-P5 REPORT-

TOWARDS A RESILIENT VENICE

TRANSFORMING THE URBAN ENVIRONMENT AFTER THE COVID-19
PANDEMIC AS A WAY TO TACKLE OVERTOURISM

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Figure 1: Steering into the unknown (Tourist Journey, 2020)

Colophon

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Abstract

At present, almost two years after the beginning of the COVID-19 pandemic, the detrimental effects that this situation created on economic and social environments of cities are still fresh and far from being over. As these issues had a particular impact on tourism around the world, government and businesses in tourist-driven cities lost their main source of income. Consequently, under these excruciating circumstances many local entrepreneurs are not able to pay the usual high rents, hence forcing shops, restaurants, and lodging facilities to close their doors. Moreover, in these monofunctional cities the lack of alternative markets makes finding a different use for real estate properties a difficult task, thus building's vacancy rates are on the rise.

Therefore, this research aims at developing a managerial strategy for the built environment capable of coping with the issues derived from the pandemic, while also providing relief to other intrinsic problems that these cities are facing, such as gentrification and lack of economic diversification, due to overtourism. Accordingly, by studying and analyzing the city of Venice, this research seeks to identify market trends for future scenarios in which plausible solutions can be developed and implemented. Thus, delivering a comprehensive urban strategy and policy recommendations that could help Venice and other local governments to improve their own urban resilience, in hopes for a brighter future.

Key words: overtourism, tourism gentrification, monofunctional cities, urban resilience, tourism resilience, adaptive reuse, real estate management, scenario planning, policy steering, Venice, Italy.

Personal motivation

Coming from a country -Peru- that relies heavily on the tourism industry to keep its economy at float, I have a special interest in understanding how these types of activities affect and steer the development of places that were not originally designed as touristic attractions. Furthermore, during my education as an architect I had the opportunity to live and study in Venice, therefore, seeing firsthand how much the historic city has been (un)shaped due to this extreme phenomenon. Ever since, I wanted to delve deeper in this matter, which not only concerns architecture and urban planning subjects but also encompasses social, economic, demographic, and managerial aspects that need to be considered as a whole in order to grasp the complexity of this issue.

Accordingly, I believe that in present times, this topic is of utmost relevance, as it is known that the number of residents and visitors in urban areas is exponentially growing. Therefore, in a near future, this subject will be important for urban managers and policy makers in multiple cities around the world, as they try to figure out how the 'city of the future' will look like; and consequently, start preparing for the inevitable changes. By analyzing Venice, I am addressing a particular and extreme case, from which different future scenarios are going to be outlined in order to produce a feasible managerial strategy that could be implemented by local authorities. By doing so, I hope that my findings and subsequent recommendations can be used in some way to shed light on what can be done in regard to this pressing issue, while also contributing to the future creation of more resilient cities and societies.

Consequently, I can determine that my personal interest is focused on studying the main characteristics and challenges that an overtouristic city faces, in order to determine what can be done in the built environment to improve the current situation. Furthermore, as the ongoing pandemic is affecting all types of economic activities, a new opportunity is presented as many commercial amenities are already looking for alternative uses to keep them in business. As a result, this fact can be exploited in two ways. First, it can be used to reduce the monofunctional activities that these cities have, which is the main cause of social conflict between residents, tourists, and the government; thus, enhancing tourism resilience qualities. And second, it can be used to reduce the impact of the economic backlash that the decrease of visitors will have on tourist-driven cities during and after the pandemic; hence, increasing long-needed urban resilience traits that benefit both residents and tourists.

For these reasons, I hope that the development of this study will set an example on how to deal with present-day challenges, while also taking care of other issues that remained ignored throughout time. Thus, aiming at providing a flexible guideline for the development of future resilience strategies that can be translated into different contexts, far beyond the boundaries set for the Italian case study explored in this thesis.

"una città ferma è una città morta" -a still city is a dead city-(NC, 2021)

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INTRODUCTION

Prologue

The current COVID-19 pandemic creates a situation in which many countries -and cities- are required to enforce measures that completely ban recreational travelling, and greatly reduce local non-essential journeys (Salcedo, Yar, & Cherelus, 2020). Thus, cities that heavily rely on tourism as their primary way of income are the most affected. Besides significative economic losses on touristic attractions, the 'horeca' sector is also particularly shaken (Batty, 2020). Although it is too early to make accurate projections, some recent studies suggest that the repercussions of the pandemic will lead the global economy to a recession that has not been seen since the Great Frost of 1709 (Schofield, 2020). At this moment, the effects of this pandemic are widely spread, and it presents itself as an unprecedented situation in which there is not yet a clear path to follow nor ending date. In general terms, it is possible to say that around 80% of the social and economic activities are negatively affected by the current pandemic (Batty, 2020). Even though some measures are expected to be eased by late-2021 with the commercialization of the vaccine, it is very unlikely that the economy can be brought back to pre-pandemic levels soon. As a matter of fact, some recent studies do not expect a recovery for the tourism sector before the year 2023 (Jiricka-Pürrer, Brandenburg, & Pröbstl-Haider, 2020). As local economies are highly affected by the restrictive measures, tourism businesses around the world are forced to lay off employees and to temporarily -if not for goodclose their doors while looking for alternative ways of surviving (Benjamin, Dillette, & Alderman, 2020). Consequently, many are waiting for better times to come, but as the uncertainty grows and the former glory of the industry is far from being restored; countless entrepreneurs are going out of business, bounding unemployment rates to rise (Batty, 2020).

As the effects of the pandemic in the tourism industry are discussed, it is impossible not to mention Venice, the most iconic -and extreme- example of a tourism-driven city. In the last half century, and particularly on the last decades the city of Venice endured the effects of mass tourism. Recent reports show that the city attracts approximately 25 million visitors each year, being one of the most popular destinations in the world (Bardavid, 2020). Among the many negative social and environmental consequences, the main problem of overtourism is the displacement of the archipelago's inhabitants in order to make space for new touristic amenities such as hotels and restaurants -also known as tourism gentrification-. This phenomenon which is also described by many economists as 'tourism monoculture', accounted for a reduction in the population of Venice from 175,000 to less than 55,000 residents in the last 70 years (Mangiapane, 2019). While at the same time prompting tourism-related activities to increase exponentially, nowadays representing 65% of the total city's economy (Saini, 2020). For instance, a recent study shows that the city center has more than 8,000 apartments listed on Airbnb, by far Italy's highest Airbnb-to-population ratio (Momigliano, 2020).

In the past, many studies and initiatives had been done in order to address this particular issue. However, none has been successfully implemented due to inadequate governmental regulations and opportunistic stakeholders that are tempted by the 'easy money' generated by the tourism industry (DW Documentary, 2018). As it was described by the British urban planner Michael Batty, some social and economic behaviors such as the leisure industry are particularly difficult to modify, "some networks are extremely resilient to attacks on their nodes or their links. There are many social and economic networks that are very difficult to bring down even if key nodes and segments are removed. In some respects, this is both the great strength as well as the great weakness of many human networks" (Batty, 2020).

For this reason, the sudden stop of tourism activities derived from the pandemic, creates an opportunity to restructure how the leisure industry is organized, making cities and regions more sustainable in the

process. For instance, although Venice is risking economic collapse since the tourist numbers dropped when the COVID-19 pandemic forced authorities to cancel the 2020 Carnival and, soon after, declare a nationwide lockdown; multiple residents and investors are now wondering how to create a balance between respecting the environment, and reviving the economy once the emergency is over (Bardavid, 2020). Correspondingly, local universities and grassroot organizations began discussions with the regional government on how to make tourism less taxing and more beneficial for the urban infrastructure and its local inhabitants (Momigliano, 2020). All in all, Venice's residents hope that, after the pandemic, an economy that does not revolve entirely around tourism can be developed, for instance, one that would attract international workers and students. Therefore, the current situation presents itself as a new opportunity in which many real estate properties are now in need of alternative uses in order to keep the financial system at float. For this reason, this thesis aims at utilizing this period of uneasiness as a catalyst for rejuvenating the city monofunctionally, while aiming at more environmental- and cultural- friendly uses. As an example, the two main universities of the city rise as a development opportunity due to their need of finding new spaces to increase research facilities and to accommodate new students, as up until now real estate in the archipelago has been a very limited -and expensive- resource (Momigliano, 2020).

Along this thesis, Venice is mentioned as a single case study, yet being just one of multiple cities around the world that face this particular problem. Furthermore, by living in a mostly consumerist and capitalistic society, in which travelling is becoming more accessible; globalization, and thus, tourism will only continue to grow. Therefore, in a near future, similar situations will become more common and critical, shaping cities, and thus, our urban environment. Consequently, the current pandemic is only exposing crises and tensions that historically existed in the tourism industry but were widely ignored (Benjamin, Dillette, & Alderman, 2020). For this reason, it is important take this unique opportunity to reassess long-standing collective behaviors, and consequently make a change in the way people interact with the urban environment. Now it is clear that "a resilient post-pandemic tourism must be more equitable and just, in terms of how it operates, and its effects on people and places" (Jiricka-Pürrer, Brandenburg, & Pröbstl-Haider, 2020). Therefore, in my personal opinion, this pandemic is giving us the opportunity to reexamine our current leisure behavior in order to decide if more sustainable solutions can be implemented permanently, in hopes for a brighter future.

Problem statement

As it was mentioned before, the COVID-19 pandemic presents itself as a challenge that humanity must undergo and learn how to overcome. However, during this iterative process it also creates the opportunity for implementing alternative solutions to other long-standing issues that remained unsolved due to a lack of interest or scarce resources. Therefore, as the upcoming societal change is unprecedented, it can be used as a catalyst for taking into consideration innovative and daring solutions for the built environment that otherwise would have been disregarded under 'normal' circumstances.

Due to the novelty of the subject, the consequences that a pandemic has in the urban environment of tourist-driven cities have not been studied before. Moreover, what new solutions can be implemented to deal with both the upcoming economic slump, and the persisting overtouristic issue; are yet to be discussed under this scenario. Consequently, the main aim of this research will be focused on understanding and analyzing the built environment in which an overtouristic city is located -being Venice the selected case

study-, in order to uncover endemic characteristics that can be used for tackling the aforementioned problems. The objective of unveiling these features is to utilize them as a mechanism to find suitable physical and managerial approaches that are able to promote alternative uses for real estate assets, and therefore, increase economic and social diversification in the city. By doing so, this research will address both issues that Venice is currently facing, the decline of economic activities and the negative impacts of tourism; by proposing a comprehensive final strategy in an effort to the improve urban resilience qualities and contribute to the creation of a future-proof city.

Research questions

The possibility of better understanding how to deal with the current situation and further improve the city's resilience characteristics, drives the main research questions. Which can be defined as follows.

RQ1: What are the effects of the pandemic in the built environment of tourist-driven cities, such as Venice?

RQ2: Which managerial strategies can be applied in Venice in order to increase its urban resilience, while also fostering solutions for tourism-related problems?

With the aim of answering the first research question, the current tourism-related qualities of the Venice are going be studied and analyzed. Therefore, in order to do so, the following sub-question are presented as a guideline for the first part of the study.

- (1) What are the main characteristics and issues of a tourist-driven city?
- (2) How is Venice's status quo being affected by the COVID-19 pandemic?

Similarly, with the intention of answering the second research question, findings from the first part of this study are going to be assessed in order to recommend a suitable strategy that specifically tackles the identified issues. Therefore, as a way of better structuring this stage of the process, the following subquestions are presented.

- (3) What strategies can be applied in the built environment to increase urban resilience?
- (4) What strategies can be applied in the built environment to foster solutions for tourism-related problems?
- (5) How can these strategies be combined into a single future-proof solution?

Relevance

As it was introduced in the previous section, the increasing pressure that tourism is placing on cities requires for drastic modifications in the way these activities interact with the local communities. Moreover, effective responses to this phenomenon have been gaining relevance as urbanization and globalization trends are continuously on the rise, and therefore, putting additional strain on the fragile social and natural environments of cities. Nevertheless, up until now, opportunistic economic interests from local authorities

and businesses have been delaying the development and implementation of such strategies, as they were not considered 'urgent'. For this reason, the ongoing pandemic is exposing the real threats that monofunctional cities represent for the economy and society. Thus, giving governments the opportunity to reconsider their priorities, and implement new strategies for increasing cities' resilience, while also enhancing the residents' living environment.

Consequently, due to the current pandemic situation, it is a great time to study, raise awareness, and look up for possible solutions that are able to foster sustainable developments of urban environments in the foreseeable future. Despite the fact that this research will revolve around the creation of future scenarios based on local trends of a single case study, and its corresponding response strategies; the broader goal is to develop a framework that could serve as an example for other cities experiencing similar situations. Thus, functioning as a guideline for governments that desire to develop comprehensive strategies in order to address issues related to the wellbeing of the community and their prosperity in time.

Societal importance

This study aims at providing new information about a topic that is starting to play a major role in the last few years. Even though some previous research projects studied and proposed possible solutions for the overtourism problem, none of them gave sufficient value to the built environment and its capacity be recognized as a key element for overcoming this issue. Moreover, as it was mentioned before, this problem is currently affecting many cities around the world. Therefore, as governments are drafting post-pandemic response plans, it is a good opportunity to start incentivizing capacity building in communities. For instance, as it is recommended in this study, by encouraging tourism and urban resilience characteristics into the future development of these cities. In line with these ideas, the incorporation of solutions that foster alternative economic activities in the tourism-driven cities have a special societal value, as they are able to deeply modify longstanding paradigms. For this reason, by uncovering existing governance issues and using the pandemic as a catalyst of change, the purpose of the study is to revitalize decaying social and urban environments.

Furthermore, in a more specific scale, multiple interviews will be performed to local stakeholders as part of the empirical research. The objective of such interviews will be to understand their opinion and needs in regard of the current issues that are affecting the selected case study. Consequently, this approach will not only serve as a fundamental step in the development of a final strategy, but it will also be a major contribution for understanding the causes of social unrest in Venice, as well as giving a community insight that has been not yet explored. Thus, allowing for additional strategies to be implemented by the local government on top of the ones proposed in this study.

Scientific importance

The topicality of the themes researched in this thesis -overtourism and pandemic effects- makes them to be trending subjects in the academic community. For this reason, there are various other studies that already reviewed similar topics, however, despite the fact that these subjects have been studied before, there is hardly any research that analyze them simultaneously. Therefore, under the current circumstances, this thesis is able to combine them, for the first time, under a single objective in order to create a comprehensive strategy that is capable to provide a tentative solution for both topics, while also

contributing to the generation of scientific knowledge that can be replicated in other contexts. Moreover, as the main focus of this study will be centered in understanding how these topics influence the built environment, an extra level of specificity will be added for the research. Thus, investigating a specific subject area that has not been explored before. Consequently, the main scientific relevance of this study resides in the fact that it is designed to understand and create links between two topics that are not usually associated. Hence, helping to further develop a thin research area that has been neglected in the past.

Additionally, by using a mixture of theoretical knowledge and empirical data collection this study aims at providing operational findings and strategies that are applicable in real-life scenarios. Moreover, in order to corroborate the information obtained from this study a final validation stage will be also conducted with local stakeholders to increase the reliability of the information presented. Consequently, not only limiting the research to academic purposes, but also providing an applicable guideline that can be followed by the local government, related institutions, and other cities around the world.

Methodology and research methods

As it was already presented in the research questions section, this study will be composed by two different research components that will lead to one practical outcome. This last part will provide answers and an applicable strategy for the problem statement and research questions. The two research components are going to tackle different academic areas from both theoretical and empirical points of view, therefore, offering a consistent and realistic framework for the later operationalization of the conclusions and the final strategy proposal. Below, in *Figure 2* it is possible to see a summary of the methodology and conceptual model described above, which will be also further explained in the next sub-sections.

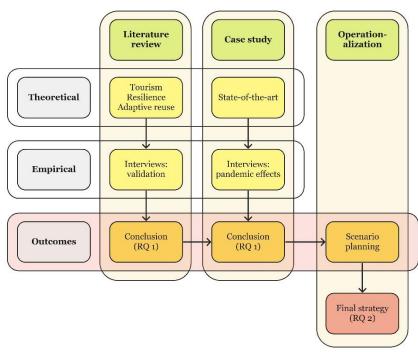


Figure 2: Conceptual model (own illustration)

Literature review

The first part of the research comprises the literature review section which will be the main body of the study as it will develop a theoretical framework that will serve as a basis for the later incorporation of empirical data and the strategy elaboration. This section will be developed by studying and analyzing scientific literature through journal articles, books, and revised reports; in addition to the incorporation of non-scientific sources which will serve to contextualize and provide background information such as video-documentaries, conference transcripts, newspapers, and internet blogs.

The main objective of the literature review will be to examine key concepts that are relevant for the thesis development, in order to provide understanding of their origins, evolution-over-time and, consequently, formulate comprehensive and usable knowledge. Thus, also discussing possible solutions, barriers, enablers, and identifying important actors to take into consideration. This systematical review of concepts will allow to unravel intertwined ideas, and therefore, narrow down definitions, making them applicable to the research scope (Fink, 2004). Furthermore, this process, will provide vast knowledge that can be further used for the creation of future trends, that are going to be applied in the development of scenario planning within the strategy section.

The first part of the literature review will discuss modern tourism, through the lenses of global urbanization and its intrinsic effects, which play a central role as a trigger of overtourism. Therefore, the causes, characteristics, and consequences of an overtouristic cities will be defined. The second part of the literature review will investigate the concept of resilience as a top-down approach to address the negative effects of overtouristic places. Hence, the notions of urban and tourism resilience are going to be explored in-depth, in order to lay down some guidelines that a theoretical solution could take into consideration, and ultimately pursue. Finally, the concepts of adaptive reuse are going to be examined as tangible bottom-up approach that could be applied in the case study's selected areas as part of a tentative solution.

Consequently, by reviewing two opposite and complementary approaches, the aim is to provide enough knowledge that could be latter merged into a single-comprehensive strategy. Additionally, during the development of each section, main stakeholders and trends will be identified at the end of each chapter as takeaways concepts that are going to be later used in the scenario planning and strategy proposal.

Case study

The second part of the research will be composed by the analysis of a single case study, for which the Italian city of Venice was chosen. The selection of the case study was made a priori by the author, as it is an outstanding and extreme example of an overtouristic city. Consequently, this section will be developed by providing an initial state-of-the-art assessment from scientific sources such as journal articles and governmental reports. Yet, for a more updated and accurate understanding of the case study other non-scientific sources are going to be included like newspapers and video-documentaries. Nevertheless, this initial analysis will be complemented with empirical data from semi-structured interviews performed by the author, in order to provide up-to-date information from local stakeholders. Accordingly, the interviewees will be purposefully selected to represent a wide range of actors, as well as their position within the city, and the amount of relevant information they are able to contribute to the study.

One of the main reasons for performing semi-structured interviews is that they provide a flexible structure within a relaxed atmosphere, in which it is possible to collect similar data from each interviewee, while

allowing the interviewer to inquire on specific topics that might arise during the development of the interview (Robson, 2011). Furthermore, the scientific literature used in this study is mainly published in English, therefore, can have an Anglo-American bias (Newell & Cousins, 2015); consequently, the validation of this information by local stakeholders during the interviews will be of great significance.

Finally, the most important objective of this section will be to determine how Venice is affected by the topics presented in the literature review, and thus, identify if some of the described theoretical strategies can be applied under the current COVID-19 pandemic. In order to do so, interviews will be guided to understand the opinions of the stakeholders about overtourism in Venice, and how the city has been shaped by the current situation. Later, these findings are going to be used to provide a realistic assessment of the current and future situation of the city, which will be utilized to produce a balanced conclusion, and ultimately a feasible strategy for answering the research questions.

Operationalization

The final part of this research will be developed by providing an operational analysis of all the data gathered in the previous sections. Therefore, this section will take into consideration the theoretical and empirical information from the literature review and the case study in order to determine future trends for the city of Venice and, thus, produce a feasible scenario planning. From this assessment, the most relevant scenarios will be selected and further developed for providing a future-proof and sustainable strategy that could be applied by the local municipality. Consequently, defining a possible solution that can contribute to solve the main problems that Venice is facing due to overtourism and the COVID-19 pandemic. Moreover, the steps used in the elaboration of this section can be also repeated in alternative settings in order to provide support to other cities with similar issues.

Research output

Goals

The goal of this research is to provide a feasible strategy that can be applied to deal with monofunctionality and vacancies in overtouristic cities after the current pandemic. To achieve this goal multiple objectives were established. For instance, the first objective is to create a deeper understanding of overtourism and its effects in a tourist-driven city. Similarly, the second objective is to acknowledge and identify what are the effects of the COVID-19 pandemic in the built environment. To do so, both theoretical and empirical data will be used. Then, the third objective is to discuss which solution can be better implemented in the case study by reviewing urban and tourism resilience literature, as well as adaptive reuse concepts, alongside their practical implications. And, finally, the last objective is to assess all this background information in order to establish reliable future scenarios and provide a comprehensive strategy that can be used to improve the current situation of the Venice.

Deliverables

In Figure 3 a timeline of the research deliverables is presented. As it is shown in the figure below, the P1 presentation -06 November 2020- was focused on defining the basic aspects of the study, such as research

problem, structure, and objectives. Then, the P2 submission -19 January 2021- was mainly aimed at setting up the methodology for the research, as well as reviewing all the theoretical literature necessary for the study. Next, the P3 presentation -13 April 2021- revolved around introducing the main case study, providing guidelines about the empirical data collection, and showing the main findings from interviews to the relevant stakeholders. Moreover, also drafting tentative future scenarios. Next, the P4 submission -20 May 2021- was focused on finalizing the empirical data analysis and improving future scenario planning. Thus, also presenting the final strategy proposal, and elaborating definitive conclusions and recommendations from the theoretical and empirical findings. Finally, for the P5 presentation and submission -24 June 2021-this research was finalized by developing the final arrangements to this thesis report and producing the final presentation.

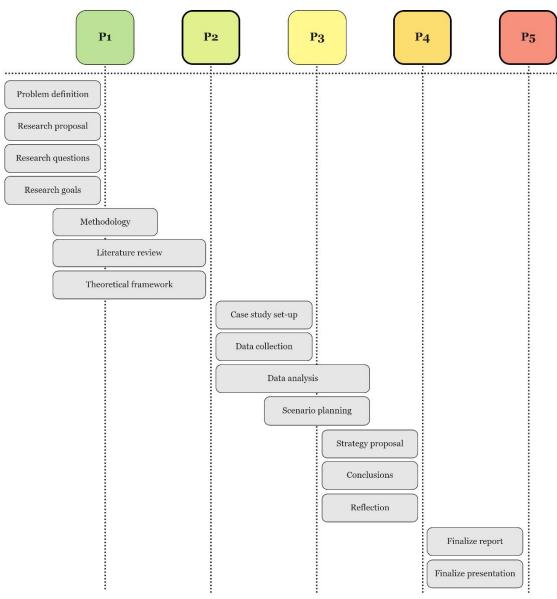


Figure 3: Research timeline (own illustration)

LITERATURE REVIEW

Understanding the tourism problem

Urbanization

The term 'mass-tourism' has gained much relevance in the last years (Perkumienė & Pranskuniene, 2019). However, academic discussions around this topic -although under different names and labels- have been present since the 60's, as many cities have been already dealing with this phenomenon in the past (Koens, Postma, & Papp, 2018). These early discussions have raised socio-political concerns about the growth of tourism and its negative effects, especially when addressing social and environmental issues (Mihalic, 2020). For instance, before the rise of the term 'overtourism' the UNWTO already defined 'tourism's carrying capacity', an interrelated concept, as "the maximum number of people that may visit a tourist destination at the same time, without causing destruction of the physical, economic and sociocultural environment and an unacceptable decrease in the quality of visitors' satisfaction" (UNWTO; CELTH; BUas; NHL Stenden, 2018). Additionally, it is important to highlight that even in these early definitions, adequately managing the tourism industry in order to benefit visitors and residents alike has been a fundamental objective when discussing ideal qualities of tourism.

Yet, in order to introduce and define overtourism, first it is critical to recognize how people's displacement impact and shape the world. Therefore, before exploring tourism literature, this section will start by mentioning some alarming facts about global urbanization and its fast-evolving nature, as it is strictly related to the tourism industry and its effects on existing and future cities. The importance and relevance of urbanization in large-scale tourism becomes evident when it is inevitable not to talk about cities when discussing the tourism industry. For instance, even though some highly visited destinations are not located in urban areas (e.g. Phi-Phi Islands in Thailand, or the natural heritage in Iceland), it is impossible to reach them without passing through a city first. Thus, there is an undeniable relation between tourism and increasing numbers of people in cities, either because they are actively visiting it, or just staying for a short period of time while making a connection to their final destination. Consequently, the topic of urbanization is of increasing relevance in understanding the effects of tourism, as a combination of these two factors can accentuate the feeling of overcrowding in cities. For example, in just 25 years the number of people living in urban areas has increased from 43% of the world population in 1990, to 54% in 2015. Moreover, it is expected to reach 60% of the global population by 2030, and 70% by 2050 (UNWTO; CELTH; BUas; NHL Stenden, 2018).

One of the main causes for the growing numbers in urbanization is the steady development of economic activities in cities around the world. This trend, in combination with the increasing numbers in the tourism sector due to lower transport costs, travel facilitation and a growing middle class; made cities increasingly popular destinations for business and leisure (UNWTO; CELTH; BUas; NHL Stenden, 2018). As a result, according to the UNWTO, the number of visitors in cities has increased from 25 million to 1.3 billion, in the last 70 years. Although the income produced by these activities significantly contribute to the socioeconomic and cultural development of countless cities, they also pose significant challenges to ensure sustainable growth, as well as to minimize adverse effects in the local communities. For instance, besides economic growth some other positive impacts can be identified in urban areas, such as increased multiculturality, enhancement of the city image, and conservation of cultural heritage. Whereas the main negative effects are primarily linked to economic factors, as higher prices for housing and transport, as well as increasing costs in amenities, catering, and retail services. Thus, also having negative social consequences in the local community, due to dissatisfaction for being neglected and undesired changes.

Overtourism

Up until recently, tourism was seen as one of the most sustainable economic activities in many cities and was used as a way to promote and strengthen development. For instance, after the 2008 economic crisis, fostering tourism was adopted as a strategy to bolster economic activities in multiple city destinations (Koens, Postma, & Papp, 2018). Nevertheless, in the last decade, the perception about city tourism has changed significantly, as many local stakeholders have pointed out that services that were designed for local use are now struggling to cope with the increasing numbers of tourists (e.g. public transportation, roads infrastructure, neighborhood amenities). Nowadays, these situations are further emphasized by the growing popularity of online accommodation services that allow tourists to sprawl all over the city, as well as new fashions such as having authentic experiences, meaning that tourists and locals are further intertwined in everyday activities. Consequently, as visitation numbers grow, street congestion increases, and market prices rice; many residents turned their initial welcoming approach into antagonism, hindering social interactions and neighborhood acceptance (Mihalic, 2020). As a result, local organizations in high profile destinations are now increasingly pressuring the government to deal with and reduce tourism activities.

