0.446 **	0.428 **	0.546 **	0.613 **	0.526 **	0.557 **	0.529 **	0.438 **	0.433 **	0.443 **	0.530 **	0.451 **	0.525 **	0.522 **	**1.000**								
21 Usage of clean energy (wind, sun, geothermal, photovoltaic, etc.) in tourism sector	0.357 **	0.285 **	0.240 **	0.285 **	0.407 **	0.463 **	0.345 **	0.515 **	0.551 **	0.428 **	0.494 **	0.418 **	0.488 **	0.441 **	0.487 **	0.505 **	0.455 **	0.463 **	0.603 **	0.675 **	**1.000**							
22 Share of recycled waste in tourism sector	0.371 **	0.332 **	0.255 **	0.277 **	0.366 **	0.425 **	0.362 **	0.504 **	0.585 **	0.415 **	0.520 **	0.434 **	0.488 **	0.466 **	0.528 **	0.528 **	0.460 **	0.477 **	0.652 **	0.611 **	0.776 **	**1.000**						
23 CO_2 emissions in tourism sector	0.351 **	0.318 **	0.283 **	0.297 **	0.400 **	0.420 **	0.396 **	0.451 **	0.560 **	0.383 **	0.520 **	0.431 **	0.441 **	0.370 **	0.467 **	0.428 **	0.422 **	0.452 **	0.570 **	0.558 **	0.615 **	0.633 **	**1.000**					
24 Energy consumption in tourism sector	0.441 **	0.347 **	0.300 **	0.306 **	0.472 **	0.543 **	0.445 **	0.563 **	0.621 **	0.490 **	0.596 **	0.515 **	0.521 **	0.504 **	0.535 **	0.490 **	0.470 **	0.538 **	0.560 **	0.615 **	0.749 **	0.688 **	0.767 **	**1.000**				
25 Water consumption in tourism sector	0.393 **	0.313 **	0.254 **	0.247 **	0.399 **	0.494 **	0.396 **	0.542 **	0.621 **	0.491 **	0.571 **	0.494 **	0.454 **	0.432 **	0.510 **	0.463 **	0.413 **	0.534 **	0.520 **	0.644 **	0.750 **	0.697 **	0.694 **	0.954 **	**1.000**			
26 Air quality	0.498 **	0.398 **	0.282 **	0.334 **	0.500 **	0.557 **	0.475 **	0.625 **	0.617 **	0.610 **	0.642 **	0.549 **	0.426 **	0.428 **	0.450 **	0.509 **	0.463 **	0.644 **	0.453 **	0.724 **	0.713 **	0.582 **	0.564 **	0.693 **	0.719 **	**1.000**		
27 Amount of soil erosion	0.305 **	0.246 **	0.202 **	0.163 *	0.262 **	0.502 **	0.424 **	0.403 **	0.544 **	0.314 **	0.434 **	0.333 **	0.394 **	0.295 **	0.334 **	0.309 **	0.288 **	0.441 **	0.383 **	0.650 **	0.570 **	0.565 **	0.527 **	0.628 **	0.657 **	0.660 **	**1.000**	
28 Frequency of environmental accidents related to tourism	0.341 **	0.312 **	0.264 **	0.300 **	0.319 **	0.531 **	0.471 **	0.505 **	0.563 **	0.394 **	0.512 **	0.454 **	0.549 **	0.415 **	0.508 **	0.457 **	0.470 **	0.533 **	0.490 **	0.616 **	0.677 **	0.644 **	0.575 **	0.669 **	0.706 **	0.676 **	0.701 **	**1.000**

* p<0.05

** p<0.01

Appendix 11: Survey about mountain destination environments, innovativeness and development

I am trying to examine the influence of innovativeness and tourism environments on mountain destination development. The questionnaire is developed based on previous research; please email me if you would like to receive the research findings.

I would very much appreciate it if you would take about 10 minutes of your time to fill out the expert survey. Your responses will be strictly confidential and data from this research will be reported only in the aggregate. To express my gratitude, I will send you the research results.

The survey is available in English, German, Italian, French and Slovenian; please select the language and start the survey by clicking the link below.

DEMOGRAPHIC QUESTIONS

Operating sector (multiple choice)

1. Private sector
2. Public sector

Line of work (multiple choice)

1. National tourism organisation
2. Regional tourism organisation
3. Local tourism organisation
4. Tourist information centre
5. Local government
6. Convention and visitor bureau
7. Chamber of commerce
8. Ski area operator
9. Non-governmental organisation
10. Other _____

Please select the country in which you operate

1. Austria
2. France
3. Germany
4. Italy
5. Liechtenstein
6. Slovenia
7. Switzerland
8. Other _____

Please name the destination in which you operate

Questions about your destination

Please state the approximate size of the destination (in km²)

Please state the approximate number of inhabitants in 2010

Please state the approximate number of visitors in 2010

Please state the approximate number of nights spent in 2010

Please state the approximate average daily visitor expenditure in 2010

1 MOUNTAIN DESTINATION INNOVATIVENESS

Evaluate the state of innovative elements at your destination compared to other mountain destinations (1 = Much worse, 2 = Worse, 3 = Somewhat worse, 4 = About the same, 5 = Somewhat better, 6 = Better, 7 = Much better).

1.1 SOCIO-CULTURAL SUSTAINABILITY AND STAKEHOLDER PARTICIPATION

	1	2	3	4	5	6	7
The local population's support for change	❑	❑	❑	❑	❑	❑	❑
The local population's capacity to change	❑	❑	❑	❑	❑	❑	❑
Participation of all stakeholders in tourism planning	❑	❑	❑	❑	❑	❑	❑
Collaboration of all stakeholders in decision-making processes	❑	❑	❑	❑	❑	❑	❑
Taking into account the interests of the local community	❑	❑	❑	❑	❑	❑	❑
Organisational structure that supports involvement of all stakeholders	❑	❑	❑	❑	❑	❑	❑
Availability of knowledge resources and education	❑	❑	❑	❑	❑	❑	❑
Respect for the socio-cultural authenticity of host communities (conservation of cultural heritage and traditional values)	❑	❑	❑	❑	❑	❑	❑
Offering local products in combination with experiencing local craftsmanship	❑	❑	❑	❑	❑	❑	❑

1.2 ENVIRONMENTAL SUSTAINABILITY

	1	2	3	4	5	6	7
Energy policies that support usage of alternative sources of energy	❑	❑	❑	❑	❑	❑	❑
Environmental policies that promote sustainable development	❑	❑	❑	❑	❑	❑	❑
Making optimal use of environmental resources (environmental sustainability)	❑	❑	❑	❑	❑	❑	❑
Transportation policies that favour alternative transportation modes and public transportation	❑	❑	❑	❑	❑	❑	❑
Maintaining ecological processes and helping to conserve natural resources and biodiversity	❑	❑	❑	❑	❑	❑	❑
Exploiting opportunities created by changing climate conditions	❑	❑	❑	❑	❑	❑	❑
Implementing new practices in environmental management	❑	❑	❑	❑	❑	❑	❑
Adapting to changing climate conditions	❑	❑	❑	❑	❑	❑	❑

1.3 PROACTIVENESS

	1	2	3	4	5	6	7
Dynamic content on the web portal	❑	❑	❑	❑	❑	❑	❑
Creation of distinctive image of the destination	❑	❑	❑	❑	❑	❑	❑
Logistics adapted to changing demand (last minute reservations, new reservations systems, etc.)	❑	❑	❑	❑	❑	❑	❑
Web portal providing rich user experience	❑	❑	❑	❑	❑	❑	❑
Tourism products adapted to changing demand (last minute reservations, increased price sensitivity, etc.)	❑	❑	❑	❑	❑	❑	❑
Formation of destination's innovation strategy	❑	❑	❑	❑	❑	❑	❑
Creation of innovative vision	❑	❑	❑	❑	❑	❑	❑
Ease of access to information through a highly developed communication system	❑	❑	❑	❑	❑	❑	❑

1.4 PLEASE COMMENT ON INNOVATIVENESS AT YOUR DESTINATION

2 TOURISM ENVIRONMENTS IN MOUNTAIN DESTINATIONS

Evaluate the state of elements in tourism environments at your destination compared to other mountain destinations (1 = Much worse, 2 = Worse, 3 = Somewhat worse, 4 = About the same, 5 = Somewhat better, 6 = Better, 7 = Much better).

