

2022

Smart City Tours as an Innovative Way to (re)Discover Urban Environments in an Italian Context

Miriam L. Weiß

Eurac Research - Institute for Regional Development, miriam.weiss@eurac.edu

Follow this and additional works at: <https://arrow.tudublin.ie/ijtgr>



Part of the [Geography Commons](#), [History Commons](#), [Tourism Commons](#), and the [Tourism and Travel Commons](#)

Recommended Citation

Weiß, Miriam L. (2022) "Smart City Tours as an Innovative Way to (re)Discover Urban Environments in an Italian Context," *International Journal of Tour Guiding Research*: Vol. 3: Iss. 1, Article 4.

doi:<https://doi.org/10.21427/hm9e-wh72>

Available at: <https://arrow.tudublin.ie/ijtgr/vol3/iss1/4>

This Academic Paper is brought to you for free and open access by the Current Publications at ARROW@TU Dublin. It has been accepted for inclusion in International Journal of Tour Guiding Research by an authorized administrator of ARROW@TU Dublin. For more information, please contact arrow.admin@tudublin.ie, aisling.coyne@tudublin.ie, gerard.connolly@tudublin.ie.



This work is licensed under a [Creative Commons Attribution-NonCommercial-Share Alike 4.0 License](#)

Smart City Tours as an Innovative Way to (re)Discover Urban Environments in an Italian Context

Cover Page Footnote

I would like to thank the tour guiding association in South Tyrol for getting involved in the subject, for its openness and favorable support of the project. Thanks also to Professor Betty Weiler for valuable feedback in the writing phase and Eurac Research which has offered the enabling framework to carry out this research.

Smart City Tours as an Innovative Way to (re)Discover Urban Environments in an Italian Context

Miriam L. Weiß

Eurac Research, Institute for Regional Development, Italy
miriam.weiss@eurac.edu

This article explores the foundations upon which to build innovation and further professionalise the tour guiding sector in an Italian context. It is based on a cooperation initiative started in March 2020 just at the beginning of the Covid-19 pandemic which proposes smart city tours as innovative, sustainable, and creative ways to (re)discover urban environments with the expected impact to make tour participants think, influence post-tour behaviour towards sustainability, and to provide a differentiated view of a visited place. The study is designed as a formative evaluation prior to introducing measures that allow further exploitation of the potential for smart city tours by looking at a set of innovation characteristics in tourist guiding, organisational aspects, marketing, and prospective demand. Results demonstrate that the foundations for introducing smart city tours are in place. The city of Bolzano in the Autonomous Province of Bolzano - South Tyrol has extensive thematic diversity but also has experienced licensed tour guides and tour managers, who receive continuous training on innovative topics, didactics, and technologies. In terms of organisation and marketing, the research points to areas with a need for further development, and potential areas of interest for different target groups in smart city tours can be demonstrated.

Key Words: tour guiding, South Tyrol, smart city tours. transdisciplinary approach, sustainable tourism

Introduction and Background

In today's tourism industry, dominated by experience-economy, visitors are looking for meaningful experiences at a destination or visited place that can make a difference in their lives while helping to sustain visited communities and environments (Weiler & Black 2015b:161; Pine & Gilmore, 2011; Widtfeldt, Meged & Kaae, 2021); i.e. tourist activities that contribute to the United Nations Sustainable Development Goals. We also observe tourists looking to live like locals when visiting and locals looking for leisure activities in their own city, e.g. when travelling away from home is voluntarily waived or restricted (Richards, 2021; Sommer 2018).

Tour guides, in their role as interpreters of tour participants' experiences, are in the same way looking for ways to rendering tourism more sustainable and exploiting their leeway to conceptualise tours and shape contents (Weiler &

Black, 2015a; Hu & Wall 2012). They seek to offer tours that are more environmentally friendly, more social, closer to the locals, less disturbing of the visited places, more creative and tours that have a lasting impact on participants' behaviour (Christie & Mason, 2003). Scientific studies recognise that tour guides and managers have significant room for manoeuvre whereby guides can change visitors' understanding of sustainability and encourage sustainable behaviour through their explanations (Weiler & Black, 2015a, 2015 b; Weiler & Kim, 2011; Hu & Wall, 2012; Zatori *et al.*, 2018; Christie & Mason, 2003).

In recent years, various types of guided city tours have added to the touristic offer of classical historic city tours, proposing innovative ways for foreign, non-foreign visitors, and locals to (re)discover urban environments. Literature reveals that innovative tours emerge in response to global (mega)trends of their time in that they cover current novel themes and apply didactic and technological innovations

(Weier, 2005; Rátz & Irimiás, 2016; Winsky, 2020), specifically tailored to place. In this paper, the author intends to elicit the principles and processes for introducing such innovative ways to (re)discover urban environments which she coins smart city tours in an Italian context.