Under these excruciating circumstances some of the destinations have become so characterized by tourism, that the academic community coined the term 'Venice Syndrome' to refer to cities typified by overtourism and in a process of residential depopulation (Martín, Guaita, & Salinas, 2018). In these cities, some of the main causes for such specific traits are the introduction of low-cost airlines and the increasing numbers of the cruise industry, that in combination with online accommodation (e.g. Airbnb, Couchsurfing, or Booking), and social media branding; produce the optimum scenario for a new unregulated market in which tourist numbers are thriving (Responsible Travel, 2018). For instance, in Venice, this scenario has caused housing prices to increase, making it the most expensive city in Italy. This fact has altered permanently the city by displacing local residents due to extremely high rents and the substitution of residential accommodations with tourist ones, resulting in a permanent reduction of the city population and the loss of its traditional charm (Capocchi, Vallone, Pierotti, & Amaduzzi, 2019). Some other remarkable effects of the growing number of tourists, are the increase in consumption of natural resources, negative impacts in socio-cultural heritage, and the saturation of infrastructure and mobility facilities (UNWTO; CELTH; BUas; NHL Stenden, 2018). Therefore, in the Venice case, a combination of social, cultural, and demographical aspects, plus neglected environmental issues; have led to local tensions and a pronounced rejection of tourism, which can be identified as the final embodiment of the 'Venice Syndrome' (Seraphin, Sheeran, & Pilato, 2018).

In general terms, the issues described in the previous paragraphs represent some of the main characteristics of overtourism. However, the term is usually considered 'fuzzy' as it lacks precision and it is challenging to operationalize (Koens, Postma, & Papp, 2018). Consequently, an oversimplified definition of the term can be laid out as "unsustainable tourism" (Mihalic, 2020). Nevertheless, it can be further explained as "the excessive negative impacts of tourism on the host community and the natural environment" (Koens, Postma, & Papp, 2018). Similarly, a commonly used, but non-scientific definition of the term can be found in the Collins Dictionary in which it is presented as "the phenomenon of a popular destination or sight becoming overrun with tourists in an unsustainable way" (Dickinson, 2018). In the context of this research, these straightforward definitions are important to be considered as they represent how the majority of the society understands this subject. Nonetheless, the most agreed claim is that overtourism is damaging the natural environment, as well as manmade infrastructure by putting them

under an unparalleled strain, while also pricing residents out of the property market (Milano, Cheer, & Novelli, 2018). Yet, as many academics agree, it is a tremendously complex topic that is often oversimplified.

For this reason, a more comprehensive description is presented by the European Parliament in which they include some socio-political aspects by defining it as "the situation in which the impact of tourism, at certain times and in certain locations, exceeds physical, ecological, social, economic, psychological, and/or political capacity thresholds" (Peeters, et al., 2018). Accordingly, as it can be seen in the following figure, the European Parliament also provides a conceptual model for understanding all the elements that influence the concept of overtourism, and thus, interconnecting factors such as main drivers, effects, carrying capacity, and policy responses that affect a destination and its surrounding environment. Likewise, a scientific definition is provided by the UNWTO in which they define overtourism as "the impact of tourism on a destination, or parts thereof, that excessively influences perceived quality of life of citizens and/or quality of visitors experiences in a negative way". This definition is then further elaborated by saying that overtouristic cities are "destinations where hosts or guests, locals or visitors, feel that there are too many visitors, and that the quality of life in the area or the quality of the experience has deteriorated unacceptably. It is the opposite of 'responsible tourism' which is about using tourism to make better places to live in and better places to visit. Often both visitors and quests experience the deterioration concurrently" (UNWTO; CELTH; BUas; NHL Stenden, 2018). Altogether, in these two definitions it is suggested that the absence of managerial strategies to deal with this situation, and the existence of unregulated markets are the main reasons for the overtourism phenomenon (Capocchi, Vallone, Pierotti, & Amaduzzi, 2019).

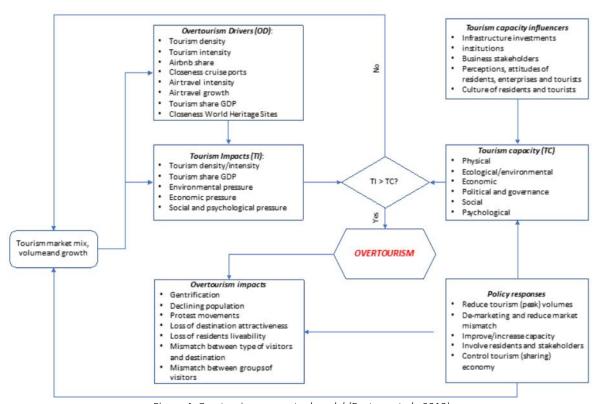


Figure 4: Overtourism conceptual model (Peeters, et al., 2018)

Note: OD = Overtourism Drivers, TI = Tourism Impacts, and TC = Tourism Capacity

Along these lines, it is possible to determine that overtourism is caused, to a certain extent, by policy and governance issues. For instance, as the UNWTO concludes in their report about overtourism, "tourism congestion is not only about the number of visitors but about the capacity to manage them" (UNWTO; CELTH; BUas; NHL Stenden, 2018). Moreover, according to multiple studies, there are three main factors that -if not regulated properly- contribute to the massification of tourist flows and concentration of arrivals in a few main destinations: the cruise industry, low-cost airlines, and online platforms for tourist rental accommodations. As it was mentioned in a conference made by an Italian university in 2019 "If Airbnb suffocates destinations by providing too much accommodation, low-cost airlines like Ryanair can be blamed for suffocating destinations by providing too much international transport" (Baskakova & Peretta, 2019). Consequentially, leading to crowding, carrying capacity, and environmental sustainability concerns (Capocchi, Vallone, Pierotti, & Amaduzzi, 2019). In practical terms, this phenomenon is characterized and triggered by a lack of regulations that allow for an overuse of the resources, infrastructure, and facilities of a destination, which tourist share not only with residents, but also with commuters and day-visitors (Koens, Postma, & Papp, 2018). Ultimately, leading to clogging and failure due to excessive use, thus prompting protests against tourism among marginalized and displaced inhabitants (Capocchi, Vallone, Pierotti, & Amaduzzi, 2019). Among other claims, these protests allege that touristification is changing the city intrinsic character by losing its authenticity and causing constant irritation or annoyance in the local community. For example, by imposing permanent changes in residents' lifestyles, such as difficulties in accessing amenities and carrying out everyday activities (Milano, Cheer, & Novelli, 2018).

Consequently, in several overtouristic places some measures have been already proposed and even implemented in an attempt to reduce the negative impacts of this phenomenon. For instance, direct strategies have been set for addressing some specific issues, such as regulating traffic through the creation of car free zones; controlling tourist behaviors and disturbances with stricter regulations during night hours and implementation of earphones for listening to guided tours; and trying to reduce the high number of tourists by taxing cruises and day-visitors. Further attempts have also been made to regulate service providers such as Airbnb by asking for additional registration in the municipality, limiting the number of days that a property can be rented, or ensuring that the owner lives in the property for at least a set number of months a year (Koens, Postma, & Papp, 2018). However, even though some progress has been done by the implementation of these measures, policymakers are still struggling to keep up with the rapid development of the sector. Moreover, they also argue that for successfully addressing this issue a wider approach is needed in which other stakeholders are involved, as they rightfully claim that it is not only a tourism problem. A similar posture is presented by the UNWTO (2018), as they suggest that a possible solution to this phenomenon can be achieved through a good destination management, especially by addressing social issues outside the tourism industry. Therefore, it is suggested that a wider approach is needed for managing both visitors and local communities, and thus, achieving a sustainable development in the industry. For example, this can be obtained through community engagement, congestion management, reduction of seasonality, diversification of attractions, and respecting carrying capacity limits (UNWTO; CELTH; BUas; NHL Stenden, 2018). By doing so, managers will shift tourism development towards lower- social, cultural, and environmental impacts; consequently, giving destinations a higher added value and facilitating the achievement of a desired economic balance (Capocchi, Vallone, Pierotti, & Amaduzzi, 2019).

Nonetheless, a requirement to achieve this is that public and private sectors work together towards a common goal, which can yield profitable long-term benefits. In order to do so, aligning multiple

stakeholders views is mandatory as it will help to maximize the benefits of the proposed strategy (Joppe & Brooker, 2014). For instance, the improvement of local city infrastructure, requires governance models that promote interaction and collaboration between different levels of public and private stakeholders beyond tourism, as well as in the local community.

Similarly, a management approach that has proven to be effective is the incorporation of innovative and sustainable solutions by putting together two parallel strategies in a single approach. This method consists of exploiting and improving strategies that are already in use -as the ones mentioned in the previous paragraphs-. And then, exploring new aspects that can be implemented in the future over different governance levels in order to tackle other areas not addressed by the first strategies (Mihalache & Mihalache, 2015). A key element of this proposal is to promote innovative experiences aimed at being applied in a short time span that will allow the city to diversify tourism demand in time and space, therefore, providing a proactive solution able to disrupt current trends (Seraphin, Sheeran, & Pilato, 2018). For instance, if the objective is to reduce the number of visitors, a plausible solution could be to combine the existing regulations to mitigate the negative impacts of tourism and introduce new national strategies such as removing the overtouristic city from all promotional materials. In this example, this additional strategy follows the logic presented in a 2019 study, in which it is stated that "highly branded destinations are more likely to attract uneducated tourists", and therefore, emphasize the negative impacts of overtourism by attracting irresponsible tourists (Baskakova & Peretta, 2019). Consequently, by applying this strategy the goal is to attract a fitting visitor segment in accordance with the long-term vision, while reducing the overall number of tourists at the same time.

Thus, as it has been showed in the development of this section, most of the strategies that are already in place tackle overtourism from very specific points of view and are mainly focused on addressing tourism related issues. Consequently, in order to contribute to finding an alternative solution to this -growing-urban and social problem, the following sections will review two different approaches. The first set of theories will study possible solutions from a top-down perspective, focusing on resilience concepts as they emerge as viable urban development concepts that should be included in governmental policies as strategies to face this issue from a wider scale and from a non-touristic approach. On the other hand, an adaptive reuse theory will be further revised and considered as it presents itself as a feasible bottom-up approach that could be successfully implemented. This theory is important to consider due to its positive social implications and its ability to overcome other issues that are not covered by resilience practices. Furthermore, the advantage of reviewing governmental and local strategies that can be also promoted by private initiators is that the negative effects of overtourism are tackled from two different angles at the same time, hence providing better opportunities for success.

Takeaways

Stakeholders

The tourism sector is very broad and has a large number of stakeholders involved along different scales. Most of the time, the distinct objectives, and ethical convictions that these actors have create opposite positions, and therefore, generate conflicts between parties (Halis, Halis, & Ali, 2017). Nevertheless, in order to find a solution for the overtourism issue, these stakeholders should work together for achieving a successful recovery in the industry. By doing so, the process for finding a common agreement between parties helps to overcome frictions and set sustainable objectives. Consequently, from the literature review

studied in this section, the following table was assembled, in which the main tourism stakeholders are clustered into three separate groups: public sector, private sector, and local community & customers. This division is made for a better assessment of the involved stakeholders in the operational section. For each division, the main actors where selected and included (*Table 1*).

PUBLIC SECTOR	PRIVATE SECTOR	COMMUNITY & CUSTOMERS
National government	Small & mid-size enterprises	Domestic tourists
Regional government	Transport business	International tourists
Local government	Intermediaries	Residents (living in TD)
Public organizations	NGOs	Residents (working in TD)

Table 1: Tourism stakeholders, adapted from (Slivar, 2018)

Note: TD = Tourist Destination

Drivers & trends

Drivers and trends presented below are taken from the tourism literature review and will be used for the elaboration of scenario planning in the strategy proposal section of this study.

Urbanization drivers: high economic development in cities; growing middle class; lower transportation costs; commuting & travel facilitation. *Urbanization trends*: large-scale tourism; overcrowding of cities.

Overtourism drivers: increasing numbers of online accommodations; growing cruise industry; tourists looking for authentic experiences; disproportionated consumption of natural resources; absence of managerial strategies; unregulated markets. Overtourism trends: surpassing services' carrying capacity; displacement of residents; loss of local identity; negative impacts in socio-cultural heritage; saturation of infrastructure & mobility; concern for ecosystems' wellbeing; rejection of tourism by local communities.

Top-down approach: Resilience

Urban resilience

Global population is increasing at an exponential rate. According to the United Nations, in 1950 the world's population was 2.5 billion, 50 years later in 2000 this number has more than doubled to over 6 billion. Recent projections expect to have 8.5 billion inhabitants by 2030, and more than 9.7 billion by year 2050 (United Nations, 2015). This extreme growth has large effects on the consumption of resources, that in turn have various consequences in land-use and environmental aspects. Likewise, it also has important repercussions in social and mobility aspects, such as migration, commuting and tourism (Cheer & Lew, 2017). These figures are then further emphasized when the existing economic model, driven by unsustainable patterns of consumption, is taken into consideration. Consequently, adding more pressure on the already fragile and strained environment, therefore contributing to the deterioration of quality of life on Earth (World Economic Forum, 2016).

As a result of these demographic settings and a major shift in urban infrastructure due to unprecedented urbanization and environmental concerns, resilience is an idea that is increasingly gaining relevance in

many cities around the world, especially among decision makers at multiple scales and disciplines (Meerow, Newell, & Stults, 2015). Thus, in recent years, academia has given much attention to the ability of overcoming environmental, socioeconomic, and political challenges by enhancing resilience qualities in host cities. Although, in practice this concept can produce both positive and negative outcomes (e.g. uneven benefits for stakeholders), it has, nonetheless, emerged as a standardized and idealized urban goal (Meerow & Newell, 2016). Consequentially prompting a so-called 'resilience renaissance' (Bahadur, Ibrahim, & Tanner, 2010).

The term resilience has its origins in ecological literature, and after more than forty years of academic scrutiny its definition has become so broad, that for most scholars it is almost meaningless (Meerow, Newell, & Stults, 2015). This situation is due to the term's capacity to function as a bridging element between multiple knowledge domains, therefore fusing several concepts under a single label (Meerow & Newell, 2016). For this reason, this study will briefly review the foundations of this concept, and how it has shifted over time in order to be applicable in urban environments.

As it was mentioned before, 'resilience' was first described in 1973 by ecologist C.S. Holling as a system's ability to maintain basic functional characteristics even when disturbed, but not necessarily by remaining the same (Holling, 1973). Therefore, depicting ecosystems as having multiple stable states that can evolve in order to persist. Later, the author expanded his definition by making a distinction between 'static resilience', in which the system has the ability to bounce back to its previous undisturbed state; and 'dynamic resilience' in which the system maintains its basic functions while evolving to a new stable state (Holling, 1996). This framing of ecological resilience as dynamic, complex, and adaptive was fundamental for laying the current definition of resilience, especially in the social context by allowing the conceptualization of nature-society as 'an intertwined, coevolving system' (Meerow & Newell, 2016). Thus, as several other investigations have also concluded, resilience theory is not limited to ecological studies. For instance, it can be applied to almost any field that requires a certain degree of adaptation over time such as social, urban, environmental, and economic practices. In this context, the resilience approach is fundamental for understanding how these complex systems can persist when facing uncertainty, disruption, and unavoidable changes.

Consequently, as cities are generally recognized as complex systems (Batty, 2008), resilience theories are constantly being applied in urban studies. In essence, the importance of urban resilience resides on the capacity of individuals, communities, institutions, businesses, and systems within a city to remain functional and quickly recover from any type of detrimental situation (Spaans & Waterhout, 2017). These negative circumstances can be caused by endemic issues that weaken the structure of a city on a daily basis, for instance, high unemployment, inefficient public transportation, unbalanced composition of the population, or serious food and water shortages. Yet, these situations can also be catastrophes that occur unexpectedly such as earthquakes, floods, and disease outbreaks (Spaans & Waterhout, 2017). In this understanding it is implied that urban resilience operates in a state of non-equilibrium, in which the city capacity to maintain its key functions do not necessarily requires a return to the prior state of equilibrium. Moreover, within a single urban environment, different strategies can be set in place for short- and long- term adaptation, in order to face multiple sorts of threats. Still, a critical element shared by most of these strategies is having the capacity of a fast response and recovery (Meerow, Newell, & Stults, 2015).

It is important to note that a lack of resilience in one of the previously mentioned aspects can negatively affect others, as many of these complex issues are deeply interconnected. Yet, focusing too much on a

specific area of resilience can also undermine the system flexibility and diversity, therefore, reducing its ability to respond to sudden threats (Wu & Wu, 2013). Consequently, a balance must be achieved in order to guarantee a resilient city. For this reason, even though most developed countries generally do not suffer from chronic city problems, the rapid urbanization in recent years is bringing new challenges for future generations that need to be addressed accordingly. For instance, most cities are still susceptible to unexpected disasters -such as the ongoing COVID-19 pandemic-, hence being one of the main reasons why the resilience topic is gaining much relevance lately.

Following a similar reasoning, a more precise definition was introduced to better frame the urban characteristics of resilience, in which the term is presented as "the ability of an urban system and all its constituent socio-ecological and socio-technical networks across temporal and spatial scales, to maintain or rapidly return to desired functions in the face of a disturbance, to adapt to change, and to quickly transform systems that limit current or future adaptive capacity" (Meerow, Newell, & Stults, 2015). Here, as in the previous explanation, urban resilience is presented as a desirable dynamic state in which a broader adaptability is preferred over a specific one.

As it was suggested by some researchers, the best way to achieve urban resilience is presented by its own malleable characteristic -the same attribute that caused ambiguity in its definition-, by allowing diverse disciplines to take part and embrace it, which can also be conceptualized as 'resourcefulness'. This trait is especially important on cities, as they are complex systems that require expertise and collaboration between many interrelated subjects, particularly in dire periods (Meerow, Newell, & Stults, 2015). Moreover, this idea also allows for the incorporation of other external concepts such as social justice and economic adaptability (e.g. providing support for marginalized communities or introducing new market alternatives), therefore, increasing the capacity of transforming society (Meerow & Newell, 2016). Yet, once resilience strategies have been adopted by cities, the objective is to gain enough momentum in order to be sustained in time. For instance, this can be achieved through capacity building and strategies that are able to change old mindsets of stakeholders by allowing for new types of collaborations, usually involving long-term plans (Spaans & Waterhout, 2017).

Accordingly, once all stakeholders and collaborators have a common understanding of what is intended with the implementation of urban resilience, the next step is to align views and establish shared interests, in order to propose viable solutions. To achieve this, Meerow & Newell (2016) propose a set of questions, also known as "five Ws", that need to be taken into consideration by managers to provide a feasible approach into urban resilience strategies. As it can be seen in Figure 5, these questions help to contextualize and bring some important aspects of resilience to the forefront by urging stakeholders to discuss and take postures about politicized traits and dimensions, thus deciding which trade-offs are going to be prioritized. Consequently, the answers to these questions will help to decide which potential trade-offs are more valuable for stakeholders according to the current circumstances, and so, determining which are the most important to consider when applying resilience empirically. For instance, when urban resilience is applied to specific urban contexts, the process and outcome is dependent on the local governmental system, desired policy scale, and to what disturbances it aims to become resilient to. Therefore, by discussing these factors in advance, trade-offs will be acknowledged by the stakeholders, reducing conflicts, and preparing a smooth path for the proposal of a strategy (Meerow & Newell, 2016).

	Questions to Consider		
Who? Who determines what is desirable for an urban system?			
		Whose resilience is prioritized?	
		Who is included (and excluded) from the urban system?	
What?]т	What perturbations should the urban system be resilient to?	
	R	What networks and sectors are included in the urban system?	
	Α	Is the focus on generic or specific resilience?	
When?	D	Is the focus on rapid-onset disturbances or slow-onset changes?	
	E	Is the focus on short-term resilience or long-term resilience?	
	0	Is the focus on the resilience of present or future generations?	
Where?	F	Where are the spatial boundaries of the urban system?	
	F	Is the resilience of some areas prioritized over others?	
	s	Does building resilience in some areas affect resilience elsewhere?	
Why?	?	What is the goal of building urban resilience?	
		What are the underlying motivations for building urban resilience?	
		Is the focus on process or outcome?	

Figure 5: Five Ws of urban resilience (Meerow, Newell, & Stults, 2015)

Tourism resilience

In functional terms, since the industrial revolution, new technologies in transportation and telecommunication have made the world increasingly smaller (Cheer & Lew, 2017). As a result, globalization has emerged as a 'new phenomenon', bringing along both positive and negative consequences. For instance, modernization -which can be seen as a side effect of globalization- can be viewed as a growing opportunity for isolated communities' well-being, yet it can also be a dreadful cause for losing sovereignty and uniqueness. A similar analogy can be made for the tourism sector, in which globalization can represent both the emergence of a new economy, or an external assault on local traditions (Cheer & Lew, 2017). This last part is what ultimately drives this study, as it is possible to see that tourism is highly influenced by invisible relationships between ecological, social, economic, and political variables. In other words, it can be said that because of its nature, touristic communities are prone to repercussions of wider global developments, such as urbanization. Furthermore, it can be determined that the scale and rate of change has increased dramatically in the last decades due to human actions. This fact is important to take into consideration when discussing tourism resilience, because governance policies that are able to selfregulate negative social behaviors can generate changes in communities by studying to what degree those communities can adapt and respond favorably (Gössling & Hall, 2006). For this reason, local initiatives can steer policies that promote capacity building only to a certain degree, as they are heavily reliant global trends, as well as particular developments in regional or national contexts (Miller & Becken, 2016). Consequently, even though when considering positive outcomes of social initiatives, often other major factors can still shape and modify the ending result.

In the previous section the term resilience was described and defined from an urban perspective, as the ability of human communities to withstand and recover from stresses (Stockholm Resilience Center, 2015). Nevertheless, between the multiple layers within this concept, tourism resilience has emerged as an important aspect for this study because it brings other perspectives not included before. For instance, up

until now, when addressing tourism issues the concept of resilience has been mostly focused on the economic aspects, such as the recovery of tourism industries and the revitalization of arrivals numbers after a crisis. As an example, in the tourism industry an important aspect of resilience is portrayed by 'business resilience'. This sub-concept is easier to define both in terms of boundaries and key variables, as it is confined to the "ability of an economic sector or individual enterprise to adapt, thrive, and oftentimes innovate in response to the changing business environment" (Orchiston, Prayag, & Brown, 2016). This is due to the ability of business stakeholders to self-organize and reframe business operating conditions, without major interferences of other parties. However, more recently other variables such as the impacts of migration and social change on touristic destinations have started to get more attention (Lew, 2014). This fact is of foremost relevance when thinking about future cities resilience, yet it is harder to steer as it requires policies and strategies that interconnect multiple interdisciplinary themes and governance scales. For this reason, when understanding disruptions and their impact on tourism, a model is presented by Alan Lew (2014), in order to identify what type of disturbance is taking place and what resilience approach should be supported. In the Figure 6, four general contexts for tourism and resilience issues are presented. Each of them shows a specific type of disruption and its preferable resilience approach.

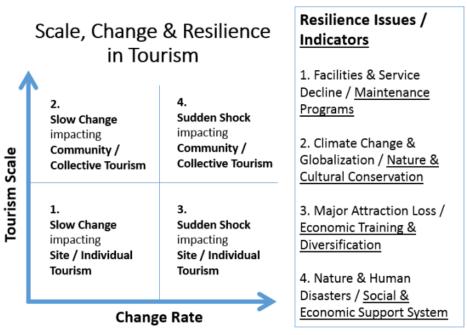


Figure 6: SCR model (Lew, 2014)

In this model, it is important to highlight that there are two axis that distinguish between community and individual tourism, as well as slow and fast disruptions. This distinction is crucial as the drivers and solutions for each of them can have very different scopes (Cheer & Lew, 2017). For instance, at the beginning of Lew's model, slow changes in the tourism industry are presented. The first quadrant of the model represents inevitable and predictable deterioration of individual facilities over time; therefore, a long-term maintenance plan is suggested for ensuring its viability and improving its resilience. Similarly, the second quadrant shows the impacts of slow changes -such as new environmental, social, and economic

developments-, in a wider scale (e.g. regional, national level). Which can be faced by the incorporation of international certifications for the tourism industry, as well as setting sustainable goals and policies. When the rate of change surpasses a certain threshold, it can be identified as a shock, disaster, or system failure (Lew, 2014). The third quadrant discusses this setting by explaining that the main concern for individuals in the tourism industry is the loss of access to attraction resources or to tourist markets due to infrastructure, economic, political or disruptions. Consequently, future planning and economic diversification is suggested as a way to achieving high resilience standards. Finally, in the fourth quadrant, major natural and human disasters that affect larger areas are displayed. For this situations, preparatory planning, emergency management, and long-term recovery plans are suggested in order to improve resilience levels.

Consequently, these two last groups are of special importance in the implementation of urban resilience, as they describe many of the issues that the tourism industry is facing nowadays due to the COVID-19 pandemic. Under these groups it is essential to highlight the importance of having a rapid recovery, as fast-action responses are necessary when dealing with emergencies. In order to do so, the tourism sector should support preparation and response efforts for large disasters, for example, by "supporting public education and raising awareness of known vulnerabilities through sites, museums and events that commemorate past disruptions, serving both residents and visitors educational interests" (Winter, 2011). As the author of the model further elaborates, this evolutionary approach has proven to be effective in the tourism industry by strengthening future resilience through the involvement of individual and institutional learning (Lew, 2014).



Figure 7: Seven principles for building resilience (Cheer & Lew, 2017; Stockholm Resilience Center, 2015)

After analyzing the SCR model, it is possible to conclude that touristic destinations face constant challenges, mostly related to environmental, social, and economic issues. As mentioned in the previous section, some

trade-offs of advancing tourism are the decline of natural resources, detrimental effects on social cohesion, and community unrest. Furthermore, the increase of tourism can also prompt urban changes, such as deterioration of services and infrastructure, increasing displacement of local residents, and contribute to spikes in housing costs and availability (Füller & Michel, 2014). As it was identified in the SCR model, all of these issues can occur over different times intervals, for instance some being gradual and foreseeable, while others being drastic and unexpected. Thus, having both linear and sporadic cycles. Additionally, these issues can have multiple impact scales both at social and geographic levels; as some will primarily affect individual stakeholders, while others have repercussions on entire communities (Lew, 2014). Consequently, the key for improving resilience is to build local capacity to deal with gradual and unexpected changes at multiple scales. This should be done by developing adequate responses that are able to provide a rapid rebound or at the very least, an efficient adaptation (Cheer & Lew, 2017). Although key responses are suggested in the SCR model, they should be only considered as a starting point from which more specific and context-based solutions will be then developed. For instance, as it is further suggested by Cheer & Lew (2017), there are seven general principles that can be used as a guide when introducing tourism resilience in communities (Figure 7). By applying these concepts, the purpose is to identify key opportunities that can be exploited, in order to ensure that systems remain resilient and support the future wellbeing of the local community in an ever-changing environment.

Takeaways

Stakeholders

In order to identify the main stakeholders involved in the process of building resilience it is necessary to recognize different types of knowledge beyond academic literature, such as bottom-up and top-down approaches (Kapucu, Ge, Martín, & Williamson, 2020). The involvement of multiple levels of actors helps to build trust among different parties as responsibilities are shared and do not rely on a single entity. Accordingly, public-private partnerships (PPP) are an essential aspect of these strategies as they promote trust, while providing high levels of efficiency and effectiveness. Consequently, in line with the literature review presented above, three different groups of stakeholders were identified, which are presented in the following table.

PUBLIC SECTOR	PRIVATE SECTOR	COMMUNITY
National government	Corporations	Residents
Regional government	Small & mid-size enterprises	Workers
Local government	Investors & Developers	Students
	Media	Local associations
	NGOs	

Table 2: Resilience stakeholders, adapted from (Kapucu, Ge, Martín, & Williamson, 2020)

Drivers & trends

Drivers and trends presented below are taken from the resilience literature review and will be used for the elaboration of scenario planning in the strategy proposal section of this study.

Urban resilience drivers: disruption by endemic issues; disruption by unexpected catastrophes. Urban resilience trends: operate in a state of non-equilibrium; fast response and recovery; implementation of shortand long-term strategies; balance between specific and broader adaptability; incorporation of economic adaptability; provide social justice; ensure sustainability over time.