2.1 TECHNOLOGICAL ENVIRONMENT

	1	2	3	4	5	6	7
Mobile phone signal coverage	❑	❑	❑	❑	❑	❑	❑
Presence of Internet connection facilities and Internet coverage	❑	❑	❑	❑	❑	❑	❑
Acceptance of credit cards and presence of ATMs	❑	❑	❑	❑	❑	❑	❑
Efficient health/medical facilities	❑	❑	❑	❑	❑	❑	❑
Efficient electricity infrastructure	❑	❑	❑	❑	❑	❑	❑
Efficient water supply infrastructure	❑	❑	❑	❑	❑	❑	❑

2.2 SOCIO-CULTURAL ENVIRONMENT

	1	2	3	4	5	6	7
Presence of multilingual written instructions/guides (traffic signs, maps and restaurant menus)	❑	❑	❑	❑	❑	❑	❑
Ease of oral communication (in English or other languages)	❑	❑	❑	❑	❑	❑	❑
Local managerial and staff skills	❑	❑	❑	❑	❑	❑	❑
Hospitality of local population	❑	❑	❑	❑	❑	❑	❑
Support for tourism development by local population	❑	❑	❑	❑	❑	❑	❑

2.3 NATURAL ENVIRONMENT

	1	2	3	4	5	6	7
Carrying capacity	❑	❑	❑	❑	❑	❑	❑
Variety and diversity of terrains for different sports	❑	❑	❑	❑	❑	❑	❑
Favourable climate conditions	❑	❑	❑	❑	❑	❑	❑
Visual appeal	❑	❑	❑	❑	❑	❑	❑

2.4 POLITICAL AND LEGAL ENVIRONMENT

	1	2	3	4	5	6	7
Support of government at the regional level	❑	❑	❑	❑	❑	❑	❑
Support of government at the municipality level	❑	❑	❑	❑	❑	❑	❑
Efficiency of decision making	❑	❑	❑	❑	❑	❑	❑
Efficiency of regulatory framework	❑	❑	❑	❑	❑	❑	❑

2.5 PLEASE COMMENT ON TOURISM ENVIRONMENTS AT YOUR DESTINATION

3 MOUNTAIN DESTINATION DEVELOPMENT

Evaluate the state of indicators of destination development at your destination compared to other mountain destinations (1 = Much worse, 2 = Worse, 3 = Somewhat worse, 4 = About the same, 5 = Somewhat better, 6 = Better, 7 = Much better).

3.1 PRESERVATION OF NATURAL ENVIRONMENT

	1	2	3	4	5	6	7
Water consumption in tourism sector	❑	❑	❑	❑	❑	❑	❑
Amount of soil erosion	❑	❑	❑	❑	❑	❑	❑
Usage of clean energy (wind, sun, geothermal, photovoltaic etc.) in tourism sector	❑	❑	❑	❑	❑	❑	❑
Energy consumption in tourism sector	❑	❑	❑	❑	❑	❑	❑
Frequency of environmental accidents related to tourism	❑	❑	❑	❑	❑	❑	❑
Share of recycled waste in tourism sector	❑	❑	❑	❑	❑	❑	❑
CO2 emissions in tourism sector	❑	❑	❑	❑	❑	❑	❑
Share of recycled water in tourism sector	❑	❑	❑	❑	❑	❑	❑
Air quality	❑	❑	❑	❑	❑	❑	❑
Water pollution from sewage	❑	❑	❑	❑	❑	❑	❑

3.2 TOURIST TRAFFIC AND EXPENDITURE

	1	2	3	4	5	6	7
Growth rate in average length of stay	❑	❑	❑	❑	❑	❑	❑
Market share growth in terms of nights spent	❑	❑	❑	❑	❑	❑	❑
Market share growth in terms of tourist arrivals	❑	❑	❑	❑	❑	❑	❑
Average length of stay	❑	❑	❑	❑	❑	❑	❑
Visits to parks, recreation areas	❑	❑	❑	❑	❑	❑	❑
Hotel occupancy rate	❑	❑	❑	❑	❑	❑	❑
Growth rate in daily visitor expenditure	❑	❑	❑	❑	❑	❑	❑

3.3 VISITOR SATISFACTION

	1	2	3	4	5	6	7
Share of returning visitors	❑	❑	❑	❑	❑	❑	❑
Share of very satisfied visitors	❑	❑	❑	❑	❑	❑	❑
Perceived value for money of tourist services	❑	❑	❑	❑	❑	❑	❑
Perceived quality of tourist services	❑	❑	❑	❑	❑	❑	❑
Visitor satisfaction with environmental issues	❑	❑	❑	❑	❑	❑	❑
Availability of tourism infrastructural services	❑	❑	❑	❑	❑	❑	❑

3.4 SOCIO-ECONOMIC PROSPERITY

	1	2	3	4	5	6	7
Average wage in tourism sector compared to other sectors of the economy	❑	❑	❑	❑	❑	❑	❑
Contribution of tourism sector to economic growth	❑	❑	❑	❑	❑	❑	❑
Seasonality of employment in tourism sector	❑	❑	❑	❑	❑	❑	❑
Lodging revenues	❑	❑	❑	❑	❑	❑	❑
Employment growth in tourism	❑	❑	❑	❑	❑	❑	❑

3.5 PLEASE COMMENT ON DESTINATION DEVELOPMENT AT YOUR DESTINATION

Evaluate the impact of the economic crisis at your destination compared to other mountain destinations (1 = Much worse, 2 = Worse, 3 = Somewhat worse, 4 = About the same, 5 = Somewhat better, 6 = Better, 7 = Much better).

	1	2	3	4	5	6	7
Impact of the economic crisis	❑	❑	❑	❑	❑	❑	❑

DALJŠI POVZETEK DISERTACIJE V SLOVENSKEM JEZIKU

Gorski ekosistemi so ključnega pomena za preživetje globalnega ekosistema. Predstavljajo pomemben vir vode, energije in biološke raznolikosti. Gore niso samo vir mineralov, gozdnih proizvodov in kmetijskih pridelkov, temveč predstavljajo tudi okolje za rekreacijo, kar je prispevalo k hitri popularizaciji gorskega turizma. Vendar pa je v zadnjih desetletjih prišlo do občutnih sprememb, kot na primer pospešene erozije prsti, zemeljskih plazov in hitrega zmanjševanja življenjskega prostora in genetske raznolikosti. Poleg naštetih negativnih učinkov se mnogi prebivalci gorskih destinacij spopadajo z revščino in izgubo tradicionalnih navad. Zaradi navedenega potrebujejo gorske destinacije ustrezno upravljanje z gorskimi viri in ustrezen družbeno-ekonomski razvoj gorskih destinacij.