In the urban context, smart implies resource efficiency, physical and emotional wellbeing, freedom of choice in access and use of spatial structures and facilities, and overall satisfaction in the sense of a better life in (urban) society (BMVI, 2017). In terms of smart urban tourism, sustainability, accessibility, digitalisation, cultural heritage, and creativity are all central to conceptually refining the term (Cocchia, 2014; European Commission, 2020). Since 2018, the European Union initiative ‘European Capitals of Smart Tourism’ awards innovative and intelligent solutions on an annual basis, that seek

to strengthen tourism-generated innovative development in European cities and their surroundings, increase their attractiveness, and foster economic growth and job creation (European Commission, 2020).

The program defines a smart tourism capital as a destination that

[facilitates] access to tourism and hospitality products, services, spaces and experiences through ICT-based tools [and which] fosters the development of entrepreneurial businesses and their interconnectedness (ibid.).

New technologies remain key in tourism. Web applications, booking sites, artificial intelligence, and virtual reality have also gained momentum in tourist guiding, before, but increasingly since the beginning of, the Covid-19 pandemic. In Italy, where this study is undertaken, one of the State’s recent responses to this trend is the *Italian National Recovery and Resilience Plan* (PNRR, Italian Republic, 2021). It intends *inter alia* to reform the organisation of the tourist guide profession and to invest in a digital tourism hub to allow

integrating the entire tourism ecosystem composed of tour operators, businesses, and institutional stakeholders to innovate

and connect digitally the supply and promotion of tourism and the country itself, enrich, expand, and improve the offered services and support tourist choices in trip planning (Italian Republic, 2021, author’s translation).

In the context of tourist guiding, this ‘hub’ will expand the portfolio of services available to the tourist professions (tour guides and tour managers), identify digital services for tour guides (e.g. virtual tours with the use of artificial intelligence, customer satisfaction, etc.), offer training and accompanying actions to prepare itineraries, train guides as ambassadors, foster communities for the exchange of ideas, and introducing management and loyalty tools for tour guides. At the time of this paper’s publication, it remains to be seen how this translates into concrete activities and outputs, but, the overall aim is to streamline and unify Italy’s touristic marketing.

Despite the most recent works on guided tours in urban contexts (Widtfeldt, Meged & Kaae, 2021; Nilsson & Zillinger, 2020), research on tour guiding in the context of urban tourism has been relatively under-researched (Weiler & Black, 2015b:170). The present article seeks to further close this research gap by providing insights from a medium-sized Alpine city located in a region with high tourism intensity, a case study of interest in similar settings.

The research assumes that Bolzano, capital of the Northern Italian Autonomous Province Bolzano - South Tyrol, offers sufficient thematic diversity for new tours, which can attract both visitors and locals. This depends however on networking, actor cooperation, and further guide training for successful realisation, in which job security for licensed guides has a high priority. The objective is to explore the foundations upon which to introduce smart city tours:

What are the thematic, organisational, and methodological requirements?

How should tours be developed?

Who should be involved?

How can cooperation among guides be strengthened and cooperation with relevant branches and services be facilitated?

Which measures should be deployed to raise awareness for smart city tours?

The study is designed as a formative evaluation prior to introducing measures that allow further exploitation of the potential for smart city tours.

The relevance of Smart City Tours – Conceptual Considerations

In line with global megatrends and today's experience economy, tour participants seek memorable, enjoyable, and meaningful experiences in which they can participate and be an active audience (Pine & Gilmore, 2011; Weiler & Black, 2015a; Richards, 2021). Tour participants want to get involved, get in touch with other participants and locals, and ultimately, make a sustainable contribution at a visited place. This pushes tourist guides to innovate and apply unconventional mediation methods to convey and reflect on knowledge while also addressing issues of criticism and controversy.

To conceptually categorise smart city tours, the author mainly draws on Weier's (2005) three fields of innovation of guided tours – themes, didactics, technologies – while considering the frameworks for interpretative guiding and sustainable development by Hu & Wall (2012) and urban eco-tours as introduced by Bancheva-Preslavskva and Dallmer (2020). The case of guide-entrepreneurs developing urban ecotourism in a Danish context by Widtfeldt, Meged and Kaae (2021) is also integrated into this model. These concepts and frameworks all address niches in tourist guiding and provide directional indications for smart city tours.