Tourism resilience drivers: local initiatives; natural deterioration of facilities; social change over time; environmental change over time; loss of access to touristic attractions; tourism industry disruption; natural disasters; human disasters. Tourism resilience trends: increase business resilience; long term maintenance policy; incorporation of international certifications; setting sustainable goals and policies; economic diversification; emergency management; long-term recovery plans.

Bottom-up approach: Reuse

Adaptive reuse

Every building is constructed with a specific use in mind; however, buildings often outlive their original purpose. Moreover, throughout history, old buildings are rarely torn down. Instead, whenever not in use, they are adapted to meet new purposes. In the past, structurally secure buildings have been adapted to fit new needs or functions in a pragmatic way, most of the time without a heritage or preservation intention. Mostly, having functional and financial objectives as main drivers (Powell, 1999). This activity usually implies a shift in the building function, most of the time through a process that involves physical changes such as enlargement, embellishment, or reconfiguration (Mohamed, Boyle, Yang, & Tangari, 2016). Some of these modifications require additions and demolitions to the existing building in order to adjust certain characteristics. For example, circulation routes, façade orientation, and the relationship between spaces; are some of the most common modifications in adapted buildings (Brooker & Stone, 2004). As a result, this process of altering the building to host new functions is often called 'adaptive reuse'. Moreover, nowadays reuse is also considered an important strategy in the conservation of cultural heritage (Jessen & Schneider, 2003). For instance, some of the most successful building adaptations in recent years are often constructions with a cultural, historical, or symbolic value (Remøy & van der Voordt, 2014). Likewise, modern redevelopments are viewed as an important aspect of city transformation towards multi-functional urban areas (Remøy & van der Voordt, 2014). Consequently, these interventions are now seen as a creative way to bring new life into existing historic centers, while serving economic, cultural, and social values (Fisher-Gewirtzman, 2016).

Although the idea of reusing buildings has been around for many centuries; historically, the concept, was not included in the architecture academic domain. Only after the first half of the 20th century it has been a key subject in design conferences and literature (Plevoets & Van Cleempoel, 2011). For instance, in 1964 the Venice Charter reflected -for the first time- on the importance of adaptive reuse in the conservation of monuments by making use of them for a social purpose, on top of their intrinsic historical value (ICOMOS, 1964; Plevoets & Van Cleempoel, 2012). Since then, many architects started working on historic buildings as an important groundbreaking aspect of their work, such as the works of Carlo Scarpa in Italy, Rafael Moneo in Spain, and more recently -and internationally- Herzog & deMeuron.

Often, adaptive reuse is defined as the act of modifying a building to accommodate uses that are different from what was originally intended (Mohamed, Boyle, Yang, & Tangari, 2016). Yet, as it was briefly

mentioned before, adaptive reuse can also take place without changing the original function of the building. The concept revolves around bringing new life to the building, either by reenergizing its original use or by transforming it. Therefore, any structurally sound building is a viable candidate for adaptive reuse, which, most of the time, will require either aesthetically or functionally modifications (Olivadese, Remøy, Berizzi, & Hobma, 2016). For this reason, in this literature review, the definition made by Douglas (2006) is presented as a more comprehensive approach, in which adaptation is defined as a "significant modification to an existing building function when the former function has become obsolete. It is an intervention to change capacity, functionality, performance, to fix or improve a building according to new uses or requirements" (Douglas, 2006; Olivadese, Remøy, Berizzi, & Hobma, 2016).

Typically, the main causes for adaptive reuse of buildings are linked to obsolescence and vacancy of the property. These might be due to demographic and economic decline, or as a result of a spatial shift (Wilkinson & Remøy, 2015). Furthermore, the blight left behind when a building is not reused leads to lower social vitality and fewer economic opportunities. In addition, urban character can be negatively affected when architecturally valuable buildings are worn down or replaced (Mohamed, Boyle, Yang, & Tangari, 2016).

For instance, the sudden stop of social and economic activities due to the COVID-19 pandemic will eventually lead to physical decay of the built environment as a result of higher vacancy rates. Accordingly, over the past years, a trend for vacant properties has been identified in academic literature. In this pattern, unmaintained buildings, deteriorate faster; therefore, becoming brewing points for criminal activities and vandalism. Consequently, residents tend to use these areas less (i.e. public spaces), leading to blighted neighborhoods with fewer social interactions (Schilling, 2002). Furthermore, this pattern is in line with the theory of the broken window (BWT), which states that visible signs of social decay can create an urban environment where similar behaviors are further encouraged (Kelling & Wilson, 1982). Yet, adaptive reuse can be applied in these situations not only to reduce vacant buildings but to further promote improvements in the perception of neighborhoods, thus it can be viewed as a positive example of the broken window theory by positively shaping the built environment and influencing attitudes of residents and visitors (Jacobs, 1961). In this understanding, residents can be benefited by the creation of facilities and amenities through the implementation of adaptive reuse concepts. Moreover, if the scope is shifted from reusing buildings to reusing neighborhoods, many opportunities raise for disrupted communities (Mohamed, Boyle, Yang, & Tangari, 2016). This view gives an extra layer of importance to the implementation of adaptive reuse theories as they have a more lasting impact on the community by providing an added social value. For instance, when adaptive reuse specifically addresses housing issues in overtouristic cities, it can help to counter the effects of tourism gentrification by providing additional housing options. Although highend projects are usually implemented in adaptive reuse interventions, a social approach offers multiple opportunities for the community and developers (Mohamed, Boyle, Yang, & Tangari, 2016). Therefore, despite not being common, this approach could provide economic, environmental, and social benefits, which are considered a fundamental strategy in several governmental policies around the world (Fisher-Gewirtzman, 2016).

Hence, it is possible to conclude that structural vacant buildings have added financial and social costs. Thus, these negative effects have repercussions on different levels, for instance, it is a financial burden for the owner, yet it is also a social problem for the community as it can increase insecurity and lead to crimes (i.e. decay, fires, vandalism, break-ins, illegal occupancy). Furthermore, these aspects have indirect effects on the image of the surrounding area, fostering deterioration and lowering quality of life, consequently

devaluating adjacent properties (Remøy & van der Voordt, 2007). Therefore, redeveloping them is an attractive option which can be implemented in a short time span. Moreover, in mix environments such as historical city centers, a combination of housing and commercial facilities is suggested for a better economic feasibility (Remøy & van der Voordt, 2007). In this sense, adaptive reuse is part of an urban regeneration strategy, as it is focused on protecting the built environment and providing future generations with usable heritage (Bullen, 2007). Likewise, from a social point of view it helps to preserve the community identity and its surrounding environment. Additionally, redeveloping this type of areas can further help at improving neighborhoods by attracting other investors. Following the BWT, the reuse of one building promotes similar activities by its neighbors, thus creating a domino effect (Olivadese, Remøy, Berizzi, & Hobma, 2016). Yet, it is important to mention that in this kind of projects there are also many barriers, mostly from a technical point of view, that threaten the financial feasibility of the project. This is due to natural decay of buildings over the years, which urge adaptive reuse projects to make additional investments in structural and technical repairs (Wilkinson & Remøy, 2015; Remøy & van der Voordt, 2014).

When considering adaptive reuse, each building has unique characteristics that can be explored, some of them need a minor reprogramming while others are in need of a complex intervention; however, most buildings have a great potential for reuse. A change of function is only one of several alternatives to solve the vacancy problem (Remøy & van der Voordt, 2007). Accordingly, there are four main adaptive reuse strategies that property owners can use to deal with these situations, these being 'consolidation, renovation, demolition, and conversion'. From these, the last one, 'conversion' to new functions is the most successful form of adaptive reuse, which also requires major changes in the building. Yet, it is important to highlight its special qualities when dealing with vacancies in touristic places such as Venice, as it gives a beneficial and durable new use to the location and buildings, therefore avoiding the disruption of income. This can be achieved by offering several feasibility options by providing diversity of functions for both residents and users, and so having a higher social and financial benefits (Remøy & van der Voordt, 2007; 2014). Still, the objective of adaptive reuse is always focused on reinforcing the value of the building, by providing a better use, physical aesthetics, and program. Nonetheless, if these buildings have a recognized architectural value the chances of having a successful adaptation are increased (Remøy & van der Voordt, 2007). For instance, an example of 'conversion' are the traditional canal-houses in Amsterdam, which have been changing uses regularly for the last 400 years (Wilkinson & Remøy, 2015).

From an architectural view, when a building is altered with adaptive reuse strategies such as 'conversion', the most important factor of the intervention is the relationship between the old and the new project. Consequently, three categories were established based on the extent of integration between the original building and the new one (Fisher-Gewirtzman, 2016). As it is shown in the below (Figure 8), these categories or strategies are 'installation, insertion, and intervention'. Each of them encompasses a higher degree of modification to the original building, therefore buildings that are labeled as monuments are not suited for the later categories as they require much more invasive changes. For instance, the transformation from storehouse to museum in the project 'Punta della Dogana' by Tadao Ando in Venice, is a fine example of an adaptive reuse project which falls under the category of 'installation', due to the restrictive guidelines that were followed as the original building was labeled as monument. On the contrary, the transformation from offices to library in the 'DOK centrum' by DOK Architecten in Delft, fits under the 'intervention' category due to the flexibility of the project and the freedom of proposing multiple modifications to the original building.

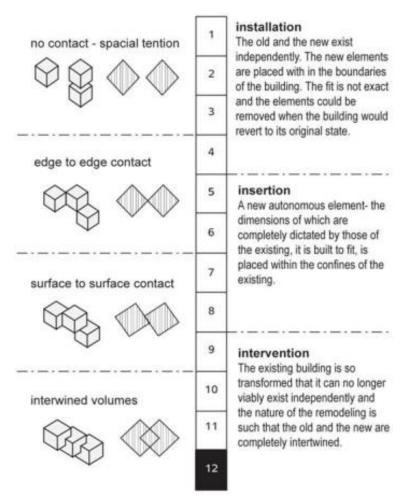


Figure 8: Degree of adaptive reuse integration (Fisher-Gewirtzman, 2016)

Adaptive reuse in Italy

When analyzing the national context of the case study, it is possible to determine that urban renewal in Italy is a consolidated practice. This is due to governance policies that support maintenance of historical and cultural assets with aim of enhancing preservation of national heritage. These practices are centered in fostering conservation and rehabilitation of buildings in order to conserve its historical characteristics (Olivadese, Remøy, Berizzi, & Hobma, 2016). Yet, when addressing adaptive reuse strategies, most of the Italian regulations are considered obstacles for transformation as they are not designed specifically for these kinds of practices. Instead, when renovations are implemented, the same regulations as new buildings are applied. As a consequence, interventions in existing buildings are regularly discouraged by investors as most regulations are lengthy, outdated, and contradictory. Thus, as many experts describe, reuse is yet not common in the Italian context (Olivadese, Remøy, Berizzi, & Hobma, 2016). Nevertheless, as it happened after the 2008 crisis, interventions in existing buildings can contribute to over 70% of the construction industry, therefore, setting -once more- new opportunities for the economic revival of the country after the current crisis (Cresme, 2014). Correspondingly, most properties in Italy are considered as potential reuse elements for their historical, morphological, and architectural characteristics; as they are usually located in strategic locations within the historic center (Olivadese, Remøy, Berizzi, & Hobma, 2016).

In these locations, reuse could deliver social benefits as affordable housing which meshes well with other aspects of the city core, as culture and leisure (Remøy & van der Voordt, 2007). Consequently, under the current circumstances, social housing corporations could be more likely to take this type of transformation projects because these initiatives do not require an immediate return on investment (ROI) and demand lower rates of return than commercial developments (Remøy & van der Voordt, 2007). Additionally, besides the multiple urban and social effects that adaptive reuse can have on the city level, it also offers many economic advantages as the creation of new jobs. For this reason, policy makers are particular interested in applying these strategies in economically depressed areas where creation of new jobs are of vital importance. Furthermore, recent studies showed that in adaptive reuse projects around 65% of the cost goes towards labor, while in new constructions it is less than 50%, therefore, reallocating the invested money in the local community (Mohamed, Boyle, Yang, & Tangari, 2016). Moreover, the return on investment (ROI) for some adaptive reuse projects can be higher than new constructions (Shipley, Utz, & Parsons, 2006). Likewise, it is well recognized that adaptive reuse has a great potential for increasing surrounding property values, plus having a ripple effect for boosting similar projects.

Consequently, it is possible to conclude that the benefits of adaptive reuse are twofold, firstly it is a financial opportunity for the private sector as reusing properties allow for new alternatives besides the traditional market; and secondly it is of high importance for the government as it allows for the redevelopment of abandoned properties, while creating new jobs for the community (Shipley, Utz, & Parsons, 2006; Rypkema, 2008). In this sense, by taking into consideration the case study of Venice, it is possible to determine that the oversupply of touristic amenities and the economic decline due to the COVID-19 pandemic can be the two main drivers for conversion of the existing building stock in the coming years.

Takeaways

Stakeholders

As in many other disciplines, when taking into consideration the multiple stakeholders involved in adaptive reuse there is always a convergence of conflicting beliefs, opinions, interests, and resources. Therefore, by properly identifying them it will allow for establish a collaborative approach, simplifying future decision-making processes; on top of providing financial, logistic, and design-related advantages (Aigwi, Phipps, Ingham, & Filippova, 2020). Consequently, after reviewing the existing literature about adaptive reuse, four main groups of actors were identified, which helped to better organize them according to their common interests. As it is shown in the following table, examples of the main actors are presented per each group, these being divided among: investors, producers, regulators, and users.

INVESTORS	PRODUCERS	REGULATORS	USERS
Building owners	Contractors	National government	Community
Government	Designers	Regional government	Passers-by
Developers	Restorers	Local government	Original users
Tenants	Builders	Heritage regulators	Contextual users

Table 3: Adaptive reuse stakeholders, adapted from (Aigwi, Phipps, Ingham, & Filippova, 2020)

Drivers & trends

Drivers and trends presented below are taken from the adaptive reuse literature review and will be used for the elaboration of scenario planning in the strategy proposal section of this study.

Adaptive reuse drivers: functional & financial interests; conservation of heritage; reduction of obsolete & vacant buildings; reduction of vandalism & criminality; neighborhood enhancement. Adaptive reuse trends: urban regeneration & city transformation; area reactivation; incorporation of new facilities and amenities; preservation of local identity; reduction of tourism gentrification.

Literature review conclusions

As it has been shown in the first part of the literature review, urbanization and its fast-evolving nature are strictly related to the tourism industry and its impacts on cities. Furthermore, this topic is of increasing relevance for understanding the effects of tourism, as a combination of these two factors can accentuate the feeling of overcrowding in cities, and hence trigger overtourism problems. In practical terms, overtourism is characterized and caused by an overuse of the resources, infrastructure, and facilities of a destination, which tourist share with residents, commuters, and day-visitors. Consequently, leading to clogging and failure due to excessive use, as well as worsening gentrification of services and housing. Thus, prompting protests among marginalized and displaced inhabitants.

There are three main factors that -if not regulated properly- contribute to the increase of tourist flows and concentration of arrivals in a few main destinations: the cruise industry, low-cost airlines, and online platforms for touristic rental accommodations. However, the absence of managerial strategies that allow for these events to happen, and the existence of unregulated markets are the main reasons for the overtourism phenomenon. Although some measures have been already proposed and even implemented in an attempt to reduce the negative impacts of this phenomenon, policymakers are still struggling to keep up with the rapid development of the sector. Therefore, as it is agreed by the academic community, a wider managerial approach is needed for managing both visitors and local communities appropriately. For instance, by fostering community engagement, congestion management, reduction of seasonality, diversification of attractions, and respecting carrying capacity thresholds. All in all, aiming for a sustainable development of cities, especially by addressing social issues outside the tourism industry. Accordingly, in order to achieve this objective, it is required that public and private sectors work together towards a common goal, consequently, aligning diverse stakeholders' views to maximize the benefits of a future interdisciplinary strategy.

For this reason, a managerial approach that has proven to be effective is the incorporation of innovative solutions by putting together two parallel strategies in a single approach. Consequently, in order to contribute to finding an alternative solution to this -growing- urban and social problem, two different strategies were reviewed: a top-down perspective focusing on resilience concepts, and a bottom-up approach implementing adaptive reuse theories. The objective of reviewing state-led and grass-root strategies concurrently is that negative effects of overtourism can be tackled from two different angles at the same time, hence providing better opportunities for success.

As it was mentioned before, the top-down approach was centered in understanding resilience, as this concept allows systems to persist when facing uncertainty, disruption, and unavoidable changes, such as

the current COVID-19 pandemic. Consequently, in order to further comprehend this strategy, urban and tourism resilience concepts were studied. In essence, the importance of resilience resides on the capacity of individuals, communities, and businesses within a city to remain functional and quickly recover from any type of detrimental situation. Therefore, this strategy is presented as a desirable dynamic state capable of having a rapid recovery. Thus, as it was presented in the SCR model, the key for improving resilience is to build the local capacity to deal with gradual and unexpected changes at multiple scales. On the other hand, the bottom-up approach was focused on providing background information about adaptive reuse strategies, and their applicability in the case study. Basically, this concept revolves around the idea of bringing new life to old buildings, either by revitalizing its original use or by transforming it. Although the degree of intervention can vary according to each project and local regulations, the core objective remains the same, allowing for a better use to take place and contribute to the community needs. Therefore, offering multiple advantages for urban and social regeneration, that can be complemented with broader state-led resilience strategies. As a result, if these two complementary strategies are implemented together, they can achieve symbiosis by having urban and tourism resilience policies as guiding principles that ensure future sustainability of the city, while also functioning as enablers of community-led adaptive reuse strategies. Consequently, in the following sections the challenge is to funnel the existing community desires into feasible proposals that are able to provide a better social and urban environment for all stakeholders, by taking into consideration both approaches reviewed here.

CASE STUDY

Venice

As it was already introduced in the previous chapters, the city of Venice is an extreme embodiment of the overtourism phenomenon, and consequently, it will be the main case study of this research. Thus, in order to provide accurate and representative data, first a theoretical introduction will be developed, followed by an empirical research that will support and complement the initial information. Therefore, in this section an overview of the city and its surroundings will be presented to contextualize the area, creating a state-of-the-art assessment, which will be used as a theoretical starting point, prior to the incorporation of empirical findings.



Figure 9: Cruise ship in Venice (BBC News, 2021)

A priori state-of-the-art

Venice is a major Italian seaport, located in a shallow water lagoon protected by sandbanks on the Adriatic Sea, nowadays being one of the most active cruise ports in Southern Europe (Seraphin, Sheeran, & Pilato, 2018). Consequently, for its geographical, economical, and historical importance it is the capital of both the province of Venezia and the region of Veneto, in the northeast coast of Italy. Although it is still one of the biggest ports in Italy, during the late medieval age and early modern period (697-1797 AD) it was one of the most important cities in the Mediterranean Sea. Being the capital of the *'Serenissima Repubblica di Venezia'*, a sovereign state and maritime republic stretching from Italy to Croatia, Albania, Greece, and Turkey. Therefore, being the main commercial node between Europe, Africa, and Asia (Cosgrove, 2020). Since it was established in the 7th century, the Venetian Republic considered the Venice archipelago and the surrounding lagoon as a single entity (Seraphin, Sheeran, & Pilato, 2018). Following the same idea, a study was developed in 2015, in which it was explained that "the urban model of Venice rest on two

influential factors: the natural balance between land and water, and the social-economic dependence between mainland and islands" (Cerreta, Poli, Cannatella, & Sposito, 2015).

As a consequence of its geographical location, an archipelago in the middle of a lagoon, Venice has a unique characteristic that makes it different from any other city in the world. First of all, this trait has created a network of canals and narrow streets that only allow for pedestrian and maritime ways of transportation, and secondly it has limited any kind of modern suburban sprawl beyond the historic center. This situation, with the added advantages of over a millennium of unmatched wealth due to the commercial and trade activities, has created a city full of historical palaces and monuments (Cosgrove, 2020). Therefore, the universal desire for conservation of this unique built environment has prompted the UNESCO to include the entire city as part of the UNESCO World Heritage list in 1987 (World Commission on Environment and Development, 1987). For this reason, nowadays Venice is well recognized for his ancient artistic heritage, as well as its unique architectural patrimony, attracting millions of tourists each year.

However, as in many other places, the World Heritage Site designation has evolved over time into a branding tool, thus, transforming Venice into a tourism icon. Therefore, at the moment, Venice is probably the city whose image is most associated with tourism and leisure. Yet, this same factor is causing the city to have difficulties in catching up with the booming regional economy of Veneto. As a matter of fact, overtourism is a problem that has been affecting Venice for the past 70 years. Moreover, the carrying capacity of the city -22,000 tourist a day- has been long surpassed, having an average of 66,000 tourist per day, with peaks of 100,000 people during especial occasions (Tattara, 2013; Valcárcel, 2018). This situation is then emphasized by the lack of accessibility, environmental problems, rigid historical physical structure, and an economic system mostly driven by touristic ambitions. Furthermore, the lack of accommodation in the mainland, forces more tourist into the city center, where most historical buildings have been converted into lodging facilities (Cerreta, Poli, Cannatella, & Sposito, 2015). Additionally, as it was already presented in the literature review, most adverse effects of overtourism are present in Venice, such as detrimental use of urban and coastal spaces, increased congestion and privatization of public spaces, tourism-induced real estate speculation, rise of disparity in purchase power between residents and visitors, and local loss of socio-cultural connectivity and sense of belonging (Milano, 2017). Consequently, the city has been constantly losing population, economic activity, and political centrality for the last half century (Musu, 2000). Similarly, in spite of once being the center of Italian visual and performing arts, now even creative industries prefer to escape to more dynamic and less crowded areas (Russo & Arias-Sans, 2009).

This situation not only affects the intrinsic beauty of the city but stimulates market mechanisms that promote low-quality and high prices for touristic attractions, services, and products. Yet, these practices are not solely a consequence of the growing numbers of visitors, but also due to the inactivity of policy makers, destination managers, and tourism companies (Seraphin, Sheeran, & Pilato, 2018). Therefore, Venice is now facing the consequences of being incapable of gearing its own resources for the maintenance, valorization, and preservation of its cultural heritage (Caserta & Russo, 2002). Furthermore, this problem is worsened by the cruise industry, which brings over two million tourists to the city every year (Valcárcel, 2018). The effects of these large ships have a huge impact on the fragile environment of the lagoon, as more than 1200 cruises cross the narrow 'Bacino di San Marco' each year (Testa, 2011). Besides the environmental concerns, the main problem with this kind of tourism is the high number of visitors disembarking daily at set times, therefore, creating space issues in the inelastic urban configuration of the old city, with little to no economic compensation for the local community (Capocchi, Vallone, Pierotti, & Amaduzzi, 2019). For instance, the negative effects of pollution in the lagoon area caused by the cruise

industry amount to 278 million euros per year, while the revenues generated by the same industry in a similar period of time are barely 290 million (Cerreta, Poli, Cannatella, & Sposito, 2015). These paradoxical numbers are due to the fact that only 15% of visitors spend the night in the city, as most of them are only day-trippers who do not contribute to the city economy (Russo & Arias-Sans, 2009).

The high number of tourists arriving each day, and a high rate of commuters who work in the tourism industry but are not able to afford a place in the historic center (e.g. builders, cooks, masseurs, janitors etc.); create an environment in which most of the city inhabitants are temporary, and thus unable to form a loyalty with the local identity (Burgio, 2009). As it was described by some academics "Venice is now inhabited by the pampered and the pamperers" (Burgio, 2009). Therefore, as there is no longer a natural population in the city, an ephemeral one has taken its place. This fact also affects social and cultural areas such as a low dynamism during the night, and seldom youthful practices by the local community (Russo & Arias-Sans, 2009). As a result, the city has been characterized by a progressive depopulation and demographic aging, which is further emphasized in the minor islands of the archipelago by the conditions of territorial marginality and difficult accessibility (Basso & Fava, 2019). Consequently, this reality does not allow for continuity in the construction of a collective identity in new generations, therefore, fostering increasing numbers in the destructive industry of entertainment, as buildings are methodically converted into hotels, resorts, casinos, restaurants, and souvenir shops.

Dealing with tourism

In order to address this situation, in the past many policies have been applied by local authorities to mitigate the negative impacts of tourism in the historical city center, such as taxation of visitors, booking systems and limited number of hotels beds, implementation of alternative routes and restricted areas, and even virtual tours. Nevertheless, while the number of visitors continue to increase at an overwhelming speed, none of these tactics has proven to be effective enough in reducing the damage caused (Seraphin, Sheeran, & Pilato, 2018). However, forcing the city to completely renounce to the tourism industry is not an economically viable solution, as the effects of such radical solution would also negatively affect other economic sectors. Therefore, as some studies suggest, several simultaneous strategies need to be enforced in order to provide better conditions in which the city can survive without completely changing the economic system.

These strategies need to focus on three different governance levels in order to alleviate the touristic pressure on the Venetian environment. As it can be seen in the following map (*Figure 10*), there are three scales of intervention within the Veneto region: 'Patreve economic area', 'Venice's metropolitan area', and 'Venice city center' (Cerreta, Poli, Cannatella, & Sposito, 2015). Consequently, each of these levels requires different strategies to cope with distinct scales of the problem at hand. For instance, at a wider level, it requires a broad resilience approach which will be able to improve urban nodes, reduce land consumption, and prevent risks from external events. At a metropolitan level, it requires an ecologic and economic resilience strategy, being able to face climate change and disruptions by adapting accordingly. Finally, at the city core level, urban resilience strategies are needed to promote regeneration of the city and preservation of the cultural and social heritage. However, in all of these strategies, the overarching goal is to valorize and preserve not only the physical heritage, but the safeguard intangible cultural traits and the virtues that derive from it (Russo & Arias-Sans, 2009).



Figure 10: Levels of intervention (Cerreta, Poli, Cannatella, & Sposito, 2015)

Empirical findings

Historic legacy

When discussing Venice and its intrinsic problems, a recurring topic mentioned by multiple stakeholders was the profound division between the city of Venice and the rest of the Veneto region. This matter has its roots in both historical and geographical factors that go back to the 19th century, which are still affecting social, economic, and demographic factors of the city. Hence, to a certain extent, are the cause for present-day issues related to the increasing touristification.

Starting from a geographical point of view, the urban development of the Veneto region is not homogeneous as it is primarily shaped by the Venetian lagoon. Therefore, having sprawl settlements all around its shores, with two main axis that stretch from Venice -the region capital- towards Treviso at the north and Padua on the south-east. Yet, despite its proximity, in practice these two cities are not considered to be part of the Metropolitan city of Venice, as proper institutional powers were never given to Venice by the Italian central government. As explained by one interviewee, "when we talk about the Metropolitan city of Venice, we usually meant the so called 'Patreve', which should be the union between these three cities, but in reality, they are functionally disconnected" (GS, 2021). Moreover, there is historic schism between Venice and the rest of the region that played a decisive role towards the lack of cohesion among these cities. A tangible example of this situation is the referendum that have been taking place every ten years since 1970, trying to officially separate Venice from the rest of the region.