Približno 10 % svetovne populacije je odvisne od gorskih virov (Združeni narodi, 1992). Poleg tega so gorski viri pomembni za več kot 50 % svetovne populacije; gore pokrivajo več kot 20 % površine zemlje (Ives, 1992). V Evropi Alpe pokrivajo 190.959 km²; to je 28,7 % celotne površine Avstrije, 27,2 % Italije, 21,4 % Francije, 13,2 % Švice, 5,8 % Nemčije, 3,6 % Slovenije, 0,08 % Lihtenštajna in 0,001 % površine Monaka. Ljudje živijo v Alpah že tisočletja; danes ta področja predstavljajo življenjski prostor za 14 milijonov ljudi (iz mnogih jezikovnih skupin in 5.867 skupnosti), za okoli 30.000 živalskih vrst in 13.000 rastlinskih vrst, od katerih jih je 388 endemičnih. Alpe so priznana turistična destinacija že več kot 150 let; v zadnjem času Alpe vsako leto obišče okoli 100 milijonov turistov, ki v povprečju ostanejo tam približno štiri noči. V Alpah je na voljo 5 milijonov postelj; v eni tretjini alpskih skupnosti ni na razpolago nobenih prenočitvenih možnosti za turiste, medtem ko je v 135 primerih v skupnostih na voljo več postelj za turiste, kot je prebivalcev. Druga posebnost alpskega področja je velika pomembnost zimske sezone glede na število nočitev in ustvarjanje vrednosti; vendar pa lahko klimatske spremembe to spremenijo, zaradi česar bo poletna sezona lahko postala bolj pomembna za številne destinacije v Alpah (Alpska konvencija, 2009a).

Ekonomski razvoj Alp se v zadnjih desetletjih odraža v velikem pritisku na naravno, družbeno in kulturno okolje. Kaže se potreba po trajnostnem razvoju Alp, pri čemer ni turizem nobena izjema. Alpska konvencija je že določila cilje razvoja trajnostnega turizma in promoviranje inovativnosti v turizmu na področju Alp (Alpska konvencija, 2009a). Da bi zagotovili trajnostni in inovativen razvoj gorskih destinacij, je treba podrobno raziskati okolja, inovativnost in razvoj gorskih destinacij ter vpliv okolij in inovativnosti na razvoj gorskih destinacij. Treba je raziskati elemente, ki lahko izboljšajo destinacije, in razviti model inovativnosti gorskih destinacij (MIGD), saj turistične gorske destinacije pestijo okoljski pritiski, negotovost in kriza (Bourdeau, 2009).

Čeprav obstaja obsežna literatura, vezana na različne vidike turističnih destinacij, je še vedno čutiti pomanjkanje raziskav, ki bi zajele vse faktorje razvoja destinacije. Zaradi omenjenega je še bolj očitna potreba po pregledu okolij, ki doprinesejo k razvoju destinacije. Taka raziskava bi podala celosten pregled, ki bi omogočil učinkovito upoštevanje dejavnikov, ki vodijo k

uspehu destinacije (J. R. B. Ritchie & Crouch, 2003). Na tak način se bo možno postaviti po robu ekonomski negotovosti, kar še bolj potrjuje potrebo po raziskavi pomembnih okolij za razvoj destinacije. Čeprav inovativnost lahko doprinese k boljši konkurenčnosti in razvoju, inovativne aktivnosti niso bile dovolj raziskane, prav tako ne njihov vpliv in pomen za destinacije (Flagestad, Hope, Nordin, & Svensson, 2005; Hjalager, 2010). Pregled obstoječe literature kaže potrebo po identifikaciji pomembnih dejavnikov inovativnosti na sami destinaciji, kar bi lahko pospešilo razvoj destinacije. Prav tako primanjkuje podatkov o razvoju destinacij in pomembnih faktorjev tega razvoja. Evropska komisija (2009) je izrazila potrebo po razvoju elementov za merjenje trajnostnega razvoja. Novejše ugotovitve kažejo na potrebo po drugačnih merjenjih razvoja destinacije, takšnih, ki ne bodo slonela le na ekonomskih temeljih. Tak pristop zahteva identifikacijo elementov, ki vključujejo vse vidike razvoja destinacije, tako ekonomske, družbene, kulturne in naravne dimenzije destinacije kot tudi zadovoljstvo turistov. Upoštevanje vseh deležnikov in vseh vidikov razvoja destinacije ponuja dobro osnovo za identifikacijo elementov in faktorjev, osnovanih na teh elementih, ki ne bodo merili samo ekonomskega uspeha destinacije, temveč tudi njen trajnostni razvoj.

Namen in cilji raziskave

Cilj prvega dela raziskave je raziskati elemente okolij, inovativnosti in razvoja gorskih destinacij glede na njihovo pomembnost in poiskati koherentne faktorje znotraj okolij, inovativnosti in razvoja gorskih destinacij. Dwyer, Knežević Cvelbar, Edwards in Mihalič (2012) so pokazali, da se lastnosti konkurenčnosti razlikujejo med lokacijami. Raziskava se osredotoča le na gorske destinacije z namenom standardizacije in primerjave podobnih destinacij. Dwyer in Kim (2003) sta ugotovila, da so potrebne nadaljnje raziskave, vezane na pomembnost različnih dimenzij destinacij. Kljub temu da so številni avtorji razpravljali o pomembnosti različnih dejavnikov, povezanih z destinacijami (Crouch, 2007, 2011; Enright & Newton, 2004, 2005; Lam, 2006; Macchiavelli, 2009), pa so gorske destinacije na tem področju še vedno premalo raziskane. Razvoj MIGD lahko ponudi pregled različnih vidikov okolij gorskih destinacij, inovativnosti in razvoja; namen raziskave je torej ponuditi uporabno orodje za nadaljnje raziskave na področju gorskega turizma in prav tako ponuditi pripomoček za sprejemanje odločitev v gorskih destinacijah.

Cilj drugega dela raziskave pa je preveriti, ali višja uspešnost v inovativnosti gorskih destinacij doprinese k razvoju destinacije in ali lahko smatramo, da je inovativnost posrednik med okolji in razvojem destinacije. Pričakovati je, da inovativnost vpliva na razvoj destinacije (Dobni, 2008; Haugland, Ness, Grønseth, & Aarstad, 2011; Volo, 2005; Zach & Fesenmaier, 2009). Višja uspešnost okolij lahko vpliva na konkurenčnost destinacije in njen razvoj (Crouch & Ritchie, 1999). Torej bo raziskano tudi, ali višja uspešnost okolij gorskih destinacij ugodno vpliva na inovativnost in razvoj gorskih destinacij. Namen tega dela raziskave je tako izboljšati poznavanje razmerij med različnimi vidiki gorskih destinacij in ponuditi smernice za izboljšanje razvoja gorskih destinacij.

Raziskovalna vprašanja in hipoteze

Raziskovalna vprašanja v prvem delu raziskave so razdeljena na dva dela. Prvi del poskuša identificirati pomembne elemente okolij, inovativnosti in razvoja gorskih destinacij. Dwyer in Kim (2003) se zavzemata za več raziskav pomembnosti različnih dimenzij destinacijskih elementov. McCool et al. (2001) trdijo, da glede primernih elementov za trajnostni razvoj vlada velika zmeda. To pomeni, da določitev seznamov pomembnih elementov okolij, inovativnosti in razvoja gorskih destinacij lahko bistveno prispeva k dopolnitvi obstoječe literature na tem podorčju. Raziskovalna vprašanja so:

RV_1: Kateri elementi okolij so pomembni za razvoj gorskih destinacij?

RV_2: Kateri elementi inovativnosti so pomembni za inovativnost in razvoj gorskih destinacij?

RV_3: Kateri elementi razvoja so pomembni za merjenje razvoja gorskih destinacij?

Vprašanje, ali identificirani pomembni elementi tvorijo koherentne faktorje, je raziskano v drugem delu, ki se osredotoči na razvoj faktorjev okolij, inovativnosti in razvoja gorskih destinacij. Na osnovi rezultatov prvega dela raziskave so elementi, izbrani za analizo, statistično značilno pomembni. Raziskovalna vprašanja so:

RV_4: Ali elementi okolij tvorijo koherentne faktorje, ki predstavljajo dimenzije v ozadju okolij gorskih destinacij?