Hu & Wall's framework is all-encompassing from a sustainability point of view and positions the tourist guide at the centre. It provides many good starting points for defining what sustainable tour guiding should incorporate, looks strongly at the tourist guide's various roles and responsibilities but less at other actors with whom the guide should or

could cooperate to foster sustainability. Bancheva-Preslavskva and Dallmer focus on educational tours guided by young volunteers, who are not licensed guides; they are primarily, adolescents concentrating thematically on globalisation, responsible consumption, and sustainability. Widtfeldt, Meged and Kaae focus on the important links between tours, networking and collaboration (with a set of various actors), education and training. Weier maintains that all tours featuring innovations commonly offer the guest extraordinary new insights and represent a special experience with a high memory value (Weier, 2005:246). With his definition, he offers the broadest spectrum of what constitutes innovation in guided city tours so that nearly all city tour formats can be classified with it, including smart city tours. Instead of innovating in single fields, smart city tours intend to be innovative in all three, that is thematically, methodologically, and technologically. Thus, smart city tours should convey information in a way to evoke change and contribute to a socio-ecological transformation, leaving a sustainable impact on tour participants as well as the visited city, quarter or site as laid out in Table 1 – column three especially – and explained in detail below. To further explore the foundations, upon which to introduce smart city tours in an Italian context, the author also looks at the city's local and organisational framework conditions that also shape the innovation potential (tour development, tour provider, marketing, potential demand) (cf. Weier, 2005:252).

Smart city tours arouse interest among locals and visitors for different reasons. They guide participants off the beaten track. They tackle challenges and problems of a city. They open one's eyes to the invisible and hidden. They make people think. They seek to change thought patterns and to evoke change in people's behaviour. A tour has a distinctive *thematic* focus that is, for example, interesting for a participant's own professional or personal development, one that engages participants in discussion and shows alternatives to ingrained behavioural patterns. Such tours cover the major sites only tangentially or not at all, they take place on foot or by public transport, they visit small

Table 1: Characteristics of Smart City Tours

Field of Innovation	Explanation	Examples of Smart City Tours and Expected Impacts
Thematic	Themes tied to specific places, times, or activities; themes from the viewpoint of specific social groups or the perspective of specific disciplines / specialist fields	Problem-oriented topics; art in the public sphere; city construction projects renewable energies; mobility; sustainable housing; co-living / -housing communities; smart solutions in the city; create interest, generate new understanding, promote guest-local encounters; highlight and communicate the essence of a destination; visit uncommon places / city quarters; influence tourist behavior; consider local principles and codes; promote local (economic) cycles
Didactic	Tours appealing to the senses; tours for particular target groups or with particular actors	Guide small groups; supporting materials; ‘rules of conduct’; choice of alternative routes; stop at selected places; interactive & participatory engagement of participants; divert attention to the less obvious and to alternatives; raise awareness of background information, criticism, controversy; allow for discussion
Technology	Means of mobility or communication technologies	Sustainable means of transport (on foot, public transport, bicycle); create opportunities to visit city parts / quarters off-the-beaten-track

Based on Weier (2005) with own additions

independent stores, restaurants, local initiatives and the like with the aim to strengthen local cycles (cf. Winsky, 2020).

Given that smart city tours are not the classic sightseeing tour, they need to build on expertise in one or more specific field (or a combination), i.e. combining the tour guide profession with specialisms such as architecture, mobility, renewable energies, but also social welfare, social integration, and performing arts, to name just a selection. The approach to such tours has a transdisciplinary conceptualisation, drawing for example on actors commonly not at home with the tourism industry. This enables creative, collaborative, and dynamic environments in which new knowledge can be generated and recombined, a situation considered necessary for developing new products, services, or organisational models (Krätke, 2012 in Altenburg, 2014). This approach is evident in the face of crisis, like the persisting COVID-19 pandemic, where creativity is being considered key in transforming tourism. It is also evident in the context of ‘building back better’ – in a post-Covid world as Richards suggests (Richards 2020, 2021).

Didactically, smart city tour guides respond e.g. by guiding only small groups, by setting unexpected rules of conduct (like asking participants to switch off their smartphones and to not take any pictures) or asking people to draw impressions on a sketchpad whilst on tour with the guide. Mediation can also take place through acting, singing, or music. Guides involve the audience, engage in discussions, let people feel, smell, and taste the environment they are visiting.

Exemplary actors in such tours are – in cooperation with licensed guides – architects, cooperatives, scientists who jointly develop a tour, practitioners of public welfare; renewable energy experts, scientists and entrepreneurs who guide green energy tours; as well as experts on climate change informing on urban climate change adaptation or guiding to so called places of change which contribute to an eco-social transformation of (urban) society, as seen for example in Germany (Berlin, Freiburg, Munich) or the Netherlands (Amsterdam). Such tours provide different perspectives on a city, they seek not to disturb the local social and cultural environment but to contribute to the benefits of the

local population, taking a city's social and human capital into consideration (European Commission, 2020). In that sense, smart city tours also point towards trends like circular tourism, urban ecotourism, transformational tourism, and slow tourism (cf. Richards, 2021; Christie & Mason, 2003; Hu & Wall, 2012; Widtfeldt, Meged & Kaae, 2021).