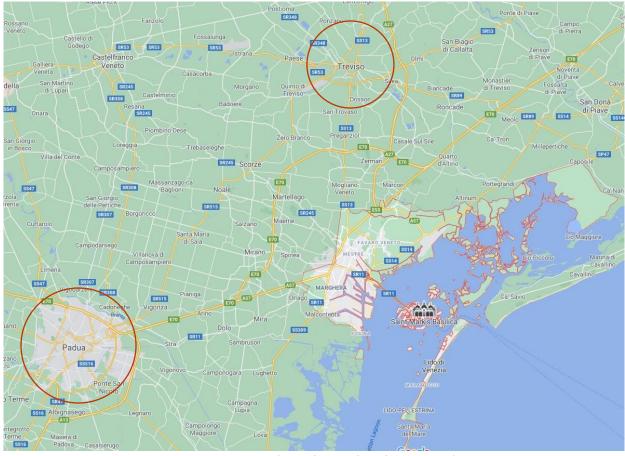


Figure 11: Venice, Padua, and Treviso (Google Maps, 2021)
Note: Venice Metropolitan region in the middle, Padua to the west, and Treviso to the north

This division, between Venice and the rest of the region has one of its main origins in cultural differences that go back more than 120 years, when the ruling class started many initiatives to transform Venice into modern city standards. For instance, at the beginnings of the 20th century, this ambition was pioneered by establishing new cultural institutions, such as the Ca' Foscari university. In a similar way, multiple international investments were attracted, which in turn encouraged the creation of Porto Marghera as the main industrial area of the metropolitan city. At the same time, the Veneto region became one of the main areas for economic development of small and mid-size enterprises -SMEs-, which created many diffuse settlements in rural areas. Therefore, small farms and industrial developments with no more than 200 workers sprawled along the territory, focusing on international exportation of local goods. However, this cultural and economic setting was never embraced by the city of Venice as there was no room for this type of developments in the existing urban fabric, relegating all types of industrial activities to the mainland, namely Porto Marghera. As a result, this area consisted of a completely different category of businesses, mainly state-owned heavy industry. Consequently, following a different economic model that proved to be very profitable for the city, yet starting a social division between Venice and the rest of the region.

At the beginning of the 60s', some infrastructure projects were required in order to better accommodate the modern necessities of the city. Similarly, a gradual modernization of the city's dwellings was needed as many of them lacked basic living standards. For instance, most dwellings were not connected to potable

water nor sewers systems, therefore setting Venice along with Napoli as epicenters for epidemics such as cholera and typhus. Therefore, as a way of providing social transformations, the government started several housing projects in the mainland -what is now known as Mestre-, which emerged as new opportunities for improving the quality of life for residents. These state-led initiatives to relocate Venice's inhabitants were efficient as the old city was not only in unable to provide good quality housing but neither job opportunities. Moreover, during this same time period, an economic modernization of the city also took place, mostly encouraged by international capitals, which pushed for more industries in Porto Marghera, far away from the historic center. Consequently, what started as a symbiotic relationship between Venice and the rest of the metropolitan region, prompted a slow depopulation of Venice.

Nonetheless, in the 70s' after more than 30 years of a thriving economy, the backbone of the Venetian wealth went into profound crisis due to environmental regulations that emerged all over Europe. These new concerns putted in evidence the damages caused by heavy industry to the environment, in this case to the Venetian lagoon ecosystem. Thus, leading to a gradual decrease of industrial activities in Porto Marghera, while at the same time, flourishing in other nearby cities with a less fragile ecosystems, such as Padua and Treviso. Hence, as a result of some state-led initiatives and lack of other economic activities, the tourism industry, an alternative market which was unexplored at that time, quickly became very popular. As portrayed by a Venetian historian, "since the Venetian productive sector was in crisis and it was not possible to bring new activities into the city due to environmental concerns, the ruling party at the time decided to use the existing heritage and beauty to attract people. This decision fostered the creation of great cultural activities and exhibitions such as the Venice Carnival, which in time drove Venice into becoming a full touristic destination" (GS, 2021). As a result, in these years the tourism industry slowly moved from a seasonal activity at the coastlines of Lido di Venezia to the historic center of the city. Bringing new opportunities to the old city and putting Venice back on track to restore its former glory, amidst a collapsing economy.

At the same time, in 1973 a new national law was passed granting special privileges to Venice due to its heritage importance, and therefore allowing for physical and socioeconomic issues to be addressed, especially by focusing on the overall modernization of the city urban fabric. In practical terms the introduction of this law let for additional investments to be made in order to safeguard the city, such as the renovation of the old infrastructure and the construction of the MOSE barrier for the prevention of seasonal floods. Consequently, preparing the perfect scenario for the development of a new touristic market. During the following years, tourism not only replaced completely the productive sector of Venice, but also started to displace other activities such as administrative and housing aspects of the city. Leading in a short period of time to an economic monoculture and a second demographical decline. Mainly, due to a lack of hinterland areas around the city that were able to provide alternative economic activities not related to tourism, as other cities in the region, and the rest of Italy had. All in all, as many stakeholders agree, what started as an alternative activity to help Venice find a new equilibrium for its crumbling economy, became and still is its only way of income, mostly because it was never regulated.

To conclude this section, a summary of the demographic evolution of Venice can be seen in *Figure 12*. In which is possible to see the rise of the population in the first half of the 20th century due to the economic opportunities provided by the city, as well as the steady decline started with the relocation of industrial activities to the mainland in the 50s' and the later introduction of the tourism industry in the 70s'.

Venice Historic City Population (1871 - 2017)

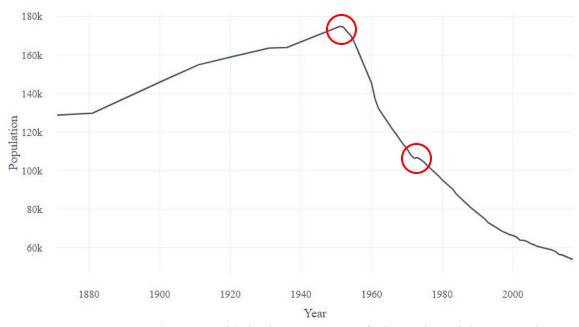


Figure 12: Venice population rise and decline (MIT - Department of Urban Studies and Planning, 2020)

Tourism effects (past)

Ever since the tourism industry began in the 70s', the number of tourists arriving to Venice has increased exponentially. For instance, tourist numbers in the city have increased from 15 million visitors per year during the decade of the 80's and 90's to more than 30 million in 2019. As a result, nowadays, the carrying capacity of the city has been surpassed, and therefore it is unable to provide the required services for all of its visitors and residents. As it was explained by a tourism expert, "Venice can handle at its maximum capacity 18 million visitors per years, not the 30 million that we had in the last years" (JB, 2021). At the same time, the average time spend per tourist in the city has decreased considerably, as now many of these visitors are hit-and-run tourists that only stay for a couple of hours. Consequently, adding unnecessary pressure on the already fragile environment of Venice, since they make excessive use of the urban infrastructure but provide no income for the city, as they are not required to pay city taxes nor waste fees, as well as not using public transportation due to the nature of their short stay. Thus, as many experts concur this specific type of visitor is worsening the situation in Venice, as the economic balance between costs and benefits that the tourism industry provides had reached a negative outcome for the city and its inhabitants. In words of a local resident, "my impression as a resident is that there is a daily transformation of the city, an almost daily worsening of situations linked to the massive presence of tourists" (MM, 2021).

During interviews with Venetian residents, two recurring issues were described as the main effect of tourism in the built environment, mainly materialized in the last two decades. The first of these effects is related to the daily conversion in the typology of shops, in which the majority of them shifted from providing services for residents as hairdressers, clothing, convenience, and recreational activities (e.g. cinemas, theaters, etc.); into tourist-oriented uses such as souvenirs, bars, and restaurants. Similarly, the second effect being a systematic transformation of dwellings into lodging locations of different sort,

therefore reducing the availability of residences for locals. As it was mentioned in the literature review, these two issues can be described as tourism gentrification. Therefore, many of the effects of this phenomenon are now visible in the social fabric of the city, hence affecting the living quality of residents. For instance, as more tourist-oriented amenities surge throughout the city, residents are pushed out, thus lowering the city's offer of essential services such as schools, healthcare, culture, sport, and wellbeing. This is due to lower demands as tourist do not make use of those facilities. Consequently, creating a snowball effect that is difficult to counteract and, in any case, promptly respond. Ultimately, as a result, the diversity and quality of services offered by the city is deeply reduced. For example, these effects were perceived and mentioned by all interviewees, as they explained that it was possible to see amenities and convenience stores in their own neighborhoods and streets converted into touristic shops, forcing them not only to look for less accessible options but also to pay higher fees for common goods, as they need to compete with prices made for tourists. Additionally, according to most of them, this profound depopulation of the city has already reached a critical point, in which not enough residents are left to support remaining local amenities. This situation is also due to a feeble educational market, as the majority of students in local universities are commuters who live in nearby cities that offer better services and cheaper student accommodations.

As a consequence of these changes, the urban fabric of the city has deteriorated in diverse aspects, as now there are only two main economic groups left in the city. Firstly, the ones actively living from touristic activities, such as hotels, restaurants, stores, or museums. And secondly, those living indirectly from it, such as private room rentals, which officially is considered a secondary source of income, despite in practice being the contrary. For instance, as it was shown in a survey held in Venice, 55-60% of the people who had a room offered through online accommodation services said that it is its primary source of income (OCIO, 2020). Thus, nowadays this lack of economic diversification creates many social issues that are affecting residents and tourist alike, as it was further described by one interviewee, "cities cannot consist of a single social category, otherwise it ceases to be a city" (EV, 2021).

Correspondingly, this 'indirect' market of private room rentals is shaped by the tourism industry and new opportunities provided by internet and globalization. As a result, supporting a systematical conversion of houses into multiple short-rent facilities guided by economic motivations and pushed by an increasing touristic demand. Leading to a difficult market for families in the search of housing options, therefore, having to pay extremely high rents or being forced to move into the mainland, as the current offer for apartments in the city is very limited. Additionally, most residential contracts do not allow for long stays and include clauses for a yearly increase of rent prices, as most landlords are driven by the tourism market speculations. In line with these findings, one of the interviewees stated, "with these market prices, living in Venice is now restricted to wealthy people, or the ones who inherited a place and had not yet decided to sell it to the tourism industry" (DM, 2021). Accordingly, in the eyes of the people living and working in Venice, the presence of both residents and students has been discouraged throughout the years, as most of the properties are allocated only for touristic purposes. For instance, in the last years, a lack of government policies in support of student accommodations had favored the increase of private touristic rentals. This is due to yielding more income to property owners, despite the overall positives effects that students can bring to the city environment, such as diversity, livability, and permanent residents.

Furthermore, another direct consequence of this phenomenon is the strong internal transformation of buildings. From a tourist perspective the city looks unchanged, as all the original façades are restored and maintained. However, from the inside these buildings are completely subdivided and altered, following

therefore, a typological transformation towards single rooms and bathrooms, without the original living areas. Thus, hindering any future adaptation initiatives into different uses, as all prospects of flexible spaces within the building have been already subdivided and methodologically compartmentalized. For instance, as it was described by an interviewee, "this situation creates a city that only lives from tourism, which has shaped its own spaces to accommodate tourists. And there are thousands and thousands of dwellings that have been converted for this purpose. If it goes on like this, it is destined to die... as a city, it is doomed to become a museum of itself" (AF, 2021). Moreover, this transformation of the building typology also brings other concerns, such as unsafe neighborhoods. This is due to a growing number of strangers living among fewer residents, and therefore less community caring and permanent 'eyes on the street' that ensure certain degrees of social protection.

According to residents, this situation has reached to this point mainly because of the lack of legislation. This is due to the easiness for owners to transform their apartments into touristic rental facilities. As it was described by one interviewee, "if I realize that I can earn more money by renting my property to tourists instead of residents, the only thing that I need to do, is to notify the municipality. The system in place facilitates these economic practices, therefore allowing for this type of activities to become the main source of income for many property owners" (MF, 2021). As a consequence, many areas had become completely transformed, serving almost a hundred percent to tourists. As it is shown in Figure 13 there are entire zones in which there are more rooms available for renting than actual residents living in that same area, with a ratio of 20+ to 1.

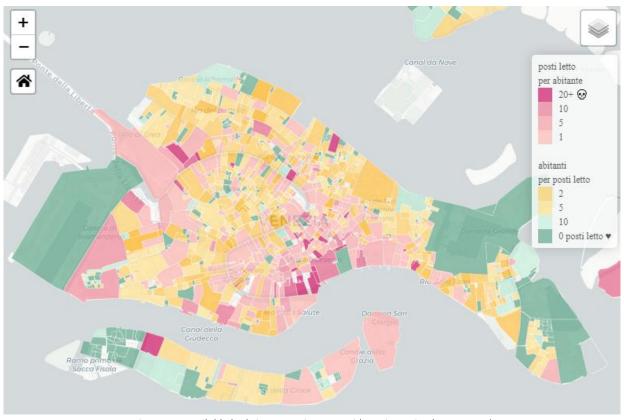


Figure 13: Available beds in comparison to residents in Venice (OCIO, 2021)

Note: In red beds/residents (negative ratio), in yellow & green residents/beds (positive ratio)

This map, developed by an NGO based in Venice, shows in red the areas that have more beds than residents, in yellow those who have almost the same ratio, and finally green those with more residents. As it can be seen, the central neighborhoods of Santa Croce, San Polo, and San Marco are in critical conditions, displaying much more lodging accommodations than the peripheral zones of Giudecca, Castello, and Cannaregio.

A direct consequence of this situation is an extremely high number of rental locations in the city, either being part of a hotel structure or a private rent such as Airbnb. As it can be seen in the following graph (*Figure 14*), the yearly ratio of residents in Venice and the number of available rental beds have been tracked during the last 20 years by OCIO, in order to offer a clear view of the evolution in the tourism industry within the historic the city. In general terms, during these last two decades the ratio of beds and residents shifted from 1 to 5 towards 1 to 1. It is important to note that besides the steady decline in population and the yearly increase of hotel facilities, there has been an extreme expansion of lodging facilities since 2016.

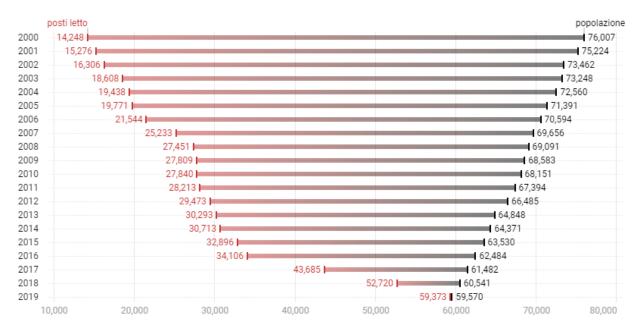


Figure 14: Number of beds in relation to residents during the last 20 years (OCIO, 2021)

Note: In red number of beds, in black number of residents

Furthermore, as it can be seen below (*Figure 15*) this exponential increase is due to the introduction of online platforms that accounted for almost doubling the number of facilities from 34,000 to 60,000 in less than 3 years. Although the presence of private online accommodation has been on the rise since its first appearances in the early 00', it is only with the introduction of Airbnb to the Italian market that a sharp increase can be observed. Having the year 2016 as an inflection point in which private rooms surpassed for the first time in history the number of beds offered by hotels and other lodging facilities.

Numero di posti letto nelle strutture ricettive

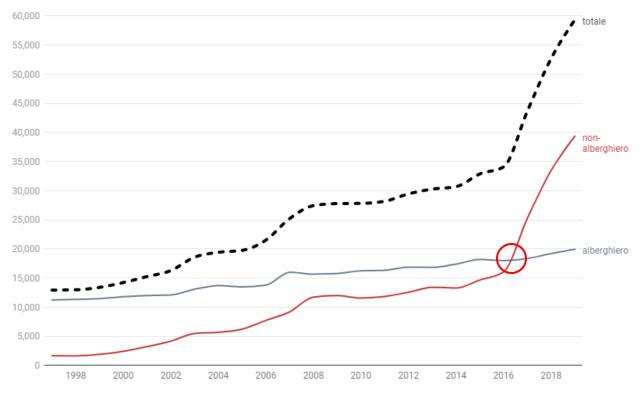


Figure 15: Hotel beds in comparison to. private rooms (OCIO, 2021) Note: Hotel beds in blue, private rooms in red, and total in black

When all of the information displayed in these two last figures is translated into the city urban fabric, we can observe entire buildings being used for online touristic accommodations, therefore having, in practical terms, unregulated hotels managed by a few private hosts. As it was mentioned before, the main cause for this situation is the lack of regulations, which in turn allow them to pay fewer taxes than regular hotels, and not even take into account basic safety measures. For this reason, not only the municipality does not receive an income that could be reinvested in the city, but also locals are suffering from the loss of residential places. Consequently, generating nuisance in both residents and public employees, as it was also stated by one municipality employee during an interview: "there is a double loss with Airbnb locations, firstly residents are losing places to live, but also not even the municipality is making a profit out of it, as taxes are not enforced nor regulated. All the money goes directly to the Airbnb corporation!" (SA, 2021).

However, besides these examples of nuisance in the local community, most interviewees also mentioned the lack of effective managerial measures implemented by the government when dealing with everyday touristic issues. According to them, there is a hard division between the measures for residents and those for visitors, without considering that most of the city workers are not residents, therefore commuting from other cities. For instance, by dividing between residents and nonresidents in public transportation queues. As one of the interviewees commented, "By trying to control tourist, other weaker categories such as commuters have been also deeply punished" (AV, 2021). Therefore, denoting a lack of consideration for the people who live the city every day, being either a permanent resident or a commuter. Consequently, generating discontent among the community, as explained by another interviewee "Venice has become a

very uncomfortable city, but then when all the services for the residents are lacking in favor of services for tourists, you realize that -sadly- you can no longer live here... this situation makes the average Venetian very unpleasant and hostile towards tourists" (MP, 2021).

Pandemic effects (present)

As it has been seen in the last years, the pandemic affected everyday activities all over the world. Yet, it had an especial and immediate effect in territories which are characterized by touristic activities. In this setting, the study of Venice is not only appropriate, but necessary to better understand how this situation is affecting and will continue to affect many similar places around the world. To grasp the magnitude and immediacy of the initial situation, when the pandemic was declared in February 2020, the Venice Carnival -which usually last over two weeks and brings more than 3 million tourists to the city- was in progress. However, the sanitary situation prompted its last-minute cancellation, just two days before the final celebrations took place. Therefore, translating into heavy economic losses for the tourism industry and the city. Furthermore, right after this decision was made, every activity related to the tourism sector was banned until summer, when certain activities such as the catering industry and domestic tourism were allowed once again, although in a reduced format. As it was explained by a Venetian worker, "since the pandemic started -in February-, it has been a very particular time, dramatic I would say... not only in Venice, but many other cities in Italy too, during this time we -as a city- have seen the collapse of our main source of income. From one day to the other, cities which were entirely built around a tourism economy have witnessed how everything stopped and fell apart" (AF, 2021).

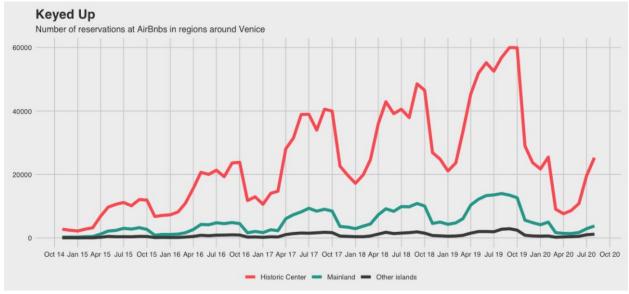


Figure 16: Airbnb reservations (MIT - Department of Urban Studies and Planning, 2020)

Under these circumstances, two early effects of the pandemic were particularly felt in Venice, one was a consequence of the measures taken by the government to prevent the virus dispersal, while the other one was a result of the community reaction to those measures. Hence, first, there was a sudden stop of all

activities related to the tourism industry, such as a catering, lodging, retail, and cultural activities, in an attempt to control the pandemic. For instance, as it can be seen in the previous graph (*Figure 16*), the number of private room reservations felt abruptly since the beginning of the pandemic, therefore creating a completely different urban dynamic in the city -usually characterized by the crowds of people-, as now it looked empty for the very first time. And second, there was a massive increase of real estate assets that became available for sale, as owners had no means to continue operating without tourists, they were forced to sell their businesses and properties. This second aspect is a direct consequence of the relationship between supply and demand being completely altered in a matter of days. For example, as rental prices went down due to the decline of tourists, many landlords decided to sell their assets out of fear that properties values will continue to decrease. According to many stakeholders this situation was abused by big corporations that were able to buy properties at low prices, waiting for the touristic market to be opened again in the future. As indicated by one resident during an interview, "is not even that properties' prices are that low, but they are accessible enough for large groups that can easily wait 2 or 3 years and then make a big profit out if them" (DM, 2021).

As a result, there is a great number of shops that are being shut down and converted into something else. For example, near traditional touristic areas such as Rialto and San Marco, some of the old businesses are being bought by foreign entrepreneurs and investors. As it was also explained by an interviewee who used to work in the tourism industry "I have seen a lot of hotels that are now closed... maybe for good, maybe only while the pandemic lasts, but I think they will change administration anyways. For instance, my old working place was closed, with all the merchandize still inside, but no one working there, even when domestic tourists were allowed back again in the city. Also, next to my shop there was a theater -Teatro Italia- which usually served the community, now it has been converted into a supermarket... I don't know what the reasoning behind that is, but I believe it is very short-sighted" (VR, 2021).



Figure 17: 'Despar' supermarket inside Teatro Italia (Linea Light Group, 2021)

Furthermore, as it can be seen in online platforms for buying and selling properties such as 'Immobiliare.it', 'casa.it', 'idealista.it'; not only businesses are being sold, but also apartments that used to serve tourists through online platforms as Airbnb. Many of the options that are now being offered, have the same pictures from their old room rentals sites, this means that these apartments were initially offered to visitors, but due to the current situation they are now being sold. This fact is consistent with the information displayed in Figure 18, as it shows the evolution -openings and closings- of Airbnb rooms in the last two years. Here is possible to observe that the net change in rooms is decreasing consistently as the pandemic evolves, from +500 in 2019 to -500 in mid-2020, especially in the historic center of the city, which is the most affected area. This information also confirms the earlier assumptions that these properties were economic investments per se, and not a secondary source of income for families, therefore having a direct correlation with the depopulation of the city.

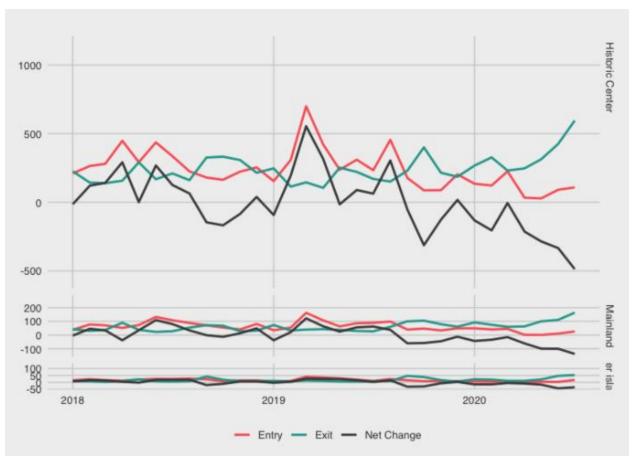


Figure 18: Pandemic effects on Airbnb, Venice (MIT - Department of Urban Studies and Planning, 2020)

On top of the obvious economic losses due to the stop of tourism activities, it is also important to highlight the social effects that this disruption generated in the city. As it was mentioned by most of the interviewees, without tourist the city became virtually empty, not only talking about the number of people, but also without amenities, shops, and restaurants; leaving only a few residents behind. Therefore, entire zones were practically shut down due to the low presence of inhabitants and activities. For instance, as it was

described by a Venetian resident, "all the area around Piazza San Marco, which is traditionally linked to a touristic use, seems that it is still in lockdown, even now that tourists are allowed back to the city... the effect is very alienating, but is a consequence of this situation" (EV, 2021). Moreover, in the eyes of longtime residents, seeing the city completely empty generates mixed feelings, from one side they say it is sad to walk through the city as it is deprived of live, activities and its characteristic agglomerations. However, it is also extraordinary, as it is the first time in their lives in which they are able to really appreciate the city, being free to walk, meet other residents, and use the public spaces that were taken from them long time ago. Consequently, most residents are trying to make the most out of it during this period, hoping that the pandemic will create a permanent change in the city, "this is something to 'seize in the moment', because in who knows how many months we will vaccinated and tourist will come back... these spaces had begun to serve the community for the first time, residents are re-appropriating them, we call this phenomenon a reappropriation of the city which is something very important, because this right was always denied to us" (MP, 2021).

Accordingly, an interesting trend that can be seen in many closed shops is the presence of selling signs asking only for Venetian's entrepreneurs or services aimed at improving the community. As it was explained by an elder resident, "this fact proves that there are some owners saying: no more things for tourists, we need to help the neighborhood. We need a community project here, not else!" (DM, 2021). Similar requirements have been set by bigger real estate owners and associations, such as IRE -Istituto Regionale Edilizio- which owns many properties throughout the city aiming at providing a better livability for residents, therefore, only renting properties for cultural projects. It is important to highlight the importance that associations have in Venice, as it was explained by several interviewees, "in Venice we have many associations, each of them with a specific objective. It is part of our culture, yet most of the time they are unable to do much because the government doesn't support them" (MP, 2021). However, in the eyes of the residents, situations as the ones presented above continue to give hope as they represent the willingness of locals to help the city, a fighting spirit that is still present in Venice.

Correspondingly, as the situation continued to affect the livability of the city, some private associations decided to launch more tangible initiatives in order to help the community. For instance, the IUAV university started a pilot project with the municipality of Venice, in which students had the opportunity to apply for housing within the city center at accessible prices. This joint project helped to stablish a link between students and houseowners, in order to give rooms that usually would have been given to tourists, such as hostels and Airbnb, to university students. So far, this initiative has proven to be a win-win situation for both groups, as students were welcomed back in the city at accessible prices, and landlords had the opportunity to rent their properties that otherwise would have remained empty. As it was explained by one of the developers of the initiative, "this is a sort of agreement that helps everyone, fifty/fifty we could say, in this sense some owners will be able to rent their houses, and students will be able to live in the city for the time being" (MM, 2021). Consequently, the initiative was considered very positively from the municipality perspective, but also from the associations representing the owners and tourist rentals. As expected, during 2020 more than 1000 solicitudes were made, therefore, making clear that an important demand for housing is not being fulfilled. The cause of this situation can be traced to the tourism market that in the last years has pushed weaker categories -such as students- out of the renting market. Thus, this 'experiment' also proved that an alternative market exists, and with the right conditions it could be brought back into the city. Yet, for the time being, this project risks being just a temporal solution, as owners will probably return to a touristic market once the pandemic is over. Nonetheless, it also helped to prove that

the presence of students is needed for recovering the city from a social perspective. Providing not only a temporal relieve for the economic crisis, but also encouraging the creation of a community, as some students will become permanent residents after their studies.

However, as expected, some stakeholders are also using this time to renovate touristic locations, looking forwards to the return of visitors. For instance, a regeneration project had started by a private investor in the Certosa island, which was a landfill until some years ago, to redevelop the area into a luxury resort. Similarly, lots of landlords are using the stop generated by the pandemic to renovate their rental apartments, so when tourist come back to the city, they can charge even higher rates. As a result, this situation concerns many residents as they lose hope that accessible housing will be ever available for future generations.

Looming tourism (future)

As it was agreed by all of the interviewees, tourism will be undoubtable linked to Venice in the future. Despite knowing about the big disparities that this industry brings along, it is impossible to re-imagine the city without it. Therefore, not only the government but the community as well, is hoping for the industry to recover fast, while pushing for high sustainability standards -from a social, economic, and environmental perspectives-. However, at this point in time, there are still some discrepancies about how long it will take to reach pre-pandemic levels, mostly due to uncertainties about sanitary regulations and unclear timelines.