RV_5: Ali elementi inovativnosti tvorijo koherentne faktorje, ki predstavljajo dimenzije v ozadju inovativnosti gorskih destinacij?

RV_6: Ali elementi razvoja tvorijo koherentne faktorje, ki predstavljajo dimenzije v ozadju razvoja gorskih destinacij?

Drugi del raziskave se osredotoči na povezave med konstrukti okolij, inovativnosti in razvoja gorskih destinacij znotraj modela MIGD**.** Prvo vprašanje, ki se pojavi, je, ali izboljšano stanje okolij gorskih destinacij vpliva na inovativnost gorskih destinacij in njihov razvoj. Potrebne so dodatne raziskave o vplivih na inovativnost na ravni destinacij (Volo, 2005). Učinkovito izkoriščanje okolij turističnega sistema lahko vpliva na konkurenčnost in razvoj destinacij (Crouch & Ritchie, 1999). Na podlagi tega sta lahko izpeljani dve raziskovalni hipotezi:

H_1: Okolja gorskih destinacij pozitivno vplivajo na inovativnost gorskih destinacij.

H_2: Okolja gorskih destinacij pozitivno vplivajo na razvoj gorskih destinacij.

Vprašanje, ki sledi, je, ali večja uspešnost gorskih destinacij glede inovativnosti prispeva k razvoju gorskih destinacij. Inovativnost je lahko vir razvoja destinacij (Dobni, 2008; Haugland et al., 2011; Volo, 2005; Zach & Fesenmaier, 2009). Weiermair (2003) ter Paget, Dimanche in Mounet (2010) poudarjajo vpliv inovativnosti na razvoj gorskih destinacij. Flagestad in Hope (2001) trdita, da je razvoj gorskih destinacij odvisen od strategij za

ustvarjanje konkurenčnih prednosti, ki lahko vključujejo inovativnost. Podana je naslednja hipoteza:

H_3: Inovativnost gorskih destinacij pozitivno vpliva na razvoj gorskih destinacij.

Zadnje vprašanje preverja, ali je učinek okolij gorskih destinacij na razvoj gorskih destinacij delno vplivan s strani inovativnosti gorskih destinacij. Da bi ta vpliv dokazali, morajo biti izpolnjeni trije pogoji. Kot prvo, povezava med neodvisnim konstruktom (okolja gorskih destinacij) in posrednikom (inovativnost gorskih destinacij) mora biti značilna. Drugič, povezava med posrednikom in odvisnim konstruktom (razvoj gorskih destinacij) se mora pokazati kot značilna. Tretjič, vzpostavitev posrednika zniža koeficient povezave med neodvisnim in odvisnim konstruktom. Če je koeficient neposredne povezave še vedno značilen, potem ima posrednik samo delni vpliv; če ni značilen, potem je vpliv zgolj posreden (Baron & Kenny, 1986). Iz tega sledi hipoteza:

H_4: Inovativnost gorskih destinacij delno vpliva na povezavo med okolji gorskih destinacij in razvojem gorskih destinacij.

Podatki in metodologija

V prvem delu analize so bili testirani elementi okolij, inovativnosti in razvoja gorskih destinacij, da bi ugotovili njihovo pomembnost za razvoj gorskih destinacij. V ta namen so bile anketirane različne skupine ljudi, ki so vključevale predavatelje, raziskovalce, svetovalce in menedžerje na področju gorskega turizma. V vsaki raziskavi je bilo kontaktiranih približno 200 raziskovalcev in 400 menedžerjev. Crouch (2011) je mnenja, da kolektivne izkušnje, znanje in vpogled menedžerjev iz organizacij za destinacijski menedžment[1] v gorskih destinacijah ter raziskovalcev s področja turizma s strokovnim znanjem destinacijskega menedžmenta in gorskega turizma predstavljajo dragocen vir informacij. Pri razvoju omenjenih elementov je dobro vključiti strokovnjake kot tudi ostale skupine, saj so strokovnjaki nagnjeni k temu, da radi spregledajo nekatere probleme, ki so lahko pomembni za turistične sisteme (Bossel, 1999). V namene te raziskave so bili povabljeni tudi drugi menedžerji, kot na primer hotelski menedžerji v gorskih destinacijah in raziskovalci na področju gorskega turizma in inovativnosti. Za tovrstne raziskave je značilno, da v njih sodelujejo predstavniki javnega in zasebnega turističnega sektorja, saj gre za populacijo, ki ima največje znanje o elementih destinacije (Enright & Newton, 2004).

Anketiranci so vsak element ovrednotili glede na njegovo pomembnost, merjeno na sedemstopenjski[2] Likertovi lestvici, ki je v literaturi s področja turizma pogosto uporabljena (Barquet, Osti, & Brida, 2010; Borchgrevink & Knutson, 1997; Peters, 1993). Pri raziskavi o okoljih gorskih destinacij (Priloga 3) je bilo izpolnjenih 194 vprašalnikov, ki so bili kasneje analizirani. Sedem izpolnjenih vprašalnikov je bilo izključenih iz nadaljnje analize, ker so

1 Nacionalne turistične organizacije, državne ali okrajne turistične pisarne, regionalne turistične organizacije, kongresnoturistični uradi in podobna telesa.

[2] 1 = zelo nepomembno, 2 = nepomembno, 3 = nekoliko nepomembno, 4 = niti nepomembno niti pomembno, 5 = nekoliko pomembno, 6 = pomembno, 7 = zelo pomembno.

vprašani izpolnili vprašalnike v manj kot štirih minutah, torej v mnogo krajšem času, kot je bilo predvideno za izpolnjevanje vprašalnika.

Pri raziskavi o inovativnosti gorskih destinacij (Priloga 4) je bilo pridobljenih 210 odgovorov, od katerih je bilo 197 uporabljenih za nadaljnjo analizo, saj je bilo ocenjeno, da je najkrajši čas za izpolnjevanje vprašalnika štiri minute. Pri raziskavi o razvoju gorskih destinacij (Priloga 5) je bilo prejetih 175 odgovorov, ki smo jih analizirali. Tudi v tem primeru je bilo sedem izpolnjenih vprašalnikov izključenih iz nadaljnje analize, ker so bili izpolnjeni v manj kot štirih minutah. Število izpolnjenih vprašalnikov se je gibalo v razponu od 150 do 300, kot sta Hutcheson in Sofroniou (1999) tudi priporočila za faktorsko analizo.

Eksplorativna faktorska analiza ne razjasni vse variance znotraj modela; določenemu obsegu napak se ne da izogniti (Norris & Lecavalier, 2010). Ko izvajamo faktorsko analizo, je za relevantne rezultate treba zagotoviti kakovost vnešenih podatkov. Za zagotovitev veljavnosti vsebine je bil izveden temeljit pregled literature. Da bi zmanjšali možnost pojavitve nenaključnih napak, so trije profesorji in trije destinacijski menedžerji pregledali veljavnost, pokritost področja in berljivost raziskovalnih vprašanj (Liu & Arnett, 2000). Pregledana je bila distribucija vseh merjenih elementov kot tudi manjkajoče vrednosti in opazovanja na robovih distribucije z namenom, da se prečistijo podatki in zmanjša število sistematskih napak (Yoon & Uysal, 2005). Resnih manjkajočih vrednosti ni bilo odkritih, manjkajoče vrednosti, ki pa so bile prisotne, pa so bile obdelane z metodo EM (*angl.* expectation-maximization method), ki daje najboljšo predstavitev originalne razporeditve vrednosti z najmanjšo pristranskostjo (Hair, Black, Babin, & Anderson, 2010).