From a *technological* point of view, tours can showcase innovations or approaches that turn a city into a smart city like information and communication technologies (ICT) that improve the quality of life or help reduce CO₂-emissions for example. Smart city tours should be easily findable, accessible, and bookable, both online and offline, for all age groups as well as people with limited physical mobility or intellectual ability.

The literature suggests that *demand* for smart city tours primarily stems from the local population or national visitors, as Rátz' assessment of innovative tours in Budapest shows (Rátz, 2017). Smart city tours prove particularly interesting to locals, who have long been overlooked as a target group by tourist destinations especially with regard to guided tours¹. Tour participants can be formed of classes from local schools, employees or delegations of local companies, students, or a professional audience, seeking more in-depth information about a certain topic or who consider it a training or team-building activity. For people from local communities, these tours can increase networking and cooperation opportunities.

While smart city tours certainly constitute a niche market, they have growth potential as shown in the case of the *StattReisen* association in Germany, founded as guide service in the 1980s targeting people who could not or did not want to go on vacation and travel to faraway places, e.g. for environmental, idealistic, or financial reasons (*StattReisen* is a play on words, it sounds similar to *Städtetour* – city break / trip – and means 'instead of travelling'). *StattReisen* tour providers are nowadays active in about 20 cities in Germany and Switzerland (Forum Neue Städtetouren E. V., 2020).

1 **Editor's Note** - see paper by Klaniczay on *Proximity Tourism in Budapest* in this volume

Most studies of smart city tours look at large cities, national capitals, or metropolises where demand for a variety of tour offers is generally greater. However, the size of a city does not necessarily determine the success or failure of a new city tour format, as German *StattReisen* also shows. Likely, a variety of factors plays a role in this, most notably the diversity of topics in a city and the resources which are available and can be mobilised to develop sustainable, innovative and creative city tour formats. This suggests that smart city tours can also arouse interest in smaller urban centres.

Methods and Data

From a perspective of preparing the tourist guiding service sector in the research focus area for the future, the study is designed as a formative evaluation with the aim of examining the preconditions for innovating and further professionalising the tour guiding sector (cf. Promberger *et al.*, 2006:45). The chosen evaluation strategy is a single case study approach that has a heuristic and explorative character (Yin, 2012). Applying qualitative and context-sensitive research methods, the author conducted participant observation, non-directive interviews, group discussions, expert interviews and an in-depth literature review (cf. Promberger *et al.*, 2006:150). Furthermore, context-specific factors (e.g. location and legal framework, market situation, existing ways of working, existing cooperation, embeddedness in the tourism industry) were considered. Results only consider internal validity in this single case and while they may apply in the context of external validity, this would be less robust. This is a shortcoming the author is aware of (Wollmann, 2000 in Promberger *et al.*, 2006).

Between March 2020 and May 2022, primary data were collected in 13 group discussions. Most of these discussions were with members of the tour guiding association committee, one discussion was in the presence of an external expert, one was a moderated online workshop. Four of the group discussions were in person while nine were virtual meetings. Eight non-directive (expert) interviews took place in March and November 2020, February, March,

July, two in August 2021, and one in May 2022. Of these, four were personal and four were virtual meetings. An informal exchange was initiated with the guide associations in the neighbouring regions during February 2021, over the phone.

Regarding the tools that were employed, a SWOT-Analysis on tour guiding practice in South Tyrol was carried out with tourist guides in July 2020. During the moderated online workshop in October 2020, tourist guides brainstormed conceivable innovative tour formats (thematically, didactically, technological) and discussed which framework conditions would need to be in place in organisational and legal terms. A market overview on guided tours in Bolzano was carried out in November 2020. Secondary tourism statistics have also been consulted and primary statistical data on guided tours in the city of Bolzano were collected. Finally, regional, national, and international best practice in urban tourist guiding was explored (October-November 2020).

The exploratory research in this paper is based on a cooperation initiative that started in March 2020 between the European Academy Bolzano-Bozen (Eurac Research) and the executive committee of the South Tyrolean Association of Tour Guides and Tour Managers - a project that is still ongoing at the time of publication. This bilateral approach was chosen based on the presumption that the association is key to introducing smart city tours as innovative ways to (re)discover urban environments. The research focused on the specific practice situation and its challenges in the fields of organisation, structure (themes, didactics, technologies) and target group identification, to understand perceptions, expectations, and to reveal development and cooperation possibilities as well as limitations.