Although many stakeholders are optimistic about the future, they also think there is a romantic bias created by the longing of change. This feeling is fueled by how the pandemic has shaped the city, for instance, the lockdown proved that there are not enough residents for keeping alive shops and amenities without the continuous presence of tourists. Moreover, only with the allowance of domestic tourism it was possible to have some activities back. Still, under these circumstances, most interviewees saw firsthand lodging facilities and shops being bought by new administrations, as well as room rentals remaining empty while waiting for better times. The only visible change was in the nature of small shops, but according to them, these new stores are not going to last long as there is not much support from the government in providing the necessary environment for them to merge in the existing urban fabric. As it was explained by a longtime resident, "it has been a year already, and it is exactly the same thing. I don't think anything will change in the future" (MT, 2021). Thus, residents believe there will be a massive change of ownerships, but not of economic model. This is due to only having a small number of people who really interiorized the situation and the importance of creating a different city. For this reason, they feel that the pandemic will be forgotten fast. In their understanding, there will be a countercurrent reaction from the community towards the recent situation, therefore returning to previous practices fast, as they stated, 'making up for the time lost'. Moreover, as depicted by a city historian, "it seems clear to me that there is a shared trend to say, 'let's wait the night', that is, in the sense that people expect tourism to return big" (GS, 2021). This pessimistic view is due to not seeing a structural change in the behavior of locals nor in the government actions, thus having the feeling that everyone is waiting for the pandemic to end in order to restart the very same practices as before, leading back to the same problems in two or three years. As it was ultimately expressed by a concerned resident, "I fear that we will return to same as before or that it will be even worse, instead of having a relaunch of tourism it could be a rebirth... and that scares me as a resident and even more as a mother" (MP, 2021).

Yet, as stakeholders also agree, this in-between time should be used as an opportunity to change the relationship that the city has with the tourism industry. In most situations, stakeholders wish for a symbiotic relationship between the city's main sources of income such as tourism and education, while also incorporating other aspects of their traditional characteristics such as art and architecture. Nevertheless, they all agree that certain values as sustainability and employability should be improved in order to make the city more resilient and future-proof. Therefore, by giving each of these areas the same importance while 'restoring' the economy, the intention is to develop a living organism that is less unbalanced than before. In line with the findings made in the theoretical sections of this study, these wishes are possible to achieve if the right policies and strategies are put in place. Consequently, as the shock created by the pandemic was significant, it is expected that it would take some time before the tourist numbers are back into pre-pandemic levels. Therefore, allowing for changes to be proposed, as stakeholders could exploit this slowdown in the industry to rethink how to deal with the most pressing issues. For instance, as it was explained by a local stakeholder, "if 3000-4000 more students are able to reside in the city, a change would be perceptible. Because the kind of social interactions that students bring is very different from those of a tourist" (AF, 2021).

Furthermore, besides implementing new strategies, most of the interviewees agreed that it was important to use options that are already available in the city. For example, at this moment, Venice is equipped with the necessary means to trace and regulate people's flows, therefore facilitating the implementation of solutions that take advantage of this fact. At the same time, it could use the great amount of unused real estate to create alternative markets that could be beneficial for the community, or at very least, utilize the existing lodging facilities to educate tourists on how to behave in the city, in order to promote a better living environment. For instance, this could be done through informative campaigns when renting a room, as it was presented by a municipal worker, "if there was some sort of education about how to behave, explaining what is allowed or not in Venice... it would already be a small step towards a better future" (SA, 2021). As it was demonstrated during the summer of 2020, the fact that domestic tourism was allowed back in the city not only helped it to survive, but also showed how a more manageable dimension of tourism looks like, therefore allowing for a new respectful and sustainable relationship.

New opportunities

When thinking about how Venice is going to further develop in the near future, there are some important aspects that need to be considered. Besides the challenges that were discussed in the previous section for overcoming overtourism and the economic crisis created by the pandemic; it is imperative to also consider the latest introduction of the MOSE barrier (*Figure 19*). Recently, this fact created a major modification in the community as it changed a situation that was considerably affecting the city's livability for a more manageable condition, as now it allowed for new interactions to be incorporated in the urban fabric. Consequently, for the first time in the city's history, floods will be controlled, thus leading into a more sustainable future in which the community and the environment will be able to coexist in harmony. Even though the implementation of this infrastructure feature coincided only by chance with the pandemic, its completion -after more than 30 years- created a unique scenario in which Venice is no longer affected by its three main issues. As now there are no tourists in the streets, no cruises in the canals, and residents are no longer being affected by seasonal floods.

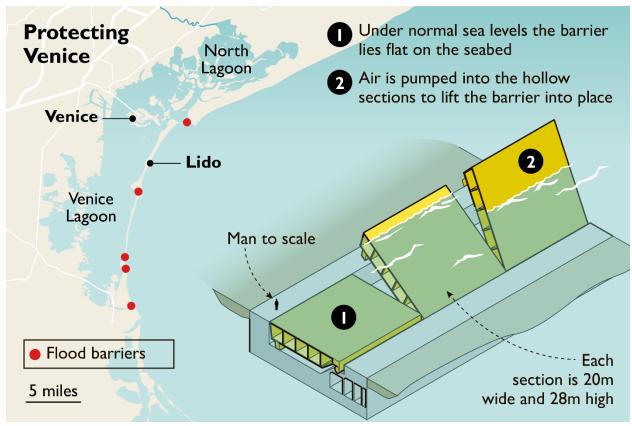


Figure 19: MOSE barrier in Venice (The sunday times, 2019)

Therefore, this exceptional situation highlighted some of the embedded characteristics that the city had, such as the increasing importance that exists between Venice and its surrounding lagoon, being the source of its history and beauty. As it was described by a Venetian professor, "cities are closed worlds in regards of external territories, but Venice is now proving some of the advantages of having a symbiotic relationship with the environment" (AF, 2021). Similarly, also highlighting the strong connection between residents and its unique built environment, which is materialized for instance, by the historical pedestrianization of the city. This example also illustrates how the urban fabric of Venice played an important role in allowing for certain activities to survive throughout the years, as the hierarchy of spaces served as a gradual passage from private to public spaces, which brought many benefits to the city. It is a system that has historically kept life and work alive within the city, from which an extremely fertile relationship was established between residence and work, guaranteeing social interactions and the creation of community. However, even now when most these activities have disappeared due to the tourism industry, the urban fabric that fostered these interactions remains, thus allowing for a future that could very well host cross-systems of life and work based on new technologies and innovation. Moreover, also demonstrating the advantages of these interactions in other fields, like the efficiency of the transportation systems that the city has, such as water busses -vaporetti- that are now working flawless due to the decrease of users. Therefore, proving with tangible examples that the relationship between urban areas and their environment can still be a fertile ground for improving future cities. These facts are of great importance as they show how Venice could be an example for other cities when dealing with certain issues, even at larger scales. Much more

when it is taken into consideration the fact that Venice is not an isolated village, but a complex city, which is the center of a bigger metropolitan area.

In line with these ideas, as it was explained by one interviewee, "now that the main problems of Venice are gone -tourism and floods-, it has been emphasized how this city could be so many other things. For instance, it could be the start of a knowledge city, as the foundations have been already laid with the many institutions that continue to survive despite the burdens set by the tourism industry" (AF, 2021). Similarly, as other stakeholders pointed out, there are some other prospect aspects that could be further developed in order to provide economic alternatives for the city. Consequently, below, four main areas were identified in regards of the future opportunities that the city could exploit for overcoming the current challenges that it is facing. These future opportunities were obtained from interviews with multiple stakeholders and would serve later as a starting point for addressing future scenarios. However, as it has been seen throughout history, implementing state-led initiatives is a very difficult task if they are not backup by the community. Therefore, as it was presented in the theoretical section, and it was also suggested by some interviewees, a mix of top-down and bottom-up approaches should be implemented. In the specific case of Venice, in the near future some top-down initiatives will be supported by the government, such as the 'regulation of common goods' which is a newly introduced law that facilitates public-private-partnerships (PPP), therefore, allowing the municipality to collaborate, develop, and promote this kind of processes. Consequently, at the same time, allowing for bottom-up approaches to easily reach institutional levels and be developed between private and public institutions. As it was explained by a municipal actor, "this law allows private stakeholders to develop larger projects that could have greater impacts in the community. Moreover, if additional regulations are later introduced from a regional level, like laws about urban regeneration, we could have a comprehensive double approach for solving the problems that Venice is now facing" (EV, 2021). For instance, another regulation that can be also introduced is the 'urban change of use' which allows the modification of existing land-use plans in accordance with the certain regulations, in order to facilitate urban regenerations. Therefore, allowing for a widespread system of spaces to be transformed, even in heritage protected areas.

Yet, before entering to each specific topic it is important to mention a general suggestion that should be implemented in every future plan for Venice. As it was recommended by some interviewees the management of the tourist flows should always be taken into consideration. Furthermore, stakeholders also suggested that there should be multiple entrance points to the city, in order to distribute the number of tourists in different areas, avoiding overcrowding the very same streets. Moreover, this idea is rendered even more viable when it is taken into consideration that many of the transportation vehicles are not being used due to the decrease of tourists, therefore allowing for pilot projects to take place. On top of this, the Venice public transport association -ACTV- has been historically linked to the community, and therefore, it could be open for implementing suggestions about new entrances and routes, if a proper plan is developed and supported by both the municipality and community.

Culture

As it was explained in the previous sections, as a result of the tourism industry many cultural places have increased. Yet, these are mainly located in a few zones around the most touristic attractions, thus still having potential for being better integrated into the urban fabric. For instance, from a cultural perspective, the area around the Biennale fostered the creation of many showrooms and galleries rental for art and

fashion, that are disconnected from the rest of the city. Therefore, representing an important opportunity for future development.

Nevertheless, in order to build a sustainable economy around culture, stakeholders believe that a more diffuse system needs to be in place. In other words, this means decentralizing the existing market that is built around the very same touristic areas. Thus, selecting certain commercial streets that fit this purpose and start building an interconnected grid of amenities that have a cultural background, without overcrowding the city. These should be hybrid activities, hence, serving both tourists and the community alike. As it was stated by an economy professor from Venice, "due to its nature, Venice needs absolutely unique and special functions... yet, these activities need to be linked to the world of culture and creativity, otherwise they won't survive. But it should not be in a specific area of the city, it needs to be done in a comprehensive way in order to reactivate a different way of experiencing the city, more diffused, more widespread" (MM, 2021). For example, according to different stakeholders there are three main steps that need to be followed. First, there should be a thorough plan for providing a better living environment from an urban planning and design point of view. Then, a government-led policy should be introduced for reducing touristic activities such as bed & breakfast in those areas. Once those plans are in place, a more diverse community can be developed. Thus, allowing and providing amenities (e.g. galleries, book shops, libraries, theaters) that could be linked to the existing cultural features of the city, such as the existing universities, the Carnival, and the Biennale.

In line with these suggestions since the start of the pandemic there is an increasing potential for developing the city around this sector as there are many shops and restaurants that had to be closed because they were unable to attract a different market than the touristic one. Therefore, having empty properties that could be redeveloped into the cultural market. This could be achieved by encouraging owners to rent their properties to locals and startups with new policies that facilitate these businesses. As it was explained by a Venetian resident, "now there are private owners who prefer to have their business closed, waiting for tourism to return... yet I know that many will be willing to try something different if the right opportunities are provided" (EV, 2021). For example, as it happened in the past, around the Arsenale area there are many small shops that could be converted from tourist amenities into cultural assets, being able to bring a different kind of visitors into the area, while also serving the community. Such as design studios, music stores, recording studios, and ateliers; therefore, proving that there is still fertile ground for development in this economic sector.

Residence

When discussing the current situation of housing in Venice it is important to point out that there is no physical shortage of dwellings. Yet, even though there are more houses than residents in the city, most of them are only temporally inhabited due to the tourism market that keeps pricing out long-term residents, in favor of short-stay visitors. On the other hand, around 15% of municipality-owned dwellings are abandoned, as they are uninhabitable due to lack of maintenance. Largely because the municipality have not made any important investment on public housing during the last decades (MF, 2021). As it was pointed out by a municipality source, last year's budget for this type of interventions is less than 2% of the overall investments made on the city. Therefore, according to local stakeholders two different strategies should be pursued in order to prompt the government to act and encourage the incorporation of new permanent residents that could help to bring up the numbers of inhabitants in the city.

First, there should be an intervention in the urban environment in order to offer better everyday amenities to residents, therefore, providing a better lifestyle that is able to attract new families. This strategy should be also linked to other areas of development, such as the diversification of the economy through education, culture, and industry. On top of this, there should be also a comprehensive enhancement of the public spaces and amenities within the city, with the objective of primarily serving the resident community, which has been underserved in the last decades.

Second, a strategy should be pursued to encourage more owners to rent their properties outside the tourist market. This situation is due to the high prices demanded for the touristic market that prospects residents are unable to pay. Moreover, as it will be mentioned in the next section, a similar situation occurs when discussing student housing. Therefore, subsidies and benefits for owners should be put in place by the government, as well as allowing for more flexible contracts in which residents are not seen as a burden for the hosts. If this situation is achieved, more families will be able to move to the city and create a bigger community that will bring back alternative economic activities. In this sense, another top-down approach policy could be also implemented for limiting the number of room rentals and hotels in the city, thus forcing more landlords to rent their properties to permanent residents. As it was explained by a local stakeholder, "the role of the public administration should be like this, to quantify these alienating elements and say to what extent they should be allowed, and when is too much" (CI, 2021). Moreover, it is important to also reduce the number of commuters that enter to Venice every day, and this can be done by improving the existing housing options in the archipelago. As it was expressed by another interviewee, "the government should invest on housing projects, we need more residents willing to live in the city" (AV, 2021). For instance, innovative housing solutions could be implemented by reusing abandoned buildings and empty warehouses, or even by creating floating platforms that could be attached to the city shores.

Education

As it was mentioned above, there is a strong economic market supporting room rentals for tourists, yet this activity does not include rooms for students. This situation is a direct result of the higher revenues that tourists generate to landlords, which students are not able to provide. However, a fact that is unfortunately overlooked by the renting parties is that students help the city in a comprehensive way, as they live it continuously, providing not only a steady income for landlords and local amenities, but also stimulating alternative markets that are linked to education. For this reason, despite the touristic situation, during the last years many secondary economies have evolved from educational-related areas such as conventions, exhibitions, and startups; therefore, demonstrating some promising effects that this alternative market could have. As it was explained by an economy professor from Venice, "the tourism market is a market that can be more easily affected by external problems. The pandemic is only one example, yet it acknowledges that other phenomena of political or environmental nature can modify and deeply affect the touristic presence. So basically, it is true that with tourism you earn much more, but it is an investment with greater risks and reduced social rewards" (MM, 2021).

Nevertheless, as it was explained by a stakeholder from the educational sector there is still plenty room for improvement as the current situation does not addresses any of these problems yet, "in the face of both quantitative and qualitative growth of universities, there has been no major response by the city to any educational need" (AV, 2021). Therefore, in the past, this situation has forced many students and even university facilities, to move out of the city looking for more promising places. For this reason, there is an

increasing pressure from local stakeholders towards the government for investing more on education, which means supporting students but also betting on universities. However, in order to do so, they agree that it requires a discussion table in which universities prove their ability to ensure that investments are translated into research, innovation, and digital technologies that can be later applied in the business world. Thus, having the ability to substantially attract capital for Venice in economic terms, but also in terms of social and cultural improvements.

As it was presented before, by helping students now, Venice is also pushing for a better future as many of them will remain in the city once their studies are concluded, having the potential of becoming a large productive force. For instance, this fact is not only supported by the idea of generating an alternative market for students to work in their respective sectors, but also to further develop promising programs within the university that could help the city in a near future, and eventually translate into startups. Furthermore, the idea of fostering startups has a deeper significance that most people think, as it is a compatible use with the urban fabric that the city of Venice has. Therefore, they could be easily accommodated in the existing urban structure without damaging the heritage, while taking advantage of the benefits that living in Venice provides. This adds to the fact that now it has become evident that it is possible to work from home, thus rendering the city much more appealing as its beauty is an added value that can be used for attracting new -online- workers.

On the other hand, the physical transformation that the city had in the last decades, from family houses to hotels and room rentals, had made its reconversion into a different use a difficult task. Nonetheless, promoting residences for students that can use the existing architectural template as a living environment is not a farfetched idea. Therefore, initiatives could be done in order to bring back new residents, and at the same time foster new families that will push for more amenities for residents, such as schools, sports, and public spaces. These aspects are very important as they could become a way to develop the city in the future, as all of them lead towards greater economic diversification, and consequently, new jobs and opportunities for the community.

Industry

As the current numbers of tourism related activities need to go down, other alternative activities need to take their place, being industrial endeavors a viable option. Industries are an important part of Venice, therefore, in order to foster them, they should be also considered as part of a comprehensive metropolitan strategy for the city as a whole. Consequently, as having industry within the historical urban fabric is not possible, this aspect should be linked to areas outside the city center, being Porto Marghera the best option for its existing infrastructure and industrial trajectory. As it was presented by a municipal stakeholder, "when discussing the future of Venice, it is important to take into consideration industries, because we can't live only from education and innovation markets... we need to be producers as well, that, will create the jobs needed to support better community numbers" (GS, 2021).

Therefore, a possible solution could be rethinking Porto Marghera as a green industrial area. For instance, besides the inherited traits that the city has, there is also an important legacy due to traditional works that continue to survive around the city, which could become a world trait for the city if they are properly industrialized and exported. Furthermore, other activities that are developed in this area should be also indubitable linked to the professions that are taught at the local universities (e.g. chemistry, engineering,

logistics, economics) in order to provide a steady flow of young professionals that could later become residents and families in the city.

Actors

Stakeholders' theory

In order to understand stakeholders in the tourism sector, first it is important to acknowledge the complexity of this phenomenon. Actors in this industry usually have contradictory interests, ranging from economic-driven ambitions to ecological concerns and social interests. For instance, some of the main stakeholders can be represented by individuals, neighborhoods, institutions, organizations, society, governments, and the environment (Mitchell, Agle, & Wood, 1997). The usual problem in this industry is that tourism development is perceived as an economic goal, instead of being seen as the mean for achieving local community and environmental prosperity (Slivar, 2018). As it was discussed previously in this study, there are multiple examples of tourist destinations that aimed at attracting crowds of tourist in order to promote economic interests. The problem lies in the fact that these practices were made without considering environmental and social negative effects, therefore, being only considered when they escalate out of control. For this reason, in hopes of reaching a better balance in touristic destinations, stakeholder analysis is a tool that will be applied in this study as it has become popular for managing and developing strategies in recent years (Brugha & Varvasovszky, 2000).

In most endeavors, competing interest between stakeholders can result in conflict (Benn, Abratt, & O'Leary, 2016). Consequently, managers, policy makers, and researchers have recognized the importance of collecting and analyzing data about stakeholders who have an interest or the potential to influence the actions of a project or policy. Furthermore, for a better analysis, different stakeholders who have similar interests and responsibilities should be grouped together. By doing so, stakeholder analysis can focus on the relationship of groups and organizations, and their impact on policies, with a wider political, economic, and cultural context; in order to understand and identify opportunities capable of influencing how decisions are taken (Brugha & Varvasovszky, 2000). For instance, the use of these methods has proven to be beneficial at establishing compromises between stakeholders, thus enhancing efficiency, community involvement, project management, governance, and finances; during the various stages of their activities (Halis, Halis, & Ali, 2017).

In its most basic understanding a stakeholder is an individual, group or organization that gets impacted by the causes or the consequences of an occurrence (Bryson, Cunningham, & Lokkesmoe, 2002). Although this description can be considered as oversimplistic, it helps to narrow down the main characteristics of stakeholders. Along these lines, a more specific approach which is also geared towards tourism, was presented in 2008 in which stakeholders are defined as "individuals or groups who are directly and/or indirectly involved, and whose lives, environment, or business are affected by the spatial scales of urban development" (Edum-Fotwe & Price, 2008). Moreover, these descriptions have roots in an earlier definition, that was presented in 1984 and reviewed later in 1995, in which stakeholders were described as any individual or group that has interests and can affect or be affected by a specific activity, which can take place in the past, present, or future (Freeman, 1984; Clarkson, 1995). Additionally, as it was later mentioned; the needs, interests, and influences of individuals or groups who are affected by the 'activity' should be always taken into consideration by decision makers, especially when these have a direct impact among other stakeholders (Benn, Abratt, & O'Leary, 2016).

In the literature analyzed, multiple degrees of involvement exist in regards of stakeholders' engagement to a project or problem. However, for this study there are two main categories that are important to be taken into consideration. Firstly, primary stakeholders, which are the ones directly involved with the 'activity', for instance those stakeholders that make and facilitate decisions. And then, secondary stakeholders, whose acceptance or compliance are required to sustain the 'activity', namely those stakeholders affected by it (McGrath & Whitty, 2017; Halis, Halis, & Ali, 2017).

Consequently, when mapping stakeholders, these two categories are important to be considered, as their interest and relationship to the activity is necessary to identify potential strategies. For instance, it is possible to shift project's opponents to supporters by offering appropriates changes, as well as preventing supporters to oppose by accommodating their requirements (Winch, 2010). In this sense, once stakeholders have been determined, a Power/Interest (PI) matrix can be used to organize them, and consequently, develop scenarios and strategies for addressing needed objectives. As it can be seen in *Figure 20*, by organizing and classifying stakeholders in relation to their power and the extent to which they are involved in a set activity, an appropriate approach can be defined and implemented in a future strategy (Johnson, Scholes, & Whittington, 2008).

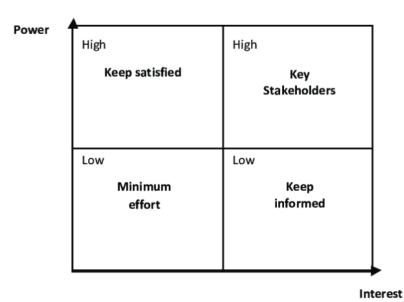


Figure 20: Power/Interest matrix (Olander & Landin, 2005; Johnson, Scholes, & Whittington, 2008)

Stakeholders' analysis

In the literature review chapter, multiple stakeholders were identified for each theoretical topic. As it is possible to see in their respective sections (*Tables 1, 2 & 3*), throughout the literature these stakeholders have been divided into different groups according to their main affiliations. Below, in *Table 4 & Figure 21*, a selection of these actors is presented according to their recurrence and prominence during the empirical interviews. Furthermore, they have been organized under three different categories for better assessment, as well as in a penta-helix map for better understanding of their scale of interest. First, the *'public sector'* consisting of supply stakeholders such as the national government (i.e. Italian central government), regional government (i.e. Veneto region), local government (i.e. Venice metropolitan area), and other smaller public organizations (e.g. customs, tourism agency, municipal departments). Second, the *'private sector'*

comprising both supply and demand stakeholders such as different size companies (e.g. international corporations, transport industry, potential investors & developers, and local SMEs), actors that respond to the community such as non-governmental organizations (e.g. OCIO), and local media (e.g. Il Gazzettino, La Nuova Venezia). And finally, the third group contains only demand actors, being part of the 'community' (e.g. local associations, residents, workers, students), and 'customers' (e.g. international and domestic tourists).

PUBLIC SECTOR	PRIVATE SECTOR	COMMUNITY & CUSTOMERS
National government	Corporations	Local associations
Regional government	Transport businesses	International tourists
Local government	Investors & developers	Domestic tourists
Public organizations	NGOs	Residents
	Media	Workers
	Small & mid-size enterprises	Students

Table 4: Venice's stakeholders (own elaboration)

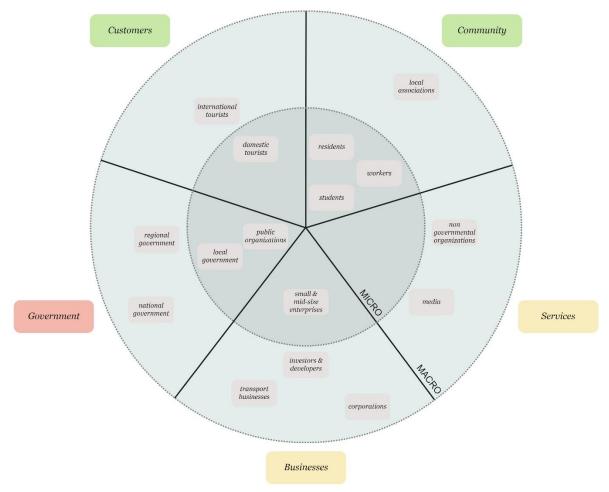


Figure 21: Penta-helix stakeholder map (own illustration)

Note: public sector in red, private sector in yellow, and community & customers in green; micro (inner) and macro (outer) scales

Consequently, in order to proceed with the stakeholder analysis, these actors have been allocated in a Power/Interest (PI) matrix. As it was mentioned in the theoretical part of this section, this allocation will allow for a better understanding of their importance and which strategy should be used for each of them during the scenario planning. In *Figure 22*, it is possible to see the outcome of such distribution, also displaying the managerial approach that should be used in each of the four quadrants. From this matrix it is important to highlight that key-stakeholders -top right quadrant- will play a central role in the final strategy proposal, therefore, they are going to be included in the future scenario planning strategies. As it is possible to see below, in this quadrant there are two stakeholders from the public sector, namely the regional and local government that will have an important role in top-down strategies, by regulating and providing guidelines for long term plans. Also, two stakeholders from the private sector are present, small & mid-size enterprises -which are the most affected by the current pandemic- and non-governmental organizations -who are working to protect residents and workers alike-. Finally, local associations are depicted as well, as they are able to represent smaller actors that would not have the opportunity to compete with other stronger stakeholders by themselves, therefore being important for community bottom-up approaches.

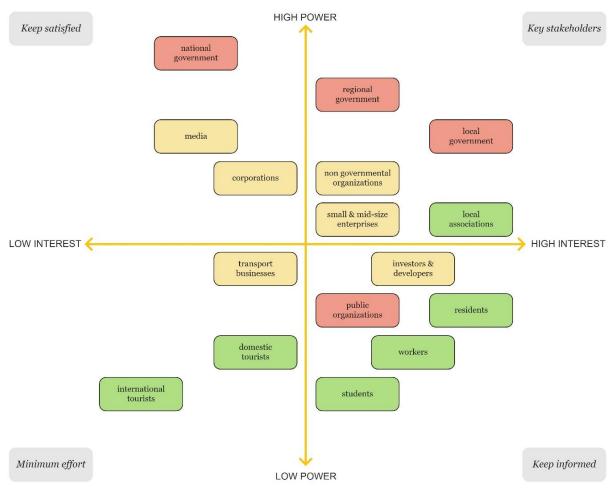


Figure 22: Venice's stakeholders' analysis (own illustration)
Note: public sector in red, private sector in yellow, and community & customers in green

Case study conclusions

According to theoretical and empirical findings of this section, it is possible to conclude that Venice had a central role in the development of northern Italy since its foundation more than 1600 years ago. This situation was possible due to its strategical location in relationship to ancient trading routes, and unique physical characteristics that allowed it to survive through dire periods. Therefore, creating exceptionally good conditions that fostered economic, cultural, and urban developments of the city. Moreover, throughout time, these same qualities contributed to separate Venice from the rest of the region as other geographical areas were not able to keep up with this fast-paced evolution. As a consequence of these inherited traits, the basic urban and social structures that now characterize Venice were created, laying down the foundations for its intrinsic architectural beauty and attractiveness. However, in modern times, these very same attributes slowed down the evolution of the city, as it became a heritage site in which industrial economic activities were not allowed. As a result, the city was forced to shift its economic model from the productive sector into the tourism industry, which now characterizes the city.