V drugem delu analize je bil za oblikovanje in testiranje MIGD (Slika 8) uporabljen model linearnih strukturnih povezav (LISREL), ki analizira kovariančne strukture. Uporaba modela LISREL je zelo razširjena pri določanju strukturnih povezav; uporablja se ga za merjenje uspešnosti (Vaughan, 1999; Vaughan & Tague-Sutcliffe, 1997) in inovativnosti (Eickelpasch, Lejpras, & Stephan, 2007; Y.-H. Huang et al., 2009). Reisinger in Turner (1999) trdita, da se modela LISREL v turizmu ne uporablja pogosto, vendar so nekateri raziskovalci, kot npr. Lindberg in Johnson (1997), Gursoy in Rutherford (2004), Yoon in Uysal (2005), Chen in Tsai (2007) ter Žabkar, Brenčič in Dmitrović (2010), model LISREL v svojih raziskavah, povezanih s turističnimi destinacijami, uporabljali. Raziskovalna področja, v katerih je bil model LISREL uporabljen, kažejo na to, da je LISREL ustrezno orodje za merjenje vpliva okolij in inovativnosti gorskih destinacij na razvoj gorskih destinacij; gorska turistična destinacija je bila uporabljena kot enota za opazovanje.

Za merjenje stanja inovativnosti gorske destinacije, okolij gorske destinacije in stanja razvoja gorske destinacije v primerjavi z ostalimi gorskimi destinacijami je bila uporabljena sedemstopenjska[3] Likertova lestvica. Anketiranci so morali oceniti stanje elementov MDIG v svoji lastni destinaciji v primerjavi z ostalimi destinacijami. Uporaba konkurentov za

[3] 1 = zelo slaba uspešnost, 2 = slaba uspešnost, 3 = podpovprečna uspešnost, 4 = povprečna uspešnost, 5 = nadpovprečna uspešnost, 6 = dobra uspešnost, 7 = odlična uspešnost.

primerjavo pri merjenju uspešnosti je pogosta metoda (Crouch, 2011; Enright & Newton, 2005). Enright, Scott in Dodwell (1997) trdijo, da destinacije niso konkurenčne ali nekonkurenčne same po sebi, temveč v primerjavi s konkurenčnimi destinacijami. Anketiranci so ocenili skupno 72 elementov. Okolja gorskih destinacij so bila ocenjena z 19 elementi, ki so bili razporejeni v štiri faktorje. Nato so bili ti faktorji za izgradnjo konstrukta okolij gorskih destinacij vnešeni v LISREL z izračunom povprečnih vrednosti elementov, ki tvorijo posamezen faktor (*angl.* summated scales). Inovativnost gorskih destinacij je bila ocenjena s 25 elementi; ti so bili razporejeni v tri faktorje, ki so bili nato vnešeni v LISREL z izračunom povprečnih vrednosti elementov, ki tvorijo posamezen faktor, za izgradnjo konstrukta inovativnosti gorskih destinacij. Razvoj gorskih destinacij pa je bil ocenjen z 28 elementi, ki so bili razporejeni v štiri faktorje in nato bili za izgradnjo konstrukta razvoja gorskih destinacij vnešeni v LISREL z izračunom povprečnih vrednosti elementov, ki tvorijo posamezen faktor.

Po tem, ko so bili podatki zbrani in vnešeni v model, so bili ustvarjeni koeficienti povezav. Koeficienti povezav inovativnosti gorskih destinacij in okolij gorskih destinacij nam omogočajo določiti prispevek konstruktov k razvoju gorskih destinacij. Prav tako je bil izmerjen prispevek okolij gorskih destinacij k inovativnosti gorskih destinacij.

Ugotovitve raziskave

Ponudbena stran v turizmu se v času stalnih sprememb in globalizacije v destinacijah sooča z vedno večjo globalno konkurenco. To poziva k sodelovanju, izboljšanju okolij in inovativnosti znotraj destinacij, z namenom biti v koraku z ostalimi destinacijami, ostati konkurenčen in se primerno razviti. Turistična literatura se začenja osredotočati na destinacije kot enote analize, zaradi dejstva, da je v očeh vedno več turistov, ki vedno bolj zahtevajo integralno destinacijsko izkušnjo, destinacija razumljena kot entiteta. Kljub dejstvu, da je bilo v zadnjem desetletju opravljenih veliko raziskav o destinacijah in njihovi konkurenčnosti in razvoju, je literatura o gorskih destinacijah še vedno v zaostanku glede oblikovanja in testiranja modela, ki vključuje vidike okolij in inovativnosti gorskih destinacij in ustreznega razvoja gorskih destinacij.

Doktorska disertacija zapolni vrzel v literaturi z identifikacijo pomembnih elementov in faktorjev okolij in inovativnosti gorskih destinacij ter elementov in faktorjev, pomembnih za merjenje razvoja gorskih destinacij. Ti pomembni elementi in faktorji niso identificirani samo s strani raziskovalcev s področij inovativnosti v turizmu, destinacijskega menedžmenta in gorskih destinacij, in vseh deležnikov v gorskih destinacijah; konstrukte okolij, inovativnosti in razvoja gorskih destinacij, sestavljene iz identificiranih pomembnih elementov in faktorjev, se testira glede njihovih povezav, kar doprinese k znanju o učinku okolij in inovativnosti na razvoj destinacij in o učinku okolij na inovativnost. Raziskava je zato sestavljena iz dveh glavnih delov: v prvem delu so identificirani pomembni elementi in faktorji okolij, inovativnosti in razvoja gorskih destinacij, v drugem pa so raziskana razmerja med temi konstrukti.

Za prvi del raziskave je bil izveden pregled literature z namenom, da se identificira teoretično osnovane elemente in skupine elementov okolij, inovativnosti in razvoja gorskih destinacij. Teorija o razvoju destinacij, raziskave o gorskem turizmu in modeli konkurenčnosti destinacij so bili upoštevani pri izoblikovanju teh elementov in njihovih skupin. Upoštevani so bili vsi udeleženci in vidiki destinacij. Vse to nudi močno osnovo za identifikacijo elementov in posledičnih faktorjev v okoljih, inovativnosti in razvoju, ki pokrivajo vse ključne dimenzije destinacij. V namen določitve pomembnih elementov in faktorjev so bile izvedene spletne ankete na mednarodnem vzorcu raziskovalcev s področja turizma, menedžerjev gorskih destinacij in ostalih deležnikov v gorskih destinacijah.

Raziskave so bile narejene z namenom, da se identificira pomembne elemente in faktorje okolij, inovativnosti in razvoja gorskih destinacij. Faktorji, ki sestojijo iz identificiranih pomembnih elementov, so bili ugotovljeni z eksplorativno faktorsko analizo in lahko pripomorejo k boljšemu razumevanju dimenzij v ozadju okolij, inovativnosti in razvoja gorskih destinacij. Prvi del raziskave zato ni osnovan na tehniki Delphi, temveč zavzema svež in inovativen pristop. Rezultati odgovorijo na raziskovalna vprašanja, ki so bila osredotočena na iskanje pomembnih elementov v okoljih, inovativnosti in razvoju gorskih destinacij, in na vprašanje, ali identificirani pomembni elementi oblikujejo koherentne faktorje okolij, inovativnosti in razvoja gorskih destinacij.