Research Findings and Discussion: Foundations for Smart City Tours in an Italian Alpine city

A literature review and results of the moderated workshops reveals a set of opportunities for tourist guides to adopt and to develop their tour offer towards smart city tours. The Autonomous Province of Bolzano - South Tyrol lies at the border with Austria in the North and in the East and with Switzerland in the West. The city of Bolzano, capital of the province, with almost 108,000 residents, about 340,000 arrivals and more than twice as many overnight stays per year (ASTAT, 2020) – with a 3.2 to 1 ratio of guest over resident – is an attractive vacation, residential, and excursion location due to its northern European, Alpine and Mediterranean influences that are tangible in culture, architecture, and food. For this and for its high quality of life, residents value their city (Isetti *et al.*, 2021). Guests come for a (multiple) day trip or pass by the city on their way North or South.

Bolzano is home to several internationally recognised research institutions and enterprises, a university with trilingual education offerings, a congress and exhibition centre, a mix of industries and innovative manufacturing as well as being the starting point for mountain excursions by cable car. It has a historic city centre, though several central living spaces have

Figure 1: Map Showing Location of The Autonomous Province of Bolzano - South Tyrol



https://en.wikipedia.org/wiki/South_Tyrol#/media/File:South_Tyrol_in_Italy.svg

Figure 2: Panoramic View of Bolzano

By Georgij Michaliutinkl, CC BY-SA 4.0, <https://commons.wikimedia.org/w/index.php?curid=41920986>

developed in all of its five quarters. The industrial area, for long anonymous and shunned, has become a vibrant, creative, and clean part of the city and is hence now more frequented by people and public transport (Pechlaner *et al.*, 2016; Isetti *et al.*, 2021). Bolzano has many leisure time activities, green spaces, cable car stations, theatres, and museums. One of them, the Archaeological Museum, hosts the Iceman, a more than five-thousand-year-old mummy found 1991 in the South Tyrolean glacier.

Thematic, Didactic and Technological Innovations

Regarding *thematic innovations*, good examples of sustainable development and urban planning are available (public transport, cycle paths, regional products, organic farming, cooperative agricultural tourism, etc.), which offer the potential for gentle, individual, and unique tours that combine several branches, e.g. handicrafts with agriculture, trade, and tourism etc. Agricultural enterprises, including vineyards and wineries, in the neighbourhood and on the outskirts of the city supply the population with food at farmers' markets, introduce product innovations, and are important and noteworthy

connecting elements with the surrounding countryside as tourist guides suggested during the workshops.

Bolzano has industrial architecture and heritage, examples of art in public space, examples of climate change adaptation and mitigation that could be covered in a smart city tour addressing related problem issues and possible solutions, as underlined by two tourist guides, one of them specialised

Figure 3: Archaeological Museum, Bolzano - Home of the Ice Man

https://en.wikipedia.org/wiki/South_Tyrol_Museum_of_Archaeology#/media/File:BozenArchMuseum.jpg

in art history. Participants further mentioned opportunities for developing tours relating to social innovation initiatives, co-working spaces, and innovative handicrafts, that are well-embedded in local and regional networks like the sustainability network dedicated to the United Nations 17 Sustainable Development Goals. In recent years, large construction projects have been in planning or already implemented, usually accompanied by controversial discussions as common elsewhere, that could also be of interest to any visitor.

Due to its status as an Autonomous Province in Italy, South Tyrol has acquired a profound, internationally recognised expertise - the South Tyrolean Autonomy Model and the related protection of minorities – knowledge considered key by tourist guides in explaining South Tyrol's specific context and relations within Italy. Dedicated (learning) materials and podcasts have been conceptualised by experts that tourist guides can draw on. The minority, multilingual and multicultural aspects of the city in fact demonstrate a 'lived' autonomy. For tour guides, it would be interesting to combine places of experienced autonomy in a tour of Bolzano, as confirmed by a local expert on autonomy studies (personal interview, July 2021) as well as by a group of tourist guides (online, Oct. 2020).

In terms of *didactics*, the group discussions revealed that licensed tour guides and tour managers commonly apply interpretative guiding and storytelling to mediate background, impressions and experiences, to explain history and to show the major sites. Groups vary in size, however, guiding 30 participants and more is the norm. The pandemic required a reduction in numbers, a change highly appreciated by the guides as tours became more individual and less disturbing on the visited area, offering also the opportunity to convey more in-depth knowledge and provide time to deepen relations between group, guide, and local.