Although the depopulation of Venice started in the 50s with the relocation of industrial activities into the mainland, the situation worsened in the 70s when touristic activities took over the as main economic backbone of the city. As it was described by different experts, Venice's gentrification is the main consequence of a lack of economic diversity that reduces job availability for residents, while also increasing local prices for housing, goods, and recreational activities. Furthermore, as the numbers of tourists continue to increase, the carrying capacity of Venice has been long surpassed, therefore being unable to provide basic services for both visitors and locals. In part, this is a result of an increasing number of daytrippers, that utilize city's services but do not generate revenues in economic or social terms. Yet, as it is explained by local stakeholders, this situation is also generated by economic market trends and lack of regulations that allow for the depletion of public services and amenities, due to a systematical conversion of these assets into tourism services, as well as a similar transformation of residential dwellings into lodging facilities. Thus, worsening the urban qualities of the city, as both contribute to an increase of resident's displacement by reducing public amenities and housing availability. Accordingly, as it is expressed by most residents this situation also generates a general nuisance in the community, as they see a lack of governmental initiatives for taking care of locals, while seeing an increasing number of policies that protect visitors and foster tourism-related activities.

Nevertheless, the start of the COVID-19 pandemic marked an important shift for Venice's characteristics, as the touristic market mas greatly disrupted by these events, and therefore, new opportunities for the community were established. As it was discussed in the previous section, two early effects of the pandemic were particularly felt in Venice, one was a consequence of the measures taken by the government to prevent the virus dispersal, while the other one was a result of the community reaction to those measures. As it was identified by local stakeholders the first one was the sudden stop of all tourism-related activities, while the second one was the resulting increase of real estate assets that became available for sale, as owners decided to sell their properties due to the decline of tourists in the city. Thus, creating different types of reactions in the market. From one side, there was an increasing number of properties being bought by foreign investors, who are betting on a long-term recovery of the tourism market. And, on the other hand, multiple properties were offered to local entrepreneurs in order to foster the development of alternative uses that are able to bring new social qualities to the city. A similar situation was seen in the housing market, as the gradual closing of lodging facilities prompted owners to decide between waiting for the pandemic to be over or shifting into student and long-term rental markets.

Moreover, it is also important to highlight some social effects that this disruption generated in Venice. As it was mentioned by multiple stakeholders, the city became virtually empty due to the low presence of inhabitants and activities. This fact had a profound impact in the community, as it made them realize that Venice needs a greater diversification of the economy and residential markets in order to have a healthier environment. Furthermore, this very same situation made residents understand that a transformation is needed, therefore, sparking a sentiment of hope around the romantic idea that the pandemic will create a permanent change in the city. Nonetheless, when asked about the future most stakeholders had a pessimistic opinion, as they believe that this adverse situation will be forgotten fast. This is due to most of them being unable to see a structural change in the behavior of locals nor in governmental actions, thus having the feeling that all parties are waiting for the pandemic to end in order to restart the same practices as before. Consequently, leading back to the similar problems in the future. For this reason, as stakeholders agree, this in-between time should be used to create new opportunities that are able to modify the relationship that the city has with the tourism industry. They wish for a symbiotic relationship between the city's main sources of income such as tourism, education, and culture, while also incorporating other aspects of its traditional charm. Nevertheless, they all agree that certain values as sustainability and employability should be also improved in order to make the city more resilient and future-proof. Furthermore, besides implementing new strategies for fostering these qualities, they also agree that it is important to use traits that are part of the local culture. In line with these thoughts, it is suggested that future scenarios are developed by taking into consideration embedded characteristics, such as the existing relationship between Venice and its surrounding lagoon, as well as the strong connection amongst residents and its unique built environment. Consequently, allowing for a future that could host crosssystems of life and work based on new economic markets and diversification. For instance, a glimpse of what is achievable was demonstrated by student housing initiatives launched during the pandemic by local universities in order to address housing shortages whilst promoting alternative economic activities.

Thereupon, as a result of these interaction with different types of stakeholders, four main areas of development were identified as future opportunities that the city could exploit for overcoming the current challenges that it is facing. Thus, these areas -culture, residence, education, and industry- will serve as starting point for addressing future scenarios. Moreover, in the next section, each of them will be also linked with some of the most important actors identified above in order to define feasible strategies that can be implemented in a near future for the city of Venice.

OPERATIONALIZATION

Scenario planning

When reviewing the past in order to prepare for the future there is one known statement that always holds true, "the only thing constant in life, is change". Yet, most of the time, lack of preparation makes change a difficult and painful process (Keough & Shanahan, 2008). For this reason, different planning tools have been developed over time to deal with these situations and manage future uncertainties.

Traditional planning is about translating past experiences into a useful forecast for the future. For instance, 'time series analysis' or 'regression methods' use recent history to make a relatively accurate projection into the future. In short periods of time, it is safe to assume that the foreseeable future will be similar to the recent past. Nevertheless, in a long-term horizon these traditional methods do not perform as intended, as they assume that trends will continue in an endless linear projection (Future Freight Flows, 2011). However, it is most likely that in long timeframes current trends will not hold, as changes and unforeseen events will certainly occur (e.g. natural disasters, political unrest, technological innovations). Consequently, under these circumstances, scenario planning emerges as a practical application as it is not focused on accurately predicting the future, but instead producing a number of alternatives that are credible yet uncertain (Keough & Shanahan, 2008). As they were presented by Paul Schoemaker (2016) "scenarios are not probabilistic predictions but coherent narratives of what could happen". Thus, due to the unstable nature of the COVID-19 pandemic, scenario planning arises as the best match for the theoretical development of plausible futures for the city of Venice. Furthermore, from these possible scenarios, strategies will be later developed in order to raise awareness and better prepare stakeholders for an unclear future. In other words, the aim of scenario planning is to create a framework for discussion from which multiple strategies can be developed instead of forecasting a single unreliable future (Schoemaker, 2016).



Figure 23: Current trend and future scenarios (Future Freight Flows, 2011)

Suitability and implementation

Scenario planning is based on the idea that organizations and governments are better preparing for upcoming issues than they are at predicting them (Future Freight Flows, 2011). As it is not possible to explore every conceivable future, this preparation is done by analyzing key uncertainties that allow to reduce future complexity by developing probable scenarios containing the most relevant dimensions, thus, few scenarios usually suffice to define a wide spectrum in which the real future might unfold (Bandhold & Lindgren, 2009). As mentioned before, it does not seek to predict which future is going to happen, but to create a handful of plausible options that represent the most relevant driving factors (Future Freight Flows, 2011). Consequently, these scenarios reflect a range of viewpoints from within, as well as beyond the organization. Hence, designing potential scenarios is not about forecasting specific events, but identifying and clustering relevant effects that these events can trigger, and effectively preparing for them (Schoemaker, 2016). Therefore, this tool for strategic thinking is a way to prepare and properly respond for multiple potential futures when uncertainty is high. Usually, this can be done by defining extreme scenarios (i.e. S1 and S4 in Figure 24) and then discussing multiple narratives that can unfold in-between those boundaries (i.e. S2 and S3 in Figure 24). From there on, strategies should be presented for addressing significant scenarios in order to provide a feasible course of action for stakeholders to follow.

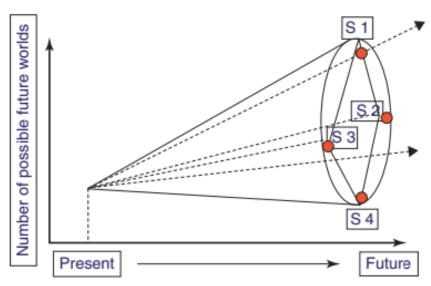


Figure 24: Defining future scenarios (Schoemaker, 2002)

Additionally, by identifying which uncertainties are the most important, scenario planning can foster deep dialogue and profound change within an organization or industry. This is achieved by challenging stakeholder's mindsets and stimulating strategic discussions and reflections, focusing more on worldviews and mental models than on numbers (Schoemaker, 2016). Consequently, it is possible to conclude that scenario planning serves as a collective thinking tool and communication device that aids managers in circumstances of nonlinear change -high uncertainty and complexity-. Even though, traditional forecasting and scenario planning are usually implemented together, the first one plays a smaller role when shortcomings and biases arise due to uncertainty, specially under long-term horizons (*Figure 25*).

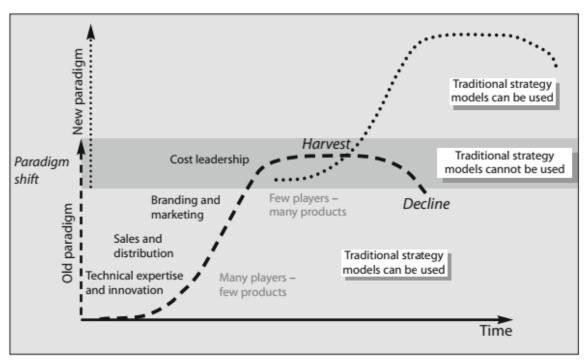


Figure 25: Integration of traditional and scenario planning (Bandhold & Lindgren, 2009)

Nowadays, besides high uncertainty, other factors can further contribute to the application of scenario planning. For instance, Paul Schoemaker (2016) defines some pre-conditions that can be identified when planning, in order to determine if future scenarios should be applied. From these factors, the following five are highly applicable in the context of this research and its case study.

- Uncertainty is high (relatively to the ability of predict or adjust).
- Too many costly surprises and blind spots have occurred in the recent past.
- Insufficient new opportunities are perceived and generated by the industry.
- The quality of strategic thinking is low.
- The industry has experienced significant change or is about to be transformed.

Establishing future scenarios

Following trends found in the literature review and its later validation by the empirical research, in this section future scenarios are going to be determined. Thus, in order to come up with potential scenarios, all trends will be first allocated in a steerability/impact matrix, to identify the ones with lower steerability and higher impact in the city. Then, these -selected- trends will be allocated in a predictability/impact matrix to identify the ones with lower predictability and higher impact, from which the two more critical trends will be selected as a basis for the future scenario planning. By creating a matrix with these two trends as variables, four scenarios will be determined. These scenarios will be then matched with the most relevant issues and future opportunities identified by stakeholders during the interviews, and consequently, four possible strategies will be developed that will give shape to a final strategy recommendation.

Step-by-step process

As it was presented at the end of every section of the literature review, drivers and trends for each topic were gathered and listed. Therefore, five main theoretical sources for future trends were considered, these being *urbanization*, *overtourism*, *urban resilience*, *tourism resilience*, and *adaptive reuse*. Accordingly, each of the trends identified in these sections were later assessed with the topics discussed in the empirical data collection, with the objective of going through a reality check. As a result, the original twenty-eight trends were scaled down to twenty more feasible ones. The first step towards the scenario planning can be seen in *Figure 26*, in which the remaining trends were allocated in a steerability/impact matrix in order to start sorting them according to their relevance for the case study, and their significance for future scenarios. Consequently, as it can be seen below, nine different trends were selected due to their high impact and low steerability in the city. These being, *area reactivation*, *services' carrying capacity*, *businesses resilience*, *overcrowding*, *ecosystem's wellbeing*, *large-scale tourism*, *local identity*, *economic diversification*, and *tourism gentrification*.

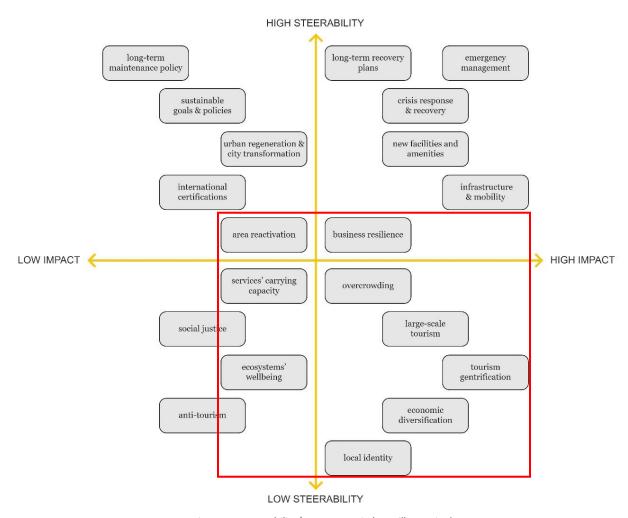


Figure 26: Steerability/Impact matrix (own illustration) Note: selected trends inside the red rectangle

The next step in the creation of the future scenarios was the sorting of the remaining nine trends in a predictability/impact matrix in order to determine the two most critical trends. As it can be seen in the following matrix (*Figure 27*), five of the selected trends were determined as being more predictable, and therefore, easier to anticipate and prepare accordingly. On the other hand, four other trends were deemed more difficult to predict, from which *economic diversification* and *tourism gentrification* had the lowest predictability and the highest impact on the city. Consequently, being selected as the two most critical trends to be taken into consideration as scenario planning variables.

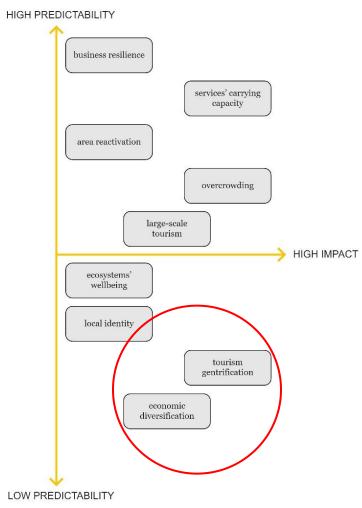


Figure 27: Predictability/Impact matrix (own illustration)

Note: selected trends inside the red circle

Finally, as it can be seen in *Figure 28*, these two selected trends were assigned as variables -main axis- of a matrix, in which the most extreme options for each of them were set. Accordingly, four scenarios were created by taking into account a combination of these variables in each quadrant. For instance, as it can be seen below, the first scenario is a result of 'high economic diversification' and a 'decrease of tourism gentrification'. Then, the second scenario is a combination of 'high economic diversification' and 'increase

of tourism gentrification'. Similarly, the third scenario is given by 'low economic diversification' and 'increase of tourism gentrification'. And finally, the fourth scenario is a consequence of 'low economic diversification' and 'decrease of tourism gentrification'.

Moreover, in accordance with their own characteristics, each of these scenarios was matched with one of the four opportunity areas identified by local stakeholders for future developments of the city, at the end of the empirical section. Therefore, 'Scenario 1' will be developed around 'culture' sector improvements, 'Scenario 2' will be established in accordance with new 'residence' opportunities, 'Scenario 3' will be created to further improve 'education' facilities of the city, and 'Scenario 4' will revolve around the 'industry' development. Furthermore, each scenario was also matched with a specific location within Venice in order to provide a spatial landing for each of the future strategies.

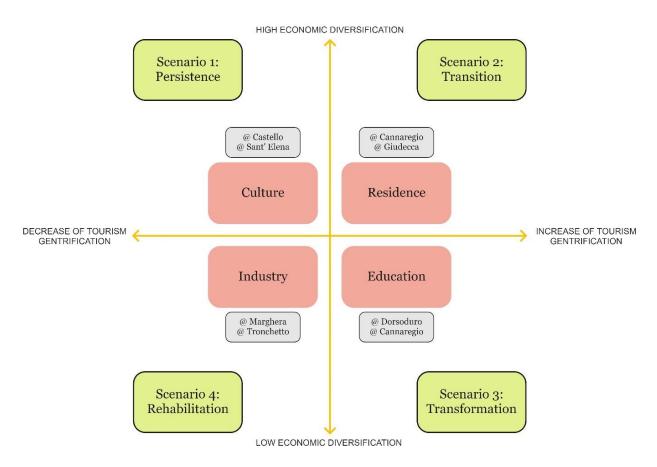


Figure 28: Future scenarios (own illustration)

Consequently, in the next section an overview of all the scenarios will be further established. Thus, more specific information will be given for each of them in order to provide more context about their future development. Likewise, an initial approach for addressing the issues presented above will be mentioned as a guideline for the possible future strategies.

Overview

In the following table it is possible to see a summary of the four different scenarios that are being proposed in response to the most likely trends identified for the city of Venice. For each of them, main stakeholders, most compatible locations, guidelines for the strategy, and a possible future development have been listed. Yet, a more detailed explanation of each scenario will be developed in the following sections. Moreover, in *Figure 29* a map of Venice is presented in which all the neighborhoods are listed in order to provide context for the location -spatial landing- of each scenario. Similarly, in *Figure 30* it is possible to see the current mobility situation of the city, which will be an essential part for developing each strategy.

	S1 – Culture	S2 – Residence	S3 – Education	S4 – Industry
STAKEHOLDERS	 Regional government Local government Local associations Small & midsize enterprises Investors & developers Workers Transport businesses 	 Regional government Local government NGOs Investors & developers Local associations Residents Students Transport businesses 	 Regional government Local government Local associations Small & midsize enterprises Investors & developers Students Transport businesses 	 National government Regional government Local government NGOs Small & midsize enterprises Corporations Workers Transport businesses
LOCATIONS	 Castello Sant' Elena Dorsoduro Cannaregio Murano* Burano* 	 Cannaregio Giudecca Sacca Fissola Sant' Elena Central districts* 	 Dorsoduro Cannaregio Santa Croce San Polo* San Marco* Giudecca* 	Porto MargheraTronchettoAdriatic Sea*
STRATEGY	 Connect cultural areas Increase cultural amenities Enhance public space Decentralize users Reduce touristic amenities 	 Enhance public infrastructure Increase local amenities Reduce number of lodging facilities Recover housing stock 	 Increase education related amenities Increase student housing Promote startups Expand universities 	 Recover sustainable industries Promote local goods Increase economic diversification Increase resident population
FUTURE DEVELOPMENT	• Expand outside city center	 Innovative housing 	Develop into knowledge city	 Expand to other cities

Table 5: Scenario's overview (own elaboration)
Note: (*) for future locations

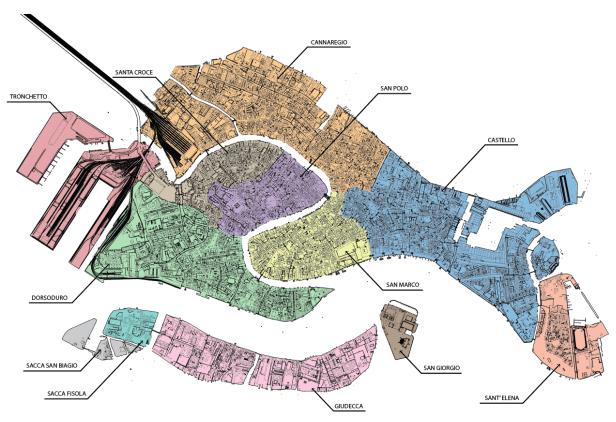


Figure 29: Neighborhoods of Venice (own illustration)

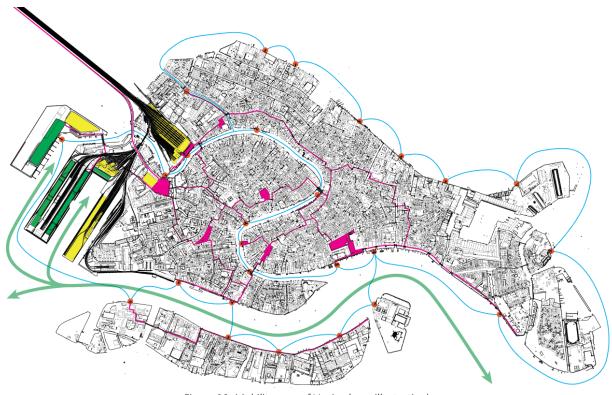


Figure 30: Mobility map of Venice (own illustration)

Note: cruise stations & routes (green), train station & car parking (yellow), waterbuses routes (blue), and walking paths (magenta)

Scenario 1: Persistence (Culture)

The first scenario faces a future in which 'high economic diversification' and 'decrease of tourism gentrification' are the main trends. Due to the positive nature of these trends in regards of the challenges that the city is currently facing, it could be considered the most optimistic scenario. A 'high economic diversification' trend means that the city itself is heading towards that direction, without any external intervention. Thus, having alternative economic activities in the city without the need of an additional strategy to encourage them. At the same time, a 'decrease of tourism gentrification' means that the touristic and housing markets have reached a balance point, and therefore, residents are no longer being displaced. Consequently, as the main issues of the city are being addressed by market trends, external intervention for solving those problems is no longer needed. However, additional strategies should be developed in order to ensure the sustainability of these positive trends throughout time, as well as to solve other problems that could derive from changes in the urban and social environment of the city.

For these reasons, in order to deal with possible challenges that the city might face in the future, this scenario will be focused on enhancing cultural assets and their link to the urban environment. Therefore, multiple areas around the city will be selected for being transformed into cultural nodes that will entice tourist out of the city center. Furthermore, the link between these nodes will be also developed from a spatial point of view as a way to increase their attractiveness, providing an added value for residents while also serving as a relief for the city carrying capacity. Consequently, helping to avoid overcrowding of the city center, and thus, relapsing into old problems.

Stakeholders

In order to translate the plans made for this scenario into reality, it is important to bring onboard different stakeholders. Moreover, as both top-down and bottom-up approaches will be used, it is necessary to incorporate actors from public institutions, as well as private parties and the community. As it can be seen in the table below (*Table 6*), the main stakeholders needed for this scenario are presented with their respective category, managerial approach, and examples. Furthermore, in *Figure 31* they can be also visualized in a Power/Interest (PI) matrix.

STAKEHOLDER	CATEGORY	APPROACH	EXAMPLES
Regional government	Public sector	Key stakeholder	Veneto region
Local government	Public sector	Key stakeholder	Metropolitan Venice
Local associations	Community	Key stakeholder	ECC, MoCA, VAC
SMEs	Private sector	Key stakeholder	Theaters, Cinemas,
			Galleries, Studios
Investors & developers	Private sector	Keep informed	Banks, IRE
Workers	Community	Keep informed	Shop owners
Transport businesses	Private sector	Minimum effort	ACTV

Table 6: Scenario 1 - main stakeholders (own elaboration)

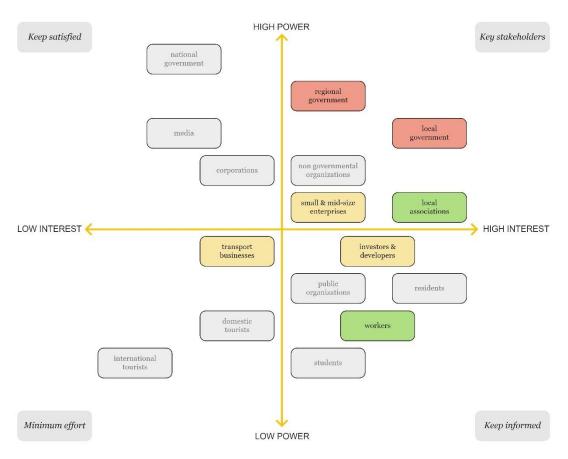


Figure 31: Scenario 1 - Power/Interest matrix (own illustration)

Note: public sector in red, private sector in yellow, community in green, and secondary stakeholders in grey

Location

As it can be seen in the map shown below (*Figure 32*), there are four main neighborhoods in which the city can be further developed from a cultural point of view. These locations have certain attributes that render them attractive for future development of cultural assets, as well as having the potential to improve the existing quality of the urban environment around them. Moreover, it is important to highlight that these areas are located outside the touristic parts of the city in order to attract future visitors out of the city center, helping to decongest traditional areas and keep a balance between the number of residents and visitors.

The neighborhoods of Castello and Sant' Elena, in the east side of Venice, have been selected due to their connection to the Biennale. In these areas the three main cultural nodes are Giardini, Arsenale and Ospedale which attract many tourists but are not well integrated with the existing urban fabric, as cultural amenities and public spaces in the surrounding areas are lacking. Similarly, the neighborhoods of Dorsoduro -in the southwest- and Cannaregio -in the northwest-, have an important presence of museums (e.g. Punta della Dogana) and educational institutions, such IUAV and Ca' Foscari; that could be linked to the cultural market, and serve as a source of users for future cultural interventions.



Figure 32: Scenario 1 - spatial landing (own illustration) Note: selected neighborhoods (brown), and specific areas (green)

Strategy

The main strategy for this scenario will be focused on fostering the creation of new cultural amenities and better integrating them into the urban fabric of Venice by means of public space interventions and policy steering. Consequently, these strategies will have the underlying purpose of increasing the livability of the city for both tourists and the community. As it was presented in the literature review, the introduction of such elements will help to increase the city's resilience by providing a more dynamic urban and social environment, which will be able to withstand future external disturbances as the economic structure will be more diversified and flexible, and thus, less susceptible to unexpected disruptions such as the pandemic.

Accordingly, as it was explained in the introduction of this scenario, this strategy will also help to ensure the sustainability in time of the hypothetical positive market trends identified for the city. Therefore, the main intention will be to aim for a homogeneous touristic presence in the archipelago. Hence, pursuing a better integration of visitors and residents by better distributing the number of tourists and making use of disconnected areas, whilst reducing overcrowded areas. In order to do so, potential areas have been selected in four different neighborhoods (Castello, Sant' Elena, Dorsoduro, and Cannaregio) in which cultural amenities will be encouraged and interventions in public space will be proposed.

Consequently, as it can be seen in the following image (*Figure 33*), the first step of this strategy will be to select streets that have the potential to become true cultural catalysts while branching out of the selected areas, therefore, creating a grid that can be integrated in the city. In these streets, physical interventions should be encouraged as a way to transform them into a more resident-friendly environment. This can be

achieved my means of physical interventions -urban design- that foster community activities such implementation of urban furniture, which could be developed in collaboration with local universities and Venice's based design firms. As well as municipal policy regulations -urban planning- for limiting the growth of touristic services (e.g. B&B, souvenir shops, restaurants), while also promoting the gradual transformation of these existing businesses into cultural amenities by means of subsidies, amnesties, and facilitations.



Figure 33: Scenario 1 - strategy (own illustration)

Note: cultural grid (magenta), cultural area of effect (blue), and new waterbuses direct entrances (orange)

The reasoning behind this proposal is to have a state-led strategy that harnesses the community desire to transform the city into a more economic diverse market, to steer the future development of businesses into the cultural sector, by facilitating and encouraging their transformation. Therefore, having a regulatory framework that allows for an easy implementation of bottom-up initiatives for cultural purposes. In practical terms, this strategy should be specifically designed to facilitate the adaptive reuse of vacant and redundant assets such as restaurants and touristic shops, into hybrid amenities that are more beneficial for the community. By transforming these businesses into cultural assets (e.g. theaters, ateliers, studios) a less taxing type of tourism could be developed, while also serving residents' needs. An additional aspect that it is important to consider is the creation of rapport between these new economic activities and existing elements in the intervened areas, in order to ensure their survival in time. For instance, new cultural businesses could be developed in association with the Biennale, the Venetian Carnival, the city's cultural heritage, and local universities such as IUAV and Ca' Foscari.

Finally, as part of this strategy the flow management of tourists should be also taken into consideration. In order to properly deal with this situation, new entrances to the city should be provided. This plan could be jointly developed with the local transportation authority (ACTV) by establishing new waterbuses routes that depart from the mainland -San Giuliano- and disembark in specific locations within the city. Given the morphological composition of Venice, there should be an entrance at each of its most extreme points (west, north, east, and south entrances). For instance, a fitting option in this scenario would be the stations of Ospedale, Zattere, and Sant' Elena as they follow the geographical configuration of Venice and will allow for by-passing touristic areas, and therefore, a more homogeneous distribution of users.

Future development

A future development of the cultural market could include an expansion of cultural nodes outside the perimeter of the historic center of Venice. Therefore, if the original strategy is successfully implemented, similar strategies could be set for new attractions areas in islands that are not usually visited. For instance, cultural developments could be created around handmade products such as glasswork and textiles in the islands of Murano and Burano, respectively.