- Rezultati empirične analize kažejo, da so identificirani faktorji v okoljih tehnološko okolje, družbeno-kulturno okolje, naravno okoljo in politično ter pravno okolje. Tehnološke spremembe so v zadnjem desetletju izjemno vplivale na destinacije. Zlasti gorske destinacije se morajo prilagoditi in sprejeti spremembe v tehnološkem okolju, da ostanejo konkurenčne in izpolnjujejo spreminjajoče se zahteve turistov. Tehnologija lahko gorskim destinacijam celo omogoči trajnostni razvoj. Družbeno-kulturno okolje je prav tako pomembna determinanta uspeha gorske destinacije. Lokalna populacija ima morda karakteristike, ki privlačijo turiste, ali pa predstavlja pomemben dejavnik v izkušnji turistov in na tak način vpliva na razvoj destinacije. Naravno okolje je verjetno najbolj pomemben faktor v gorskih destinacijah, saj večina turistov svojo odločitev glede obiska gorske destinacije sprejme na podlagi značilnosti naravnega okolja. Seveda pa je tudi politično in pravno okolje bilo zaznano kot faktor, ki vpliva na razvoj gorske destinacije prek političnega in zakonodajnega sistema. Okolja v gorskih destinacijah kažejo visoko občutljivost na okoljske vplive, ki so v gorskih destinacijah bolj očitni kot v drugih destinacijah. Prav zaradi tega morajo biti tehnološko ter politično in pravno okolje v podporo trajnostnemu razvoju destinacije.

- Nadalje rezultati kažejo, da inovativnost gorskih destinacij vključuje faktorje družbeno-kulturna trajnost in sodelovanje deležnikov, okoljska trajnost (naravno okolje) in proaktivnost. Družbeno-kulturna trajnost je bila identificirana kot faktor, ki prispeva k inovativnosti gorske destinacije in razvoju zaradi kompleksnosti gorskih destinacij, kar se tiče njihovih družbeno-kulturnih vidikov in potrebe po vključevanju deležnikov pri sprejemanju odločitev kot tudi vsesplošne potrebe po izboljšanju kakovosti življenja v

gorskih destinacijah. Še en faktor inovativnosti, ki je bil identificiran v raziskavi, je okoljska trajnost, ki zadeva le naravno okolje, ki ga je treba upoštevati pri turističnem razvoju in ga ohraniti za prihodnje generacije; uporabiti je treba trajnostna načela. Zadnji faktor znotraj konstrukta inovativnosti gorskih destinacij je proaktivnost, ki se v največji meri ukvarja s strateško in tehnološko inovativnostjo; obe sta namreč ključni za izboljšanje inovativnosti in razvoja gorskih destinacij. Razlikovalna karakteristika gorskih destinacij je zato potreba po inovativnosti, kar se tiče trajnosti, strategij in tehnologije, ki so se izkazale za glavne pospeševalce inovativnosti in razvoja gorskih destinacij.

- V raziskavi so bili identificirani tudi elementi in faktorji, ki merijo razvoj gorske destinacije na trajnosten in holističen način. Faktorji, ki merijo razvoj gorskih destinacij, so ohranjanje naravnega okolja, družbeno-kulturna blaginja, turistični promet in potrošnja ter zadovoljstvo turistov. Raziskava zato identificira različne vidike razvoja gorskih destinacij in določi orodja za merjenje le-teh. Ohranitev naravnega okolja je bila identificirana kot faktor, ki vključuje pomembne elemente za merjenje trajnostnega razvoja gorske destinacije z vidika naravne dimenzije. Ker sta bila tako naravno okolje kot inovativnost v odnosu do okoljske trajnosti identificirana kot pomembna faktorja okolij in inovativnosti gorskih destinacij, je logična posledica, da se začne uporabljati mere ohranjanja naravnega okolja. Mere družbeno-ekonomske blaginje so prav tako ključne, saj bi končni cilj trajnostnega razvoja moral biti izboljšanje kakovosti življenja lokalnih prebivalcev. Turistični promet in potrošnja je faktor, ki meri razvoj gorske destinacije z ekonomskega vidika, medtem ko zadovoljstvo turistov poskrbi za merjenje razvoja gorske destinacije s perspektive turista, ki je tudi pomembna determinanta razvoja gorske destinacije. Razlikovalna karakteristika gorskih destinacij je velik pomen merjenja trajnostnega razvoja, kot na primer ohranitev naravnih bogastev in blaginje lokalnega prebivalstva. Podobno kot pri ostalih vrstah destinacij, so tudi tu pomembni število turistov, njihova potrošnja in njihovo zadovoljstvo.

Drugi del raziskave raziskuje povezave med konstrukti okolij, inovativnosti in razvoja gorskih destinacij. Pregled literature kaže na to, da bi ti trije konstrukti znali vplivati drug na drugega. Gorske destinacije se soočajo z ekonomsko negotovostjo in pritiski, da postanejo bolj trajnostne. Okolja gorskih destinacij so ranljiva in zelo specifična. Gorske destinacije običajno vsebujejo elemente izrednih naravnih lepot, ki so dovzetni za veliko negativnih vplivov. Zato morajo gorske destinacije ovrednotiti svoja okolja in jih poskušati izboljšati, kar posledično lahko izboljša razvoj destinacij. Primerni okoljski pogoji lahko destinacijam tudi pomagajo osredotočiti se na pomembne inovativne dejavnosti z vso potrebno podporo, ki znatno poveča stopnjo uspeha inovativnosti. Raziskava, izvedena v šestih evropskih državah z večjim številom gorskih destinacij, potrjuje hipoteze, ki se osredotočajo na povezave med konstrukti okolij, inovativnosti in razvoja gorskih destinacij znotraj MIGD. Hipoteze so predvidevale, da okolja gorskih destinacij pozitivno vplivajo na inovativnost gorskih destinacij, da okolja gorskih destinacij pozitivno vplivajo na razvoj gorskih destinacij, da inovativnost gorskih destinacij pozitivno vpliva na razvoj gorskih destinacij in da inovativnost gorskih destinacij delno posreduje pri povezavi med okolji gorskih destinacij in razvojem gorskih destinacij.

- Drugi del raziskave potrjuje, da dobro stanje okolij pozitivno vpliva na inovativnost gorskih destinacij.
- Prav tako dobro stanje okolij pripomore k razvoju gorskih destinacij.
- Dobro stanje inovativnosti gorskih destinacij pozitivno vpliva na razvoj gorskih destinacij.
- Raziskava potrjuje, da je vpliv okolij na razvoj gorskih destinacij delno posredovan s strani inovativnosti, saj so bili izpolnjeni vsi pogoji za to; povezave so značilne in vpeljava posrednika zmanjša povezavo med neodvisnim in odvisnim konstruktom. Posrednik ima v takem primeru delni vpliv, saj so neposredne povezave še vedno značilne.

Teoretični in praktični prispevek

Prvi del raziskave prinaša prispevek k poznavanju gorskega turizma tako, da podrobno analizira vsa področja gorskega turizma. Informacije o okoljih, inovativnosti in razvoju gorskih destinacij so posredovali tako deležniki na področju gorskih destinacij kot tudi raziskovalci s področja destinacijskega menedžmenta, gorskih destinacij in inovativnosti. Rezultati se naslanjajo na njihova mnenja in predstavljajo vrednost za raziskovalce in tudi za predstavnike s področja javnega in zasebnega sektorja v turizmu. To je koristen prispevek tako za raziskovalce turističnih destinacij, inovativnosti in gorskega turizma kot tudi za svetovalce, destinacijske menedžerje, lokalne turistične organizacije, upravljavce smučišč, hotelske menedžerje, lokalno vlado, menedžerje prireditev, agencije, nevladne organizacije, upravljavce znamenitosti in ostale sektorje, kot na primer transport, mednarodne organizacije, gospodarske zbornice, menedžerje kongresnih centrov, podjetja, ki pripravljajo pogostitve, in ostale organizacije. Raziskava ponuja produktivne ugotovitve tistim, ki raziskujejo področja gorskega turizma, turističnih destinacij in inovativnosti. Zapolnjuje vrzel, ki se kaže v obstoječi literaturi na področju identifikacije pomembnih elementov okolij, inovativnosti in razvoja gorskih destinacij ter pri združevanju le-teh v faktorje. Premik v smeri trajnostnega razvoja se je zgodil v zadnjih letih in sodelujoči v raziskavi so nakazali potrebo po vključevanju elementov trajnostnega razvoja. Raziskava kaže na to, da se obstoječi modeli konkurenčnosti destinacije lahko izboljšajo s tem, da vključimo inovativnost in bolj jasno definiramo turistična okolja v destinacijah.