Guides regularly satisfy participants' interests in social issues such as everyday life, income conditions, coexistence of different cultures and dealing with minorities, housing prices, or dealing

with water scarcity. Where possible, e.g. on tours covering wineries, vineyards and farmer's markets, guides make the participants touch, smell, and feel the city. Their influence on route choice and designing the tour program remains very limited, however, as one tourist guide explained in a group discussion:

you often don't know who is coming [to the tour]. The bus is full, you don't recognise people well. The highlights of South Tyrol are simply 'ticked off'. We don't have much influence on what is shown and how. Bringing in the sustainability topic is difficult (July 2020).

A reason for this is that to a great extent, tourist offices and foreign tour operators determine the tour program in advance, without consulting guides.

In terms of *technological innovations*, tourist guides commonly guide by foot in or near the historic centre and seek to guide away from its congested parts. Very few tours lead to city parts off the beaten track. During the pandemic, some guides used headsets to maintain distance between participants. For Bolzano this was an innovation but was not viable for all guides in the long run due to impractical handling, the resulting impersonal distance between guide and participant and sometimes the poor quality of equipment. Guided tours to more remote parts of the city using sustainable means of transportation (e.g. city bus, bicycle) proved difficult to implement in recent years, as guided tours need to remain easily accessible for participants and thus, almost exclusively start centrally in the city centre. In the past, guided bike tours were abandoned for safety and insurance reasons. City tours, with few exceptions, cannot be booked or paid for online, yet, but this is a desirable objective. The tourist office (personal interview, Nov. 2020) as well as tourist guides, notices a certain resistance to technical innovations among guests but also among guides themselves, although portals such as *GetYourGuide*, *ToursByLocals*, *Airbnb Experiences* seem to have gained a foothold in the region, offering guided tours in Bolzano in an easily accessible manner (group discussion, Dec. 2020).

Organisation and Marketing

In general, innovations in all three areas are conceivable for the tourist guides so that a smart city tour offer could be developed. Important elements for implementation are further aspects such as organisation (tour development, tour provider), marketing, and demand.

Looking at *tour development*, tourist guides can choose which path to take during a tour; they are locally embedded and can draw on a wide network of local contacts in the tourism industry and at a policy level. But, they commonly have limited creative leeway in determining the itineraries or shaping the tour offer as mentioned above. The tourist office regularly evaluates the tour programs and develops a new one based on demand for tours over the past one to three years. New tours have a trial period but are soon removed from the program if demand remains low since 'our visitors want the classic tour even though new tour formats are on the program' as a representative of the tourist office maintained in a personal conversation (Nov. 2020).

Tourist guides as *tour providers* are most common in Bolzano, albeit some tour offers were established by non-licensed guides over the past few years which has repeatedly led to tensions on the tour guiding market. Licensed tourist guides have been organised in a loose association presided by an executive committee for the past 30 years. Efforts by the executive committee have led to professionalising the tourist guide service through legal regulation with the aim to offer a high-quality service to visitors that is in line with the objectives of South Tyrol's destination marketing organisation (DMO). A provincial law eventually defined the terms for the service professions tourist guide and tour manager (following European standard EN 15565:2008) and laid down the prerequisites and rules for obtaining a professional qualification (license). In 2022, there are about 230 licensed tourist guides and 250 licensed tour managers, while about 140 persons have obtained both licenses.

The association regularly offers further training for

their members, commonly on history and regional studies but also on personal skills and innovative technologies like renewable energies. It provides for a joint web presence in German, Italian and English and convenes with guide associations in the cross-border region to foster experience and knowledge exchange. Without an office and central secretary, and in absence of an online booking system, the organisation, management, and processing of tours lies mostly in the hands of the individual guides, factors that inhibit the association's flexibility to quickly respond and adapt to novel market trends.

As mentioned above, the majority of city tours in Bolzano are *marketed*, booked, and billed via the tourist office. Tours can also be booked with the city's tourist guide association. Some licensed guides receive orders via their own personal websites through a regular clientele of tour operators, hotels, or the tourist office, but most are dependent to a great extent on the latter. A common website or web application listing all tours available in the city that can be filtered, for example, by topic, date, duration, one's own interests, target group, etc. is not yet available in Bolzano or South Tyrol in general. For tourist guides eager to introduce and market their tours, such a portal would be

an important step forward in facilitating people to find other than the classic tours, book and pay in two clicks (workshop, Oct. 2020).

Estimating Demand

As for potential *target groups* for smart city tours, their characteristics can be defined and their numbers projected based on regional statistics, expert interviews, and by looking at tours in Bolzano offered by non-licensed guides. Schools (local), students, employees, delegations of local companies, families, visiting friends and relatives, people with a particular interest in sustainability, innovative solutions, socio-ecological transformation processes etc. can all be attracted by such tours. According to local statistics, about 20,600 pupils aged six through eighteen years attend the estimated 50-60 schools (elementary / middle / high schools, schools

for vocational training) in the city (ASTAT, 2021). Almost 4,300 students attend the Free University of Bolzano, attending about 30 courses, thematically ranging from innovation and entrepreneurship to lifelong learning, energy resources and energy efficiency, smart systems technologies, food sciences for innovation and authenticity, design and art.