Scenario 2: Transition (Residence)

The second scenario faces a future in which 'high economic diversification' and 'increase of tourism gentrification' are the main trends. Although this scenario is similar to the one presented above, the increase of gentrification raises the challenges that are needed to be addressed, and thus makes it a more realistic and probable scenario. Same as before, a 'high economic diversification' trend means that the city itself is generating alternative economic activities without the need of external intervention. However, an 'increase of tourism gentrification' means that the tourism and housing markets are not in balanced, and therefore, residents are still being displaced. Consequently, in this scenario, as the issue of diversification is being already addressed by market trends, the focus will be in proposing strategies for solving problems generated by the increase of gentrification. Yet, in order to ensure a future-proof sustainability of the economic diversification trend, additional approaches will be developed to make an overarching strategy that contributes to linking these aspects to the main issue of gentrification in the city. Thus, providing a possible solution for the gentrification problem, while ensuring the permanency of alternative economic activities.

For these reasons, in order to deal with possible challenges that the city might face in the future, this scenario will be focused on improving the availability the housing options and the quality of public spaces. Therefore, specific areas around the city will be selected for further developing these qualities in an attempt to render them more attractive to families and prospect residents. Furthermore, a better link between these areas will be also created, aiming at improving the city mobility and livability. On top of these physical interventions, new policies will be proposed at a municipal level, in order to control the number of tourists in each neighborhood and promote a more balanced environment. Consequently, matching alternative economic activities with a new local population that could thrive in this new environment.

Stakeholders

In order to translate the plans made for this scenario into reality, it is important to bring onboard different stakeholders. Moreover, as both top-down and bottom-up approaches will be used, it is necessary to incorporate actors from public institutions, as well as private parties and the community. As it can be seen

in the table below (*Table 7*), the main stakeholders needed for this scenario are presented with their respective category, managerial approach, and examples. Furthermore, in *Figure 34* they can be also visualized in a Power/Interest (PI) matrix.

STAKEHOLDER	CATEGORY	APPROACH	EXAMPLES
Regional government	Public sector	Key stakeholder	Veneto region
Local government	Public sector	Key stakeholder	Metropolitan Venice
NGOs	Private sector	Key stakeholder	OCIO
Local associations	Community	Key stakeholder	ABBAV, ASC, UI
Investors & developers	Private sector	Keep informed	Banks, RED
Residents	Community	Keep informed	Existing, Prospect
Students	Community	Keep informed	IUAV, Ca' Foscari
Transport businesses	Private sector	Minimum effort	ACTV

Table 7: Scenario 2 - main stakeholders (own elaboration)

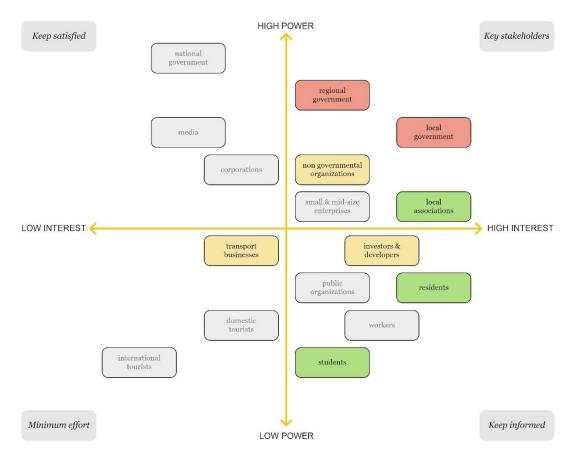


Figure 34: Scenario 2 - Power/Interest matrix (own illustration)

Note: public sector in red, private sector in yellow, community in green, and secondary stakeholders in grey

Location

As it can be seen in the map shown below (*Figure 35*), there are three main neighborhoods in which the city can implement different strategies in order to increase the availability of housing. These locations have been selected as they still have urban qualities that could be salvaged in order to render them more attractive for future families and prospect residents. Furthermore, as these areas are not located in the most touristic locations, they could be easily recovered without conflicting with other economic markets. Yet, if these future strategies are successfully implemented, they could be expanded into more touristic neighborhoods as well.

The neighborhood of Cannaregio, in the north part of the archipelago, has been selected due to its prevalent residential characteristics. For instance, up until now the area called Ghetto Ebraico hosts the majority of the population left in Venice, being known for preserving many traditions and old customs that otherwise would have disappeared. On the other hand, the neighborhoods of Giudecca, Sacca Fisola, and Sant' Elena in southern and eastern part of Venice, have been selected for their vibrant environment that has endured throughout time, as the area was able to evolve and adapt to the new requirements of the city, developing a big community of students and low-income families. Consequently, as it can be seen in these two areas, different traits and approaches can be used for recovering the city from a residential point of view. Therefore, a strategy that better links these intrinsic qualities with the core urban fabric should be explored in order to enhance areas that are being affected by gentrification issues.



Figure 35: Scenario 2 - spatial landing (own illustration)
Note: selected neighborhoods (brown), specific areas (orange), and future expansion (yellow)

Strategy

The main strategy for this scenario will be focused on improving the living environment of Venice in order to increase the city's attractiveness for current and future residents. This will be done as a way to counteract the negative gentrification trend which this scenario is facing. This goal will be achieved by encouraging public space interventions in residential areas, and state-led policies that can reduce the presence of tourists in specific parts of the city; therefore, increasing the availability of amenities and housing for residents. As it was presented in the literature review, the introduction of such strategies will improve the urban resilience of Venice as it will offer more social justice by balancing the composition of the population and services provided. Additionally, it will also help to achieve a better tourism resilience, as it will aim for better social cohesion, which in turn will be translated into less community unrest and lower gentrification rates. This strategy will follow a similar approach than the previous scenario, as the incorporation of hybrid amenities that serve both residents and visitors it is an important aspect to ensure the survival of alternative economic activities, while also contributing to improve the community's wellbeing. Moreover, a grid of public interventions will be also encouraged in order to increase mobility within the city, and to guarantee that neighborhoods are well integrated and interconnected. To a certain degree, the mobility grid proposed for this scenario will overlap with the cultural one elaborated in the previous section, as they both share common attributes that can help to create a better living environment.

As it can be seen in the following image (*Figure 36*), the first part of this strategy will be focused on developing a series of interventions in the urban environment of Venice. In the selected areas a progressive enhancement of public spaces -urban design- will be fostered in order to increase the number and quality of everyday amenities in an attempt to fulfill the needs of the residents. As it was mentioned before, these interventions should be focused on providing an urban furniture and mobility grid, while also being linked to other areas of development such as education, culture, and industry; therefore, following a similar approach than the one presented in the first scenario.

Thereafter, the second part of the plan can be implemented, in which a policy strategy will be developed for increasing the number of permanent residents. This part consists of three different top-down approaches that should be implemented simultaneously in Venice. First, regulations should be set for limiting the number of lodging facilities in specific areas, that are identified as residential zones. Then, flexible rental contracts should be authorized in order to reduce conflicts between landlords and residents. And finally, subsides and benefits should be facilitated as a way to encourage owners to reconvert their locations from the touristic market into the residential one. On the other hand, the government should also allocate a greater part of its budget into social housing. Therefore, refurbishing abandoned housing buildings as part of a future development of the city. Furthermore, if this three-step plan is successfully implemented in the selected residential neighborhoods, it could be also expanded into more touristic areas such as Santa Croce, San Polo, and San Marco, in which a more balanced number of tourists and residents could be also beneficial for a more sustainable future.

Finally, same as in the previous scenario a flow management of tourists should be also taken into consideration for this strategy. As it was already explained, the incorporation of a grid within the urban fabric of the city will increase mobility. Therefore, contributing for better controlling the movement of people, and lowering the number of overcrowded areas. However, it is also important to provide new entrances to the city, in order to avoid overcrowding its single access point -Piazzale Roma-. Same as it was explained before, a plan could be jointly developed with the local transportation authority (ACTV) by establishing new waterbuses routes that depart from the mainland -San Giuliano- and disembark in specific

locations within the city. For instance, a fitting option in this scenario would be the stations of Ospedale, and Zattere, as they are located near the intervened areas and will allow for by-passing touristic zones, while providing a direct access to residential spaces and amenities.

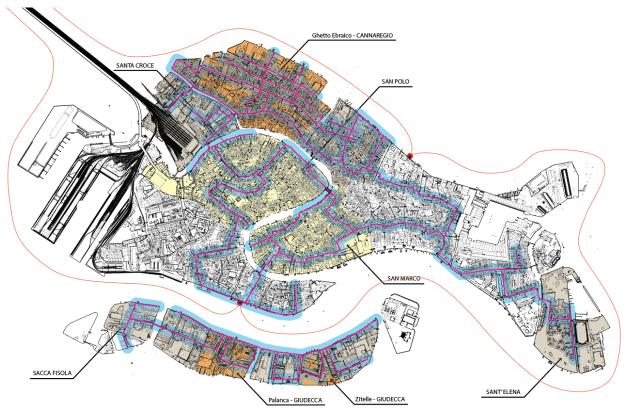


Figure 36: Scenario 2 - strategy (own illustration)

Note: urban interventions (magenta), interventions area of effect (blue), and new waterbuses direct entrances (orange)

Future development

As it was explained in the empirical section, there is no shortage of housing in Venice as an extensive number of houses could be available for future residents if room rentals, hotels, and abandoned properties are brought back to the housing market. Yet, if the number of prospect residents increases significantly due to better economic and livability qualities of the city, extra housing will be needed. As the existing architectural heritage of the city does not allows for new physical interventions to be performed, a future expansion of the housing stock could be done by promoting innovative housing solutions, such as the creation of floating platforms that could be attached to specific areas of the city in order to increase the number of available housing units without damaging the urban heritage.

Scenario 3: Transformation (Education)

The third scenario faces a future in which 'low economic diversification' and 'increase of tourism gentrification' are the main trends. Unlike the other scenarios, here two negative trends are presented,

thus making it the most pessimistic setting. A *'low economic diversification'* trend means that the city is lacking alternative economic activities, and therefore, external intervention is needed in order to find different options that could help diversifying the market. Same as in the second scenario, an *'increase of tourism gentrification'* means that the tourism and housing markets are not in balanced, and therefore, residents are still being displaced. Consequently, as the aforementioned problems are not being solved by any of the market trends, it will be necessary to provide a comprehensive strategy that is able to address both issues simultaneously. Yet, this new strategy needs to be compatible with the existing uses and activities that the city hosts, as well as providing ground for improving local dynamics and resident's quality of life.

For these reasons, in order to deal with possible challenges that the city might face in the future, this scenario will be focused on utilizing the existing niche of high educational institutions to create a market capable of drifting away from tourism activities and providing new residents to the city. Therefore, specific areas around the city center will be selected in accordance with their urban characteristics and affinity to the educational market, in order to further enhance educational amenities, Venice-based job availability, and student housing alternatives. Moreover, additional state-led policies will be urged to encourage landlords to rent their properties for students and startups in these areas, thus also aiming at reducing the existing number of touristic amenities and services. Consequently, producing an alternative economy that, if successful, will attract new activities and residents into the city, hence also providing a possible relief from current-widespread and draining touristic activities.

Stakeholders

In order to translate the plans made for this scenario into reality, it is important to bring onboard different stakeholders. Moreover, as both top-down and bottom-up approaches will be used, it is necessary to incorporate actors from public institutions, as well as private parties and the community. As it can be seen in the table below (*Table 8*), the main stakeholders needed for this scenario are presented with their respective category, managerial approach, and examples. Furthermore, in *Figure 37* they can be also visualized in a Power/Interest (PI) matrix.

STAKEHOLDER	CATEGORY	APPROACH	EXAMPLES
Regional government	Public sector	Key stakeholder	Veneto region
Local government	Public sector	Key stakeholder	Metropolitan Venice
Local associations	Community	Key stakeholder	ESU, EDU
SMEs	Private sector	Key stakeholder	Services, Startups
Investors & developers	Private sector	Keep informed	Banks, Universities
Students	Community	Keep informed	IUAV, Ca' Foscari
Transport businesses	Private sector	Minimum effort	ACTV

Table 8: Scenario 3 - main stakeholders (own elaboration)

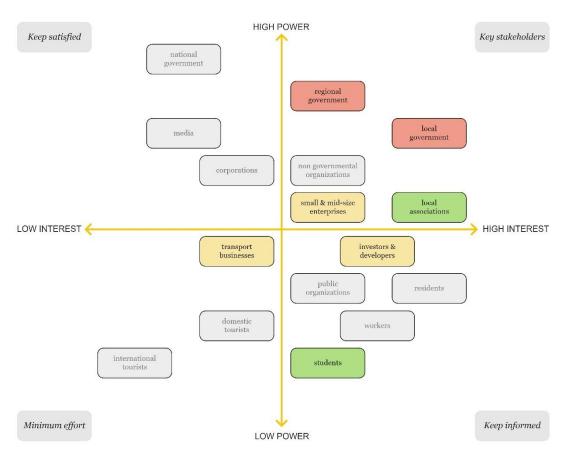


Figure 37: Scenario 3 - Power/Interest matrix (own illustration)
Note: public sector in red, private sector in yellow, community in green, and secondary stakeholders in grey

Location

As it can be seen in the map shown below (*Figure 38*), there are three main neighborhoods in which the city can implement new economic activities that further explore the educational market. These locations have been selected as they are home to multiple high education institutions which could serve as a starting point for developing an alternative market in these areas. As it can be also seen in the map, existing institutions -marked with a red dot- have greater presence in the southern and central part of the city. In accordance with the trends presented in this scenario, the central location of these educational facilities will help to start shifting economic activities at the city core, therefore, contributing to replace the tourism industry at its more critical areas. This will be a factor to take into consideration when integrating this strategy with other plans, as it could be further strengthened when complemented with other peripheral interventions.

In the south, the neighborhood of Dorsoduro has been selected as it is home for multiple buildings from the four biggest education institutions in Venice (IUAV, Ca' Foscari, Conservatorio, and Academia di Belle Arti), therefore, being the best location for start implementing this strategy. On the other hand, the neighborhoods of Santa Croce and Cannaregio (West) only have a few institutional buildings in the area, yet their central locations have proven to be very important for this market, as they provide easy

accessibility and interconnection with other parts of the city. Consequently, a joint strategy that takes advantage of the characteristics of both locations should be implemented for achieving the scenario goals. If the implementation of this proposal is successful, a further expansion could be expected into the neighborhoods of Cannaregio (North, East), San Polo, and San Marco, as they also have a few scattered educational facilities that could be incorporated into later stages of the strategy.



Figure 38: Scenario 3 - spatial landing (own illustration)

Note: selected neighborhoods (brown), specific areas (red), future expansion (yellow), and existing facilities (red dots)

Strategy

The main strategy for this scenario will be focused on fostering educational-related businesses in order to develop an alternative market that is capable of creating diverse economic activities and bringing new residents to the city. This objective has been set as a response to the negative trends identified for this scenario, therefore, having diversification of the economy and reduction of gentrification as main goals. Consequently, these goals will be achieved by promoting top-down initiatives that will serve as a catalyst to encourage a broader market development, as well as expanding student accommodation options. Furthermore, these policies will be established as market enablers that will allow for the propagation of bottom-up ideas, which otherwise would have been ignored by the market. As it was presented in the literature review, the implementation of these strategies will help to increase the economic adaptability of the city, and thus, contribute to generate better urban resilience qualities. Similarly, these will also provide a relief for the gentrification issue, hence, improving tourism resilience in Venice. In practical terms, this scenario works as a mixture of the two previous cases, as cultural amenities can be linked to the educational

market, while the housing strategies explored before can also serve the student community. Yet, the most important contribution of this strategy will be the creation of a relationship between universities' career profiles and future jobs that could be hosted in the city. Therefore, the aim will be to create a working force that aligns taught knowledge with the future economic market.

The first part of this strategy will be centered in the creation of a fruitful dialogue between universities and governmental institutions, in order to incentivize investments in education, that could be translated into research, innovation, and technologies. As it was already mentioned, the objective will be to apply these traits in the business world, and therefore, attract more economic, social, and cultural capitals into the city. In order to do this, a progressive internationalization of higher institutions is also needed, as well as ensuring that a percentage of the students become permanent residents after finalizing their studies. This final objective could be achieved if a new policy that promotes the creation of startups in low diversification zones is enabled, thus, allowing for a smooth transition of young professionals into the job market. On top of a dedicated market for universities' graduates, the implementation of this policy will also allow for the creation of a parallel market that serves students' needs.



Figure 39: Scenario 3 - strategy (own illustration)

Note: educational axis (magenta), education area of effect (blue), and new waterbuses direct entrances (orange)

As it can be seen in the previous image (*Figure 39*), the areas around the main universities will become more attractive for future developments as public amenities and renewed social interactions will be promoted. This part of the strategy will revolve around the transformation of unused buildings into low-cost working places that can foster new businesses. Moreover, this strategy could also take advantage of

online working to attract new renting segments that appreciates the beauty of Venice as an added value (e.g. startups, collaborative offices). Similarly, state-led investments and policies that facilitate the incorporation of students into the housing market will be also needed in order to secure the permanence of residents. Thus, if these strategies are implemented, graduates will be able to continue working in Venice within their respective areas of interest, creating a meaningful connection between the possible economic markets that the city has (e.g. industry, chemistry, logistics, cultural, heritage, arts, tourism, architecture) and the knowledge taught in local universities. Consequently, also strengthening the connection between economic, cultural, and social environments.

Moreover, as it was also mentioned in the previous scenarios, a flow management plan should be taken into consideration for this strategy. However, the central location of these areas renders them more difficult to access by alternative routes. Therefore, only the existing station of Zattere could be considered as a possible direct link between the mainland and the educational part of the city. For this reason, as it was explained in the other scenarios, a plan could be jointly developed with the local transportation authority (ACTV) by establishing a new waterbus route that depart from the mainland -San Giuliano- and disembark in this specific location. Thus, allowing for a direct flow of students and young professionals to move in and out of the city without being disturbed by tourists' crowds.

Future development

A future expansion of this scenario could include the creation of a more specialized city of knowledge, which will be developed from the four existing educational institutions. In order to further foster this idea, it will be necessary to improve the city internationalization, not only by attracting students from different parts of the world, but also by providing job opportunities for young professionals who desire to live in the city. Consequently, it will be important to also expand the capacity of providing better education and additional student accommodations, for example by promoting new residential projects in the area of Giudecca, and the incorporation of new education facilities as the VIU -Venice International University- in the island of San Servolo.

Scenario 4: Rehabilitation (Industry)

The fourth scenario faces a future in which 'low economic diversification' and 'decrease of tourism gentrification' are the main trends. Similar to the second scenario, having a positive and a negative trend makes it a more realistic and probable scenario than the others. Here, a 'low economic diversification' trend means that the city is lacking alternative economic activities, hence, external intervention is needed in order to find an option that could help to diversify the market. At the same time, a 'decrease of tourism gentrification' means that the touristic and housing markets have reached a balance point, and therefore, residents are no longer being displaced. Consequently, in this scenario, as the issue of gentrification is being addressed by market trends, the focus will be in solving the problem of low economic diversification. Yet, in order to ensure the continuity of a decreasing gentrification trend, the alternative economic markets that will be encouraged will also consider strategies to help avoiding future displacement of residents. Thus, by promoting a new market and helping to preserve the number of residents in the city, this scenario aims at reducing the current challenges that the city is facing.

For these reasons, this scenario will be focused on facilitating the reintroduction of industrial activities as a way of providing an alternative economic market that is able to increase diversification in the city and

region without worsening gentrification. Therefore, specific areas suited for these endeavors will be selected in the mainland, and new state-led policies will be supported in order to embrace a new market that will help to provide an alternative economic industry for Venice. Additionally, by creating jobs outside the city center, the aim is to give space for other activities to flourish, while attracting new families to these same areas.



Figure 40: Porto Marghera in the forefront and Venice in the background (Guerrieri, 2017)

Stakeholders

In order to translate the plans made for this scenario into reality, it is important to bring onboard different stakeholders. Moreover, as a top-down approach will be used, it is necessary to incorporate actors from public institutions and private sector. As it can be seen in the table below (*Table 9*), the main stakeholders needed for this scenario are presented with their respective category, managerial approach, and examples. Furthermore, in *Figure 41* they can be also visualized in a Power/Interest (PI) matrix.

STAKEHOLDER	CATEGORY	APPROACH	EXAMPLES
National government	Public sector	Keep satisfied	Italy
Regional government	Public sector	Key stakeholder	Veneto region
Local government	Public sector	Key stakeholder	Metropolitan Venice
NGOs	Private sector	Key stakeholder	Lagunet, CORILA
SMEs	Private sector	Key stakeholder	Services, Startups
Corporations	Private sector	Keep satisfied	Port of Venice
Workers	Community	Keep informed	Existing, Prospect

Table 9: Scenario 4 - main stakeholders (own elaboration)

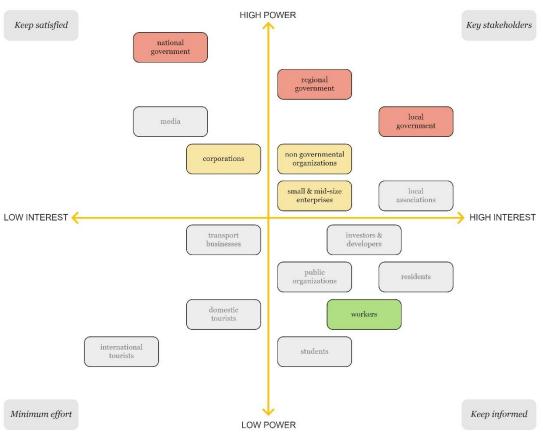


Figure 41: Scenario 4 - Power/Interest matrix (own illustration)

Note: public sector in red, private sector in yellow, community in green, and secondary stakeholders in grey

Location

As it can be seen in the map shown below (*Figure 42*), there are two main areas in which industrial activities can be reimplemented. These locations have been selected as they have an existing industrial infrastructure that should be adapted to fit environmental regulations, as well as new requirements from the city. Moreover, the marginal location of these areas will allow for a better diversification of the economy as they will encourage alternative activities outside the city center, and therefore also leaving room for more suited diversification strategies, such as education and culture to be incorporated in heritage locations.

In contrast to any other locations suggested before, this scenario incorporates the area of Porto Marghera, which is part of the Venetian metropolitan region but is located in the mainland, outside the archipelago. This is due to the existing industrial infrastructure that this area already has, moreover, also having a great potential for improving, as it has been not working at its maximum capacity for many years. On the other hand, the area of Tronchetto in the west part of Venice, has also been selected as it serves as a maritime entrance point to the archipelago, therefore, being an important link between industrial activities in the mainland and the city. Consequently, a joint strategy that better links these two locations for creating a more fruitful relationship between these two areas should be developed, as a way to encourage industrial activities back to Venice.

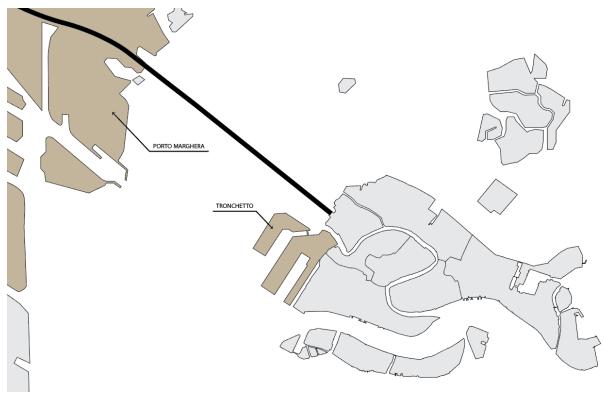


Figure 42: Scenario 4 – spatial landing (own illustration)
Note: selected neighborhoods (brown)

Strategy

The main strategy for this scenario will be focused on promoting the reintroduction of industrial activities in the metropolitan region of Venice in order to develop an alternative market that is capable of attracting new economic activities for the city. This goal will be achieved by the promotion of state-led policies to encourage the adaptation of industrial activities into modern sustainability standards, as a way to reactivate industrial activities in Porto Marghera. Furthermore, the rebirth of these activities will be also used to promote a further development and internationalization of local goods, such as traditional handcrafted glass, masks, and textiles. As it was presented in the literature review, the implementation of these strategies will help to increase the urban resilience of the city by fostering economic diversification, and therefore, strengthening its capacity to withstand detrimental disturbances. Moreover, as the focus will be shifted towards creating a new market outside the city center, it will allow for traditional activities to reclaim their lost place in the city.

Accordingly, as it was explained in the introduction of this scenario, this strategy will also indirectly support the recovery of a residential population by allowing the creation of labor jobs in industrial facilities. This is an important contribution to the city, as this specific social segment has been mostly displaced in the past by the lack of job opportunities and the high prices of housing and services.

Consequently, the first step of this strategy will be to elaborate a detailed regional vision and zoning plan for the area of Porto Marghera, with the intention of clearly determining which type of industries will be allowed and what environmental regulations will need to be adhered in order to safeguard the wellbeing of the Venetian ecosystem. Moreover, the EU Recovery Fund could be used to promote the conversion of existing industries into greener standards that not only comply with the UN sustainability goals but also allow for better resilience qualities in the city. Secondly, a restructuration of the area of Tronchetto should take place in order to transform it into a hub able to better organize the flow of cruises and to facilitate the transportation of goods between the different parts of the city and the industrial port of Marghera. Therefore, contributing to the generation of an economic market around the exportation of traditional goods.

Finally, it as it was also mentioned in the other scenarios, it will be important to link the productive activities needed for these industries with the knowledge taught in local universities. If this last step of the process is achieved a more circular economy will be obtained, as students will be encouraged to stay in the city, becoming part of working force of Venice, while also contributing to increase its declining population.

Future development

A future development of this strategy could be expected by extending the industrial and trade activities of Porto Marghera to higher environmental standards, and therefore, having again the opportunity of connecting Venice with other port cities in the Adriatic and the Mediterranean Sea. If this strategy is properly developed, the expansion of the industrial sector could be brough back to the levels of commerce that the city used to have in the late 70s, thus, creating a market strong enough to completely stop relying on tourism as the main source of income.

Final strategy

As it was presented at the beginning of this chapter, the creation of the four scenarios was done in order to utilize the existing market trends to anticipate different possibilities that could be materialized in the upcoming future. Consequently, the scenarios discussed above contemplate the most significant and likely trends for the city of Venice, thus, defining boundaries in which a probable future might be unfolded. By setting these boundaries a framework for discussion was developed, in which different strategies were proposed in order to inform stakeholders about how to prepare and tackle future challenges. However, up to this point, each scenario has been addressed independently, therefore, having separate strategies to face different -yet interconnected- problems. Nevertheless, for the final strategy a comprehensive plan was develop, in which the main recommendations of each scenario were merged together in order to produce a single future-proof strategy that can be applied by the local government to increase Venice's urban and tourism resilience characteristics.

Before diving into the final strategy, it is important to emphasize that all previously discussed scenarios had common guidelines that tied them together while also providing ground for joint developments. This situation was a consequence of having specific goals that were very compatible with other areas of development, as well as being aligned from a stakeholders' point of view. For instance, all of the scenarios had as one of their main objectives the reduction of tourism related activities, in order to improve services provided to the community as well as to protect the existing cultural heritage of Venice. Likewise, they also aimed at enhancing housing conditions for residents and students, while encouraging the increase of local businesses and startups. Moreover, a shared trait among all scenarios was the existence of a local desire to use the pandemic reset of the economy as a driver for implementing more conscious strategies that are able to protect the community and take into account long-term goals for the city.