Rezultati imajo tudi praktično vrednost, saj destinacijskim menedžerjem in deležnikom v gorskih destinacijah prinašajo novo znanje. Mnoge gorske destinacije imajo problem pri ustreznem razvoju turizma in prilagajanju spreminjajočim se razmeram. Nekatere destinacije imajo težave tudi s privabljanjem turistov in ohranjanjem le-teh. Identificirani elementi in faktorji pokrivajo različne vidike destinacij in lahko olajšajo prizadevanja na področju izboljšanja splošnih pogojev na destinaciji. Prav tako lahko izboljšajo delovanje posameznih sektorjev v destinaciji. Identificirani pomembni elementi in faktorji lahko pomagajo, da se destinacije ponovno uveljavijo tako, da izboljšajo privlačnost, menedžment in marketing; prav tako lahko prispevajo k temu, da destinacije izboljšajo okolja in povečajo prisotnost inovativnosti. Vse našteto lahko vodi k izboljšanemu razvoju destinacije. Destinacije lahko

uporabijo rezultate prvega dela raziskave v procesu odločanja o aktivnostih in načinih doseganja sinergij na področju sodelovanja in sprejemanja odločitev.

Drugi del analize prinaša raziskovalcem in destinacijskim menedžerjem informacije o povezavah med pomembnimi determinantami razvoja destinacije. Odgovore na vprašanja v zvezi s stanjem okolij, inovativnosti in razvoja gorskih destinacij so dali menedžerji gorskih destinacij v Avstriji, Franciji, Italiji, Nemčiji, Sloveniji in Švici. Raziskava doprinaša k znanju o vplivu izboljšav v okoljih in na področju inovativnosti na razvoj gorskih destinacij v teh deželah. To je dragocen prispevek k znanju, ki ga imajo raziskovalci na področjih destinacijskega menedžementa, gorskih destinacij in inovativnosti, posebno zaradi dejstva, da je bilo na področju povezav med okolji, inovativnostjo in razvojem občutiti pomanjkanje raziskav. Ta raziskava torej postavlja temelje za izboljšanje poznavanja učinkov okolij in inovativnosti na razvoj destinacij in tako predstavlja dobrodošel dodatek k obstoječim modelom konkurenčnosti destinacije. Raziskava izvira iz teh modelov in jih dopolnjuje z vključevanjem inovativnosti. Poleg tega so okolja turističnega sistema destinacij bolj jasno predstavljena. Ugotovitve, povezane z vplivom in posredovalnim učinkom inovativnosti na razvoj destinacij pa kažejo na to, da bi bilo treba inovativnost upoštevati v diskusijah o konkurenčnosti in razvoju destinacij.

Pomembnost drugega dela raziskave za menedžerje gorskih destinacij in ostale deležnike v gorskih destinacijah je v tem, da omogoča destinacijam, da ovrednotijo stanje, v katerem so okolja, stanje njihovih inovacijskih aktivnosti in stopnjo, na kateri je njihov razvoj, z zavedanjem medsebojnih vplivov. Ta del ponuja način identifikacije problematičnih področij, da bi izboljšali trajnostni razvoj destinacij. Ugotovljene povezave med posameznimi konstrukti lahko pomagajo destinacijskim menedžerjem, da bolje usmerjajo proces sprejemanja odločitev, da se ustrezno odzivajo na okolja gorskih destinacij ter da spodbujajo inovativnost, ki bo posledično doprinesla k trajnostnemu razvoju gorske destinacije. Na podlagi MIGD lahko gorske destinacije ocenjujejo delovanje posameznih elementov okolij, inovativnosti in razvoja gorskih destinacij, skupaj z njihovo pomembnostjo. Tak pristop lahko bolje pokaže na prednosti, slabosti, priložnosti in nevarnosti. Prav tako lahko pripomore k pripravi dobrih poslovnih in strateških načrtov v odgovor na situacijo v okolju. Destinacijam daje možnost, da ugotovijo, kateri dejavniki so ključni in se je potrebno na njih osredotočiti, na katerih področjih so se izkazali ter katera področja je treba izboljšati, da se bo to odrazilo na rasti in trajnostnem razvoju. Vrednotenje pomembnih elementov in faktorjev okolij, inovativnosti in razvoja, skupaj z zavedanjem njihovega medsebojnega vpliva, lahko da tistim, ki sprejemajo pomembne odločitve na destinaciji, možnost, da izpostavijo, prilagodijo ali uvedejo aktivnosti, ki bodo zagotovile počitniško izkušnjo, v kateri bodo turisti uživali. Ugotovitve dajejo gorskim destinacijam možnost, da se bolje posvetijo izzivom, ki jih prinaša hitro spreminjajoče se poslovno okolje. Prav tako jim daje možnost, da se postavijo po robu ekonomski negotovosti in podprejo trajnostni razvoj destinacije.

Omejitve raziskave in priporočila za nadaljnja raziskovanja

Omejitev raziskave je, da je bila izvedena le na ravni celotne destinacije. Raven podjetja in raven destinacije se lahko razlikujeta in te razlike bi bilo treba v prihodnje raziskati. Identificirani elementi in faktorji okolij, inovativnosti in razvoja so lahko različno pomembni za destinacijo kot celoto in za podjetje. Taka raziskava bi lahko tudi odgovorila na vprašanje manjkajočega ekonomskega okolja. Drug pristop k reševanju tega problema pa bi bila ponovitev raziskave v drugem časovnem obdobju, da bi preverili, ali obstaja razlika med mnenji glede pomembnosti ne samo okolij, temveč tudi inovativnosti in razvoja gorskih destinacij. Takšna analiza, ki se ponavlja v različnih obdobjih, omogoča vključevanje dinamičnega vidika (Frees, 2004).

Druga omejitev je dejstvo, da je raziskava preučevala mnenja samo na strani ponudbe. Otto in Ritchie (1996) sta bila mnenja, da bi uspešnost lahko določili tudi na podlagi najbolj pomembnih dejavnikov konkurenčnosti, omenjenih s strani turistov. Dwyer in Kim (2003) sta prav tako izrazila potrebo po vključevanju mnenja turistov. Zagovarjala sta mnenje, da bi bilo treba raziskati povezave med željami potrošnikov in značilnostmi destinacije, saj bi tako lahko povečali družbeno-ekonomsko blaginjo. Nadaljnje raziskave bi torej morale poskusiti določiti pomembne dejavnike okolij, inovativnosti in razvoja gorskih destinacij, kot jih vidijo turisti. Glede na njihova mnenja bi lahko določili tudi tržne segmente. Dwyer in Kim (2003) sta bila mnenja, da je treba razviti ustrezne načine merjenja konkurenčnosti destinacije z vidika različnih vrst turistov. Enright in Newton (2005) ugotavljata, da bi lahko »pristop, ki bolj natančno preučuje tržne segmente, ponudil dragocene in uporabne rezultate« z vidika identifikacije dejavnikov konkurenčnosti destinacije. Dodana vrednost razširjene raziskave, ki vključuje povpraševalsko stran, bi bila v tem, da bi lahko dobili podatke obeh strani, torej povpraševanja in ponudbe. Tak pristop bi lahko bil najbolj natančen (Formica & Uysal, 2006).