About 3,140 participants registered for a guided city tour in 2019, based on numbers of the city's tourist office, though these cover only the ones booked through the tourist office and not those organised by inbound tour operators or private tours booked directly with a tour guide or tour manager. On International Tourist Guide Day, hundreds of locals seize the opportunity to attend a free guided tour of Bolzano (personal interview with president of South Tyrol's guides' association, March 2020). Walking tours on social housing (by non-licensed guides) facilitated more than 430 people on 50 tours during the summer of 2020 (Autonomous Province Bolzano-South Tyrol, 2021). Between 2009 and 2019, tours were offered to thousands of people (students, pupils, experts) to visit best practice examples of energy efficient housing, renewable energies and so on (personal interview with former tour leader, Aug. 2021). Since 2018, there are theme-specific tours by the Architecture Foundation on urban planning and architecture, addressing building typologies and styles, how they have been created by local history and culture and shaped by the city's geographical and geological conditions.

Concluding Remarks and Recommendations

This article proposes smart city tours as an innovative way to (re)discover urban environments and explore sustainable, innovative, and creative themes. The objective was to examine the preconditions for introducing smart city tours in a medium-sized Alpine town considering three innovation fields, organisational and marketing aspects, and estimating potential demand.

It is evident that Bolzano offers a thematic variety that already attracts locals and visitors, which could however, be further exploited if opportunities for exchange between licensed guides, institutions, and locals were seized more, and actor cooperation was fostered. This could also lead to an overall strengthening of the tour guiding element within destination management and the tourism industry. Didactically and technologically tourist guides demonstrate the ability to adapt to change and the willingness to continue training even if some innovations (technologies, means of mobility) may prove more difficult to introduce or meet greater resistance. Continuous training in terms of transformative guiding (Christie & Mason, 2003) is essential and should be further explored.

The greatest hurdles for the introduction of smart city tours seem to lie in the fields of interdisciplinary tour development, organisation and marketing, which is why Weier correctly pointed out that innovative tour offers are always shaped and possibly limited by the local framework conditions. The example of Widtfeldt, Meged and Kaae for urban ecotours possibly shows one feasible way for and describes the approach to developing and introducing a niche offer comparable to smart city tours. It could be worthwhile for Bolzano to investigate in more detail the transferability of an example like the Danish one to the Italian context since smart city tours provide opportunities for guides to diversify their job profile, for tour participants to shift their focus on sustainability, for cities to add value to places and help transforming society, and to support global and provincial efforts to foster sustainable tourism.

References

- Altenburg, M. (2014) Das Leitbild der Smart City und ihr Bezug zu innovationsfördernden Ansätzen. *Informationen zur Raumentwicklung*, Heft 1/2017, pp. 96-107.
- ASTAT (2020) Landesinstitut für Statistik/Istituto provinciale di statistica, Autonome Provinz Bozen/Südtirol Provincia Autonoma di Bolzano/Alto Adige (eds.) (2020). *Statistisches Jahrbuch für Südtirol 2020*. 36. Ausgabe
- ASTAT (2021) Gemeindedatenblatt. Bildung und Kultur.
- Autonomous Province Bolzano-South Tyrol (2021) *Bolzanism Museum zählt über 430 Besucherinnen*. <https://news.provinz.bz.it/de/news-archive/653665>. Accessed 9 March 2021.
- Bancheva-Preslavska, H. & Dallmer, J. (2020) Alternative Urban Eco Tours for Responsible Consumption and Sustainability – the Example of Bulgaria. In *European Journal of Sustainable Development*, 9, 3, pp. 416-424. DOI: 10.14207/ejsd.2020.v9n3p416
- BMVI Bundesministerium für Verkehr und digitale Infrastruktur (2017) *Smart Cities und Smart Regions für eine nachhaltige Raumentwicklung*. Berlin 2017.
- Christie, M. & Mason, P. (2003) Transformative Tour Guiding: Training tour guides to be critically reflective practitioners. *Journal of Ecotourism* 2 (1), 1-16.
- Cocchia, A. (2014) Smart and Digital City: A Systematic Literature Review. In Dameri RP, Rosenthal-Sabroux C (eds.). *Smart City. How to Create Public and Economic Value with High Technology in Urban Space*.
- European Commission (2020) *COMPENDIUM OF BEST PRACTICES '2019 & 2020 European Capital of Smart Tourism competitions'*. Available at <https://smarttourismcapital.eu/>. Accessed 1 December 2020
- Forum Neue Städtetouren e. V. (2020). Forum Neue Städtetouren. <http://www.stattreisen.org/start.html>. Accessed 1 October 2020.
- Hu, W. & Wall, G. (2012) Interpretative guiding and sustainable development: A framework. In *Tourism Management Perspectives* 4, pp. 80-85.
- Isetti, G., Ferraretto, V., Habicher, D., Scuttari, A., Erschbamer, G., Pechlaner, H., von Miller, V., Mariotti, P. & Iokhno, I. (2021) *MyBZ – Bolzano in movimento | Bozen in Bewegung – Abschließender Projektbericht*. Eurac Research, Bozen
- Italian Republic (2021) *Piano Nazionale di Ripresa e Resilienza*.
- Nilsson, J.H. & Zillinger, M. (2020) Free guided tours: storytelling as a means of glocalizing urban places. *Scandinavian Journal of Hospitality and Tourism* 20(1):1-16.
- Pechlaner, H., Innerhofer, E. & Glüher, G. (2016) *Kreativ-Hotspot Bozen Süd – eine Vision? Die Rolle von Kunst und Kultur in der Entwicklung urbaner Räume*. Eurac Research, Bozen.
- Pine, B.J. & Gilmore, J.H. (2011) The experience economy: past, present and future. In Sundbo J, Sørensen, F: *Handbook on the Experience Economy*. Publisher: Edward Elgar.
- Promberger, K., Bernhart, J. & Niederkofler, C. (2006) *Grundlagen zur Evaluation von Verwaltungsreformen. Management und Unternehmenskultur*. Schriftenreihe der Europäischen Akademie Bozen, Band 14, Linde Verlag Wien.
- Rátz, T. (2017) 'Be global, go local' – innovation and creativity in the development of alternative guiding services in Budapest. *Journal of Tourism and Cultural Change* 15(5):476-489, DOI: 10.1080/14766825.2016.1189558
- Rátz, T. & Irimiás, A. (2016) 'Go Local a Budapest' Creatività e innovazione nei servizi di guida turistica. In: Rocca Longo M, Pennacchia M (eds.) *Turismo creativo e identità culturale*. Roma TrE-Press, 2015, pp. 29-43
- Richards, G. (2020) Tourism in challenging times: resilience or creativity? *Tourism Today 2020 Issue*.
- Richards, G. (2021) Trasformazione. Transforming tourism in a post-Covid world. *Vita Magazine*, 5 (May), pp. 62-63.
- Sommer, C. (2018) Stadttourismus neu denken. Worauf es bei der Arbeit an einem stadtverträglichen Tourismus ankommt. *vhw Forum Wohnen und Stadtentwicklung*, Heft 2/2018 *Tourismus und Stadtentwicklung*.
- Weier, M. (2005) Innovative Stadtführungen. In Landgrebe S, Schnell P (eds.) *Städtetourismus*. R. Oldenbourg Verlag München Wien, pp. 241-252
- Weiler, B. & Black, R. (2015a) The changing face of the tour guide: one-way communicator to choreographer to co-creator of the tourist experience. *Tourism Recreation Research*, DOI: 10.1080/02508281.2015.1083742
- Weiler, B. & Black, R. (2015b) *Tour guiding research: Insights, issues and implications*. Bristol, UK: Channel View Publications.
- Weiler, B. & Kim, A.K. (2011) Tour guides as agents of sustainability: Rhetoric, reality and implications for research. *Tourism Recreation Research* 36 (2), pp. 113-125.

- Widtfeldt Meged, J. & Kaae, B.C. (2021) Guide-Entrepreneurs Developing Urban Ecotourism. *International Journal of Tour Guiding Research*: Vol. 2: Iss. 1, Article 5.
- Winsky, N. (2020) 36. Digitale Informationsflut und touristische Angebote – Marketingstrategien von Stadtführungsunternehmen. In Pietzcker D, Vaih-Baur C (2020). *Ökonomische und soziologische Tourismustrends Strategien und Konzepte im globalen Destinationsmarketing*. Springer Fachmedien Wiesbaden, pp. 433-453.
- Yin, R.K. (2012) *Case Study Research – Design and Methods*. Applied Social Research Methods Series, Vol. 5 (Third Edition). Thousand Oaks.
- Zatori, A., Smith, M. & Puczko, L. (2018) Experience-involvement, memorability and authenticity: The service provider's effect on tourist experience. *Tourism Management* 67 (2018), pp. 111-126.

Acknowledgements

I would like to thank the Tour Guiding Association in South Tyrol for getting involved in the subject, for its openness and favourable support of the project. Thanks also to Professor Betty Weiler for valuable feedback in the writing phase and Eurac Research which has offered the enabling framework to carry out this research.