Glede na to, da je opravljena raziskava kvantitativna, bi lahko prihodnje raziskave vključevale elemente kvalitativnih raziskav. V družbenih vedah je dobro uporabljati oba tipa raziskav, saj se take kombinirane metode lahko bolje spoprimejo z raziskovanimi temami in dajejo odgovore, ki jih samo kvantitativne ali samo kvalitativne raziskave, opravljene ločeno, ne bi mogle dati (Tashakkori & Teddlie, 2010). Kvantitativne podatke, uporabljene v tej raziskavi, se lahko prilagodi v podatke, ki jih lahko analiziramo kvalitativno (Tashakkori & Teddlie, 1998). Izvajanje raziskave je bilo oteženo zaradi gospodarske krize; zaradi tega je treba rezultate posebno skrbno interpretirati. Prav tako je treba vsem deležnikom v gorskih destinacijah rezultate raziskave predložiti v pogled, da jih potem lahko obravnavamo v delno strukturiranih intervjujih. Pechlaner in Volgger (2012) ter Pechlaner, Volgger in Herntrei (2012) so avtorji, ki so predlagali, da je za take primere zelo dobro uporabiti metodo GABEK, ki lahko pomaga pri prenosu teoretičnih konceptov v prakso in lahko omogoči kvalitativno raziskovanje, ki je osredotočeno na prakso.

Raziskava je posebej prilagojena gorskim destinacijam, ki se razlikujejo od drugih destinacij v več vidikih, ki so prikazani v pregledu literature. Gorske destinacije so posebno ranljive v

primeru človeških posegov v naravno in družbeno-kulturno okolje; vpliv klimatskih sprememb in beg možganov sta dva taka primera. Estetika naravnega okolja ima odločilno vlogo, prav tako značilnosti pokrajine, ki omogočajo različne aktivnosti na prostem. Kljub temu pa ima model možnost za posplošitev. Tak model bi namreč lahko uporabili pri identifikaciji pomembnih elementov in faktorjev v drugih tipih destinacij. Seveda pa bi v takem primeru bilo treba prilagoditi model; elemente in faktorje bi bilo namreč treba prilagoditi posebnemu tipu opazovane destinacije. Model bi tako lahko prilagodili za študijo podeželskih destinacij. Kot rečeno, bi lahko s prilagoditvijo modela omogočili njegovo rabo v ne samo gorskih, temveč v različnih tipih destinacij.

Drugi del raziskave ima podobne omejitve kot prvi del raziskave. Skupna omejitev je v tem, da sta obe osredotočeni samo na raven destinacije; raven podjetij v destinaciji se lahko razlikuje tudi glede na merila uspešnosti poslovanja. Tudi tukaj v raziskavi ni upoštevan vidik povpraševanja. Prihodnje raziskave se tako lahko osredotočijo na ocene potrošnikov glede značilnosti destinacij. Vendar pa ima ta pristop tudi dokajšnje omejitve, kot na primer, kako dobro turisti poznajo elemente destinacije. Vendar pa bi lahko s skrbno in konsistentno prilagoditvijo elementov za potrošnike občutno zmanjšali te prepreke. V nasprotju s prvim delom raziskave pa drugi del raziskave ne upošteva mnenj ostalih deležnikov v gorskih destinacijah, saj se osredotoči samo na mnenja destinacijskih menedžerjev gorskih destinacij. Zaradi tega bi bilo zelo zanimivo v prihodnje raziskati mnenja ostalih deležnikov v gorskih destinacijah. S takim pristopom bi bilo možno primerjati dobljene razultate različnih skupin deležnikov.

Priporočilo za prvi del raziskave glede repliciranja raziskave v drugem časovnem obdobju se nanaša tudi na drugi del raziskave. Merjenje delovanja okolij in inovativnosti gorskih destinacij ter vrednotenje razvoja gorskih destinacij v drugem obdobju ustvari dinamičen pogled, saj povezave preučujemo v različnih časovnih obdobjih (Frees, 2004). Poleg tega je možno, da se vpliv okolij in inovativnosti odrazi na razvoju gorske destinacije šele čez določeno časovno obdobje. Kljub temu pa bi bilo vključevanje različnih časovnih obdobij v model LISREL preveč zapleteno (Vaughan, 1999). Seveda pa so v prihodnjih raziskavah mogoče izboljšave na tem področju in tako bi lahko tudi vključevanje zapoznelega vpliva ponudilo še bolj natančne rezultate.

Nadaljnje raziskave bi se lahko osredotočile tudi na pretvarjanje kvantitativnih podatkov v take podatke, ki so primerni za kvalitativne analize, saj je drugi del raziskave, tako kot prvi del, kvanitativen. Kvalitativno raziskovanje dopolnjuje in izboljšuje rezultate, dobljene s kvantitativnim raziskovanjem (Tashakkori & Teddlie, 2010). Glede na to se lahko raba takih kombiniranih metod izkaže za najbolj natančno pri vrednotenju vpliva okolij in inovativnosti na razvoj gorskih destinacij. Za potrebe kvalitativne analize bi lahko uporabili metodo GABEK (Pechlaner & Volgger, 2012; Pechlaner et al., 2012).

Drugi del raziskave je grajen na odgovorih menedžerjev gorskih destinacij. Velikost vzorca (N = 127) je pomanjkljivost raziskave in vpliva na mere prileganja. Glede na to, da je bil vzorec majhen, so bila preverjena le razmerja med konstrukti okolij, inovativnosti in razvoja

gorskih destinacij. V kolikor bi se odločili v raziskavo zajeti večji vzorec, bi lahko to pomanjkljivost odpravili. To bi močno izboljšalo vedenje o povezavah med faktorji v okoljih, inovativnosti in razvoju gorskih destinacij. Po drugi strani pa lahko v prihodnjih raziskavah pretehtamo, ali ne bi vključili modela MIGD v širši model, ki bi bil osredotočen še na več vidikov in vplivov v gorskih destinacijah.

Ena od omejitev je tudi dejstvo, da je bil model preverjen samo na gorskih destinacijah v Evropi. Karakteristike gorskih destinacij se razlikujejo od karakteristik ostalih destinacij, vendar lahko tudi med samimi gorskimi destinacijami obstajajo razlike glede na njihovo lokacijo. Da bi potrdili možnost širše uporabe modela, bi bilo treba podobne študije ponoviti v različnih okoljih, na primer v gorskih destinacijah v Severni Ameriki. Čeprav je model dobro prilagojen posebnostim gorskih destinacij, bi ga lahko z manjšimi prilagoditvami uporabljali tudi za merjenje vpliva okolij in inovativnosti turističnih destinacij na razvoj drugačnih tipov destinacij. Model torej ima možnost posplošitve, čeprav so potrebne dodatne raziskave za vsak novi tip obravnavane destinacije, da bi ugotovili posebne elemente, značilne za izbran tip destinacije.

Drugi del raziskave je pomemben zaradi akademskega prispevka k postopku vrednotenja vpliva okolij gorskih destinacij na inovativnost gorskih destinacij, vpliva okolij in inovativnosti na razvoj gorskih destinacij ter identifikacije delnega posredovanja inovativnosti pri povezavi med okolji in razvojem goskih destinacij. Vse našteto predstavlja osnovo za nadaljnje raziskave na področju gorskih destinacij. Prav tako raziskava lahko služi kot osnova za nadaljevanje raziskav različnih dimenzij konkurenčnosti destinacije. Raziskava zagovarja mnenje, da bi bilo dobro inovativnost vključiti v model konkurenčnosti destinacije in da bi bilo dobro bolje definirati okolja turističnih destinacij pri merjenju konkurenčnosti in razvoja destinacije. Raziskava torej nadgrajuje obstoječe modele konkurenčnosti destinacije; nadaljnje raziskave lahko preverijo razlike in pojasnjevalno moč klasičnih modelov konkurenčnosti destinacij in modela, ki vključuje inovativnost.