The main logic behind this strategy is to work with the existing conditions and opportunities that the city has, without imposing foreign solutions. Therefore, the proposed top-down policies only serve as enablers and facilitators for community's bottom-up initiatives, thus, steering and fostering already existing ideas. Accordingly, the final strategy proposed for Venice consists of three main components -economic diversification, housing development, and flow management- that are going to be addressed by a series of urban interventions and policies that allow for a collaboration with community initiatives in order to create capacity building in a close loop that is auto-sustainable in time and objectives. Hence, in the following image (*Figure 43*), it is possible to see the main stakeholders involved, as well as their role in the final strategy. As it will be further explained below, physical interventions and policies implemented by the regional and local government will respond to NGO's and local association's needs -in representation of the community-. Consequently, these will facilitate private projects from investors & developers, small & mid-size enterprises -entrepreneurs-, and transportation businesses, that are able to respond to the community needs.

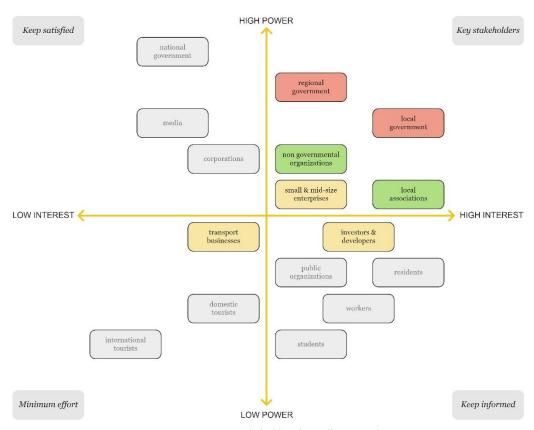


Figure 43: Main stakeholders (own illustration)
Note: demand side in green, facilitators in red, supply side in yellow, and secondary stakeholders in grey

Consequently, the first component of this final strategy recommends the creation of policies that encourage the progressive transformation of touristic businesses and amenities into a more diverse market that allows for a better restitution of economic and social benefits to the community. In order to achieve this objective, some of the specific strategies that were mentioned in each scenario are joined together as

part of a series of public interventions and new policies. For instance, the creation a complementary urban grid that helps to distribute the number of tourists outside the main streets of the city will start as a physical intervention for enhancing public amenities and public spaces, that will be later backed up by policies that foster the transformation of the areas around them into a more cultural and educational market (*Figure 44*). The distinction between educational and cultural areas are given by intrinsic characteristic of the urban fabric, as described in the previous scenarios, the north-east part of Venice is more suited for cultural amenities and the south-west area is more attractive for educational activities. Yet, regardless of the ending result, the policies implemented should have a general approach that fosters the diversification of the economy by means of incentives that promote the adaptive reuse of these commercial assets into a different use that better contributes to safeguarding cultural and social traits. Nonetheless, it is also imperative to create a better link between universities and any future economic development of the city, as creating a symbiotic relationship among these two will generate a constant source of professionals that may well become permanent residents.



Figure 44: Final strategy overview (own illustration)
Note: urban grid (magenta), area of effect (blue), and new direct entrances (orange)

Likewise, the objective of the second component of this strategy is to attract and retain residents. Thus, it follows a similar approach than the previous step by using the aforementioned interventions for public amenities and public spaces as a catalyst for developing a healthier housing market. Therefore, these urban interventions will help to create of a more attractive market for both landlords and prospects residents, that are also able to increase diversity and livability qualities of the city. Same as before, the intrinsic

characteristics of Venice, will steer which areas are more suited for families, young workers, or students. Thus, following a reciprocal relationship with the previous part of the strategy, as different types of amenities and tenants will correspond to the inherent neighborhoods' traits. On top of a higher number of residents due to the creation of a better urban environment, this strategy also recommends for the introduction of additional policies that restrict the number of lodging facilities in specific areas of the city, as well as enabling the transformation of these facilities into long-stay rentals for permanent residents. Consequently, these policies will help to set limits to the tourist industry, and therefore, allow for alternative markets to develop naturally. Moreover, at the same time, state-led investments are suggested in order to improve the availability of social housing by recovering and refurbishing the existing stock of abandoned dwellings, thus also showing a more active commitment by including physical interventions as part of this strategy.

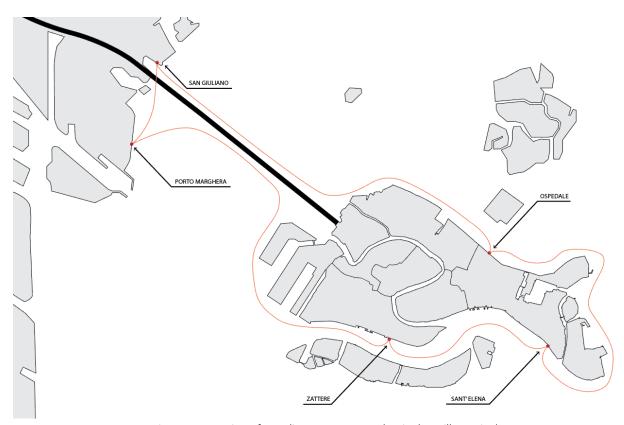


Figure 45: Overview of new direct entrances to the city (own illustration)

Finally, as it can be seen in the previous image (*Figure 45*), the last component of this strategy recommends the implementation of a flow management plan for bypassing touristic areas of the city and allowing a faster connection between the mainland -San Giuliano, and Porto Marghera- and key points of the archipelago. The internal flow management of Venice will be partly enhanced by the implementation of the urban grid which will act as an alternative route when moving around the city. Yet, direct shuttles are also needed in order to further disperse users, for this reason, the three stations identified in the previous

scenarios -Ospedale, Sant'Elena, and Zattere- have been recognized as key access points, that complement with the strategies discussed above, as well as the urban configuration of Venice.

Ultimately, an additional part to this final strategy is suggested if the first components are successfully received by the community and effectively incorporated to the city. Here, it is recommended to improve the existing industrial activities outside the city center -Porto Marghera- as a way of boosting the economic diversification of Venice, while also rendering it more attractive for other fields of development. Thus, also contributing to increase the number of potential residents. However, the technical preparation and investments needed for this additional phase is much larger than any other strategy, therefore, only being recommended as a part of a regional long-term plan.



Figure 46: Final strategy visualization (own illustration)

CONCLUSION

Epilogue

As it was presented in the first section of this research, the main objective of this study was to utilize the current COVID-19 pandemic as a catalyst for suggesting a strategy capable of contributing to the development of a resilient future-proof city of Venice. In order to achieve this, the proposed strategy had to address challenges presented by the pandemic, while also helping to solve other intrinsic issues derived from tourism-related problems. Consequently, with the intention of achieving said objectives two main research question were established as a guiding mechanism for the study. Thus, before finalizing this thesis, it is necessary to review once more the research questions in order to provide an adequate response, and to explain how these answers were obtained.

To begin with, the first research question of the study was, "what are the effects of the pandemic in the built environment of tourist-driven cities, such as Venice?". Thus, with the aim of better answering this question, it was subdivided into two different approaches, first, "what are the main characteristics and issues of a tourist-driven city?", and second, "how is Venice's status quo being affected by the COVID-19 pandemic?". Therefore, in order to answer the first research question and its corresponding sub-questions, the theoretical concepts of 'urbanization' and 'overtourism' were explored in the literature review in order to create a framework that could be used for better understanding these theories. Accordingly, these ideas were later contrasted with theoretical and empirical findings from the case study. Hence, contributing to the development of an empirical section consisting of 'past, present, and future characteristics of Venice' in which it was described how the city was shaped in the last decades by tourism activities, and more recently, how the city was affected by the ongoing pandemic. Consequently, in the next paragraphs a short answer to this research questions will be given, as a more extensive explanation can be found in the 'Case study conclusions' (Pages 63-64).

As it can be seen in the following diagram (*Figure 47*), it is possible to determine that tourist-driven cities such as Venice are characterized by a lack of long-term strategies that are able to deal with tourism-related issues. Therefore, allowing for carrying capacities of the city to be surpassed, and for an increase of overcrowded areas. Thus, being unable to provide basic services for both visitors and locals. As a result, having unregulated markets that foster the systematical conversion of amenities into tourism services, as well as a similar transformation of residential dwellings into lodging facilities. Consequently, experiencing adverse effects in the community by the lack of economic diversification, and the gentrification of the local population. Which ultimately leads to constant community unrest and tourism rejection.

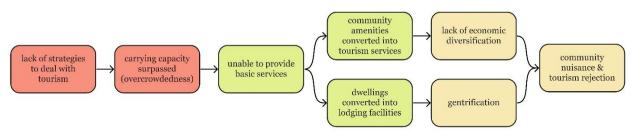


Figure 47: Main attributes of a tourist-driven city (own illustration) Note: causes in red, characteristics in green, and effects in yellow

Nevertheless, as it can be seen in the next diagram (*Figure 48*), the start of the COVID-19 pandemic marked an important shift for Venice's characteristics, due to the touristic market being greatly disrupted by these events. Therefore, the sudden stop of all touristic activities and its repercussions on the economic and social environment of Venice led to a generalized desire for better urban resilience qualities in the city. This fact allowed for a change of social paradigms in local stakeholders, thus, creating the possibility of transforming touristic amenities and lodging facilities back to community needs. Consequently, helping to diversify the economy and reduce gentrification. Hence, creating -for the first time- the opportunity to have a fruitful relationship between the tourism industry and the community, by protecting local desires whilst safeguarding the economy.



Figure 48: Main pandemic' consequences on a tourist-driven city (own illustration)

Note: drivers in red, effects in green, and opportunities in yellow

To continue, the second research question of the study was, "which managerial strategies can be applied in Venice in order to increase its urban resilience, while also fostering solutions for tourism-related problems?". Correspondingly, with the objective of finding a solution to this question, it was subdivided into three different parts that helped to organize ideas throughout the study, first, "what strategies can be applied in the built environment to increase urban resilience?", then, "what strategies can be applied in the built environment to foster solutions for tourism-related problems?" and finally, "how can these strategies be combined into a single future-proof solution?". Therefore, in order to answer the second research question and its corresponding sub-questions, the theoretical concepts of 'urban resilience', 'tourism resilience', and 'adaptive reuse' were studied in the literature review in order to create sufficient background knowledge that could be later applied in hypothetical scenarios. Accordingly, these concepts were later used to organize empirical findings from the case study into four different scenarios that tackled the main issues identified for Venice. For instance, the first sub-question was answered with strategies for enhancing urban resilience qualities of the city by tackling economic diversification issues in the 'transformation scenario' and the 'rehabilitation scenario'. While the second sub-question was answered with strategies for addressing tourism-related problems such as the reduction of gentrification in the 'persistence scenario' and the 'transition scenario'. Moreover, the second research question and its corresponding third sub-question were answered in the 'Final strategy' (Pages 91-95), in which all the strategies recommended in the aforementioned scenarios were jointed together in a single future-proof solution for the municipality of Venice.

Furthermore, in the following diagram (*Figure 49*), a summary of this final strategy is presented in order to briefly answer the second research question. Therefore, as it is possible to see below, the final strategy consisted of 4 steps that contribute towards the creation of better urban resilience qualities in Venice.

Nevertheless, each step has a unique approach that addresses specific objectives in order to solve intrinsic problems that the city is facing. For instance, the first step suggests the implementation of an urban grid by means of physical interventions (top-down approach) aimed at increasing the urban attractiveness of certain parts of the Venice in order to reduce overcrowded areas. Similarly, the second step of this strategy encourages the introduction of state-led policies that promote and facilitate adaptive reuse initiatives from the community (bottom-up approach) in order to complement the previous step, strive for a higher economic diversification, and improve housing availability. Later, the third step recommends the creation of direct waterbuses entrances to the city in order to enhance mobility, by-pass overcrowded areas, and thus, obtain a better flow management of people and activities. Finally, the last step suggests the creation of alternatives economic markets by promoting decentralized development of industry, in order to consolidate all the strategies recommended before and to further strengthen intrinsic characteristics of the city.

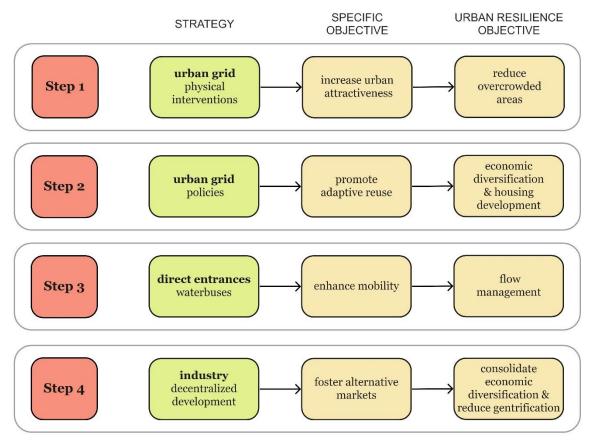


Figure 49: Final strategy summary (own illustration)

Validation

In order to improve the trustworthiness of this study, a short experiment was conducted to validate the information presented in the previous sections, as well as the recommended final strategy. This additional step was done by pitching this strategy to a former culture & tourism expert from the municipality of

Venice, and thereafter, asking about his personal thoughts on the matter. In this validation, several quotes from the empirical study were used in order to corroborate the information presented and to convey the social needs of the community. Furthermore, during said presentation, it was emphasized the different approaches that were suggested for the city of Venice in this study, including the phasing stages of the strategy, and possible stakeholders to be involved. Moreover, it was also stressed the importance of solving intrinsic issues of the city by creating capacity building and developing resilience characteristics. This validation process was done in a relaxed atmosphere, thus allowing for casual conversations to take place without biasing the expert's opinion.

Consequently, throughout the discussion of these topics, the following suggestions and respective comments were made by the interviewee. As in can be seen below (*Table 10*), most of the suggestions were already addressed by the existing strategy and correspondingly acknowledged by the expert, yet some areas still had room for improvement.

TOPIC	SUGGESTION	COMMENT
	Any strategy recommended for Venice should	The strategy presented addresses this
	take into account multiple intervention scales	important aspect by suggesting
Strategy	and market segments. If it is only aimed at one	multidisciplinary strategies for
applicability	specific sector or area, the effects are not	multiple locations, using both top-
аррпсавшту	going the be significant enough to survive in	down and bottom-up approaches,
	time, and/or to make the required changes in	thus having the potential to make a
	the community.	significant city transformation.
	There is a consistent trend in Venice's history	The data from interviews suggests
	to go back into known practices, thus, making	that the community is ready for make
Strategy	hard to change existing routines or customs.	an important change in the city. If the
feasibility	Therefore, small interventions and working	strategy proposed is able to guide
	with the community should be encouraged in	independent stakeholders and ideas
	order to foster significant transformations that	into a joint objective, viable plans
	are much needed.	could be developed.
	Even though Venice is a unique city, it works in	Although the strategy proposed in
Strategy	the same way as many other European cities.	this study is very location based, its
transferability	Therefore, a successful strategy for Venice	core elements could be used as a
	should be also applicable in other locations.	guideline for future strategies.
	A successful strategy for Venice should take	The final component of the strategy
Strategy	into account areas that are outside the city	addresses this matter specifically, yet
extend	center in order to provide essential economic	besides Porto Marghera, other areas
	activities and services that cannot be done in	of the Metropolitan region should be
	the heritage areas.	also considered.
Future	Improving mobility is one of the most	The proposal of a transportation hub
	important aspects to consider when planning	at the mainland and direct
	future strategies for Venice. Nowadays, going	waterbuses entrances to the city
mobility	in and out of the city is an extremely difficult	helps to solve this issue. Moreover, it
,	and uncomfortable task. Thus, if not addressed	aligns with current plans made by the
	properly, it represents a disadvantage for	local government to improve mobility
	attracting new residents/workers.	between Venice and the mainland.

Table 10: Study validation, adapted from (NC, 2021)

Future research development

With the objective of strengthening the final strategy proposed in this thesis, a few additional steps should be further explored in order to ensure its real-life application. The suggestions mentioned below should be deemed as possible fields of development for future studies, as well as being taken into consideration in practical applications of this research, either for Venice or as a guideline for other cities.

From a feasibility point of view, it would be important to take into consideration the implications that a long-term strategy -as the one presented- has in the community and steering parties. Particularly, when a great part of the strategy relies on bottom-up initiatives that are very dependent on the current situation of direct stakeholders, such as residents and workers. Thus, if some social-change drivers are modified after the pandemic, it will be necessary to find alternative ways to stimulate the achievement of the strategy's objectives or modify the proposal accordingly in order to fit new social requirements. Similarly, although this study has demonstrated the benefits of having a more diverse economic market for tourist-driven cities, state-led policies will be also dependent on unknown future interests. Hence, if appropriate drivers are not incorporated, some of the suggestions of this study risk being ignored as the pandemic fades and other problems become more important on political agendas.

Additionally, from an implementation point of view, it would be also necessary to establish some channels that serve as starting points for its correct execution. As it was presented by some of the public-sector interviewees, in order to promote top-down strategies it is important to take on board key-stakeholders from the local, regional, and central government. These actors should be related to the economic development of the area, with an especial interest on improving sustainability and resilience characteristics of the city analyzed. On the other hand, grass-root organizations, such as housing, culture, and student NGOs need to be also contacted in order to include them in the strategies advised. This last suggestion should be considered of great importance, as bottom-up initiatives can push for joint collaborations between interested parties, that have much more impact than independent approaches.

Finally, it is also important to evaluate possible risks that the creation of such comprehensive strategy could entail for the future development of the city. As it was discussed in the validation process, the implementation of major changes in the social and urban structure of a heritage city, such as Venice; will lead to significant modifications in the built environment. Therefore, these options should be carefully studied with local stakeholders in order to jointly steer the ambition of the strategies and its possible outcomes. Moreover, the degree of adaptability that the hospitality and catering industry have should be also considered, as adjacent areas to the city intervened risk being transformed due to the displacement of tourism industries out of the city center, if proper counter actions are not taken. And thus, risking having a remedy that is worse than the disease.

Recommendations

Before discussing more specific recommendations, it is important to emphasize that the validity of this study and its final strategy is very dependent on the actual context of the city analyzed, as well as to the specific stakeholders that were interviewed for its development. Therefore, being difficult to transfer to other urban/social environments or apply in a different time setting without making the right adjustments.

Consequently, if the intention is to use or replicate this research in a different context, it is recommended to be taken as a framework of reference and not as a scientific source.

In line with these suggestions, the following diagram (*Figure 50*) is proposed as a guideline for the correct reproduction of this study in other cities, thus, functioning as an experimental municipal tool for steering future urban developments. As it can be seen below, this process starts with the understanding of inherent problems and needs of a specific city in order to develop a theoretical study of the issues identified for the area, and its corresponding possible solutions. Then, an empirical analysis of the affected area and its main stakeholders is required to validate the information obtained before. Soon after, the creation of future scenarios can start with trends derived from underlying problems and their projected market evolution. Finally, by taking into consideration intrinsic characteristic that the city already possesses, a feasible and integrated approach can be developed, therefore, establishing a comprehensive strategy for the short- and long-term future.



Figure 50: Transferability guideline (own illustration)

About the literature review

In order to include more aspects that increase validity, and therefore, improve the reliability of this research, it would be recommendable to incorporate environmental concerns, as well as a more rigorous analysis of -Italian- building laws as an extra layer of complexity for this study. Although these additional areas were not part of the original research scope, the fragile environment in which Venice and other touristic cities are located make these topics a very interesting aspect to consider as a future development stage for this project. Yet, it is important to consider that the broadness and specificity of these subjects will demand a longer process as a more careful and meticulous approach will be required. For instance, in this specific study, the heritage status of the city center of Venice and the environmental regulations of Porto Marghera would play an important role that could indubitably affect the strategy outcome.

Similarly, the strategies proposed in the last section of this study are intended for being applied by the local -Venetian- government. Yet, it is possible that some of these initiatives may not be achievable for the municipality of Venice, as they do not have the required institutional powers to implement them, therefore, needing a metropolitan or regional approach. For this reason, it is recommended to incorporate the future study of local laws and political powers as part of the theoretical analysis in order to create a more precise framework capable of ensuring the feasibility of proposed strategies, as well as their correct implementation.

About the case study

In order to further improve the outcomes of the research, it would be advisable to include more interviews with local stakeholder from other sectors besides the ones presented in this study. For instance, there was

a shortage of private actors, as they were much harder to locate and contact due to the travelling restrictions that the COVID-19 pandemic imposed. Hence, not allowing for a personal approach and limiting contact options to internet sources and interviewees acquaintances. Consequently, it would have been interesting to include sources that could contribute with a different perspective to the issues discussed in the study. For example, actors from the tourism and industrial sector, as well as private investors, developers, and transport businesses.

Along these same lines, context-based limitations were presented by lack of real-life interactions with the case study location, stakeholders, and the Italian socio-political environment. This situation was worsened by a low input of up-to-date knowledge due to the absence of online information about non-pandemic related topics at a regional and local level. Consequently, for a better understanding of the community position and the correct development of stakeholders' interviews, it is recommended to further explore subjects of topicality for future case studies. For instance, under normal circumstances, this could be done by regular site visits and a continued exposure to direct sources of information, such as -local- national television and newspapers.

About the operationalization

In order to create a more feasible scenario planning section, it would be desirable to incorporate additional trends that broaden the scope of the research by dwelling on other issues that the case study city might be facing. For instance, in the particular case of Venice, it would be interesting to incorporate at least one scenario that takes into consideration environmental aspects, as well as addressing the cruise industry.

Moreover, as the travel restrictions did not allow for site visits, firsthand impressions were not able to be obtained for the development of scenario planning strategies. Therefore, limiting information gathering to digital sources and online interviews. Thus, hindering the perception of the described issues, and not allowing for validation of information when analyzing non-academic sources. Notably, these limitations were felt when determining the spatial landing of future scenarios, as the proposed areas were forced to be selected from online sources, thus, risking biases and outdated information. Consequently, for a more precise future development of similar studies, it would be recommended to perform site visits that allow for a more personal approach to the city, its inhabitants, and the activities performed.

Personal reflection

This research represents the last step in my graduation program for the Master of Management in the Built Environment (MBE) at the Faculty of Architecture and the Built Environment (BK) from TU Delft. Consequently, for the development of this thesis the cross-domain graduation studio 'City of the Future' was chosen as it allowed me to interact with students from other tracks and academic backgrounds. This decision was made due to my desire to combine my existing experience as an architect with my new knowledge from the MBE studies, such as managing stakeholders, developing future scenarios, and proposing urban strategies. Therefore, challenging myself to develop a thesis that finds a balance between design and managerial points of view. Moreover, the opportunity to discussing the topic of the 'city of the future' was a very enriching experience that added an extra level of complexity to my graduation research, while also helping me to gain broader academic and professional skills.

Looking back at the work performed for this study, it is important to reflect upon some aspects that were unexpected during its development. For instance, it is necessary to discuss the difference of approaches between theoretical and empirical studies, as they provided separate types of knowledge to the research. The theoretical part was elaborated as a source of raw data, that had two purposes. First, it was necessary for a broader understanding of concepts that were being studied, as I was not familiar with all of them. And second, it was used as a starting point for stablishing common discussion areas with the stakeholders, which later served as filters for corroborating the data gathered. On the other hand, the empirical part was performed in order to obtain firsthand and up-to-date information for the case study. Therefore, the most remarkable contribution of this type of information was to provide a view of the city that would not have been possible to achieve due to the COVID-19 travel restrictions. Furthermore, it is also interesting to emphasize the different approach that interviewees had in regard to the information discussed. As an example, the 'overtourism and pandemic' topics were addressed differently, in my personal viewing they had a negative connotation as adverse aspects outweighed the positive ones. However, most of the interviewees had a positive approach towards these topics, thus, highlighting ideas that were not originally considered. Consequently, providing new perspectives to the analysis of this study and to the development of future strategies.

From a more specific point of view, it was also interesting to understand how phycological aspects play an important role when managing stakeholders. For instance, most interviewees were willing to change their personal behaviors in order to help the city after the pandemic. However, they also believed that no one else was willing to do the same, therefore, feeling that their effort would be unsignificant. Consequently, being discouraged to act, as they felt powerless. Moreover, this feeling was also fueled by loss of faith in the governmental actions due to years of being neglected by one-sided policies. Yet, when possible joint strategies were proposed and discussed, it became clear that potential understandings can be agreed and further developed between these 'opposite' parties.

Ultimately, when reflecting about the final strategy proposed for Venice, it would be interesting to see it applied by the local government in order to address some of the existing challenges. However, in my personal opinion, the most important aspect of this study is its contribution for conveying what are the opinions, postures, and desires of the local population to the Venetian and Italian government. Moreover, if the strategies developed here are only used as referential guidelines to help steering the future of Venice into a better and more manageable direction, the objective of this study would be already long achieved.

Acknowledgements

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APPENDICES

Appendix A: List of participants and connection to the study

The empirical part of this thesis is composed by twenty interviews to multiple stakeholders and experts. Moreover, one additional interview was performed at the end of the study as part of the validation process. In the following table a summary of all the participants and their main characteristics is presented, including codename, place of residence, working sector, area of expertise, and date of interview.

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Table 11: List of study participants (own elaboration)

Appendix B: Interview protocol for stakeholders

Stakeholders (e.g. residents, private & public workers, students, etc.)

Dear participant,

My name is Fabrizio Chiappe, I am a Peruvian architect and a graduate student at Delft University of Technology. For the final part of my academic formation, I am studying the effects of overtourism in the built environment of Venice. Without doubt, some of these effects have become particularly clear during these unusual times.

The main objective of this investigation is to analyze and understand the impacts that this phenomenon creates in the community, and utilize the current disruption created by the COVID-19 pandemic as a catalyst to implement new solutions that would have been usually disregarded under 'normal' conditions. Due to the novelty of the subject, the consequences that the pandemic has in the building stock of a tourist-driven city has not been studied before. Moreover, which solutions could be implemented to deal with both economic and overtourism issues are yet to be discussed. Consequently, the importance of this investigation relies in the certainty of finding future-proof strategies that are able to promote alternative uses for real estate assets, while contributing to enhance social and urban characteristics of the city.

Therefore, I would like to invite you to take part in an interview and share your thoughts about these topics. Your answers will contribute to my research as well as it would help the academic community and the city of Venice to shed some light over this unstudied subject. The following personal semi-structured interview has 14 questions and will require approximately 45 minutes to complete. The findings of this interview will be used to validate theoretical data, therefore allowing for the development of practical applications. If you choose to participate in this project, please answer all questions as honestly as possible, there are no right or wrong answers.

The information obtained from this interview is strictly confidential and will not be shared to third parties. However, the interview would be recorded by the author in order to review the answers and further analyze the information. There is no economic compensation for taking part in this interview, however your contribution would be of great importance in the development of this investigation, and therefore I offer my most sincere gratitude.

If there are any questions regarding the interview or the investigation approach, please do not hesitate in contacting me through the following email: F.A.Chiappe@student.tudelft.nl

Thank you in advance!

Kind regards,
Fabrizio Chiappe, Architect

Overarching theme for the interview

How the participant is/was affected by the overtourism phenomenon, and how these interactions have been altered by the COVID-19 pandemic.

INTRODUCTION – What is the study about.

- Short presentation about myself and the graduation project.
- Explanation of the purpose of this interview.
- Brief description of the interview protocol.

PROFILING – General information about the participant.

- 1. Where do you live? If in Venice, where within the city.
- 2. What do you do for a living? If in Venice, where within the city.
- 3. For how long have you been related to Venice?
- 4. How often are you in city of Venice? During this time, do you make use of any public spaces or amenities within the city? What improvements will you do to these specific areas?

TOURISM AND THE CITY – Specific information about the participant and his/her perception of tourism.

- 5. What are the effects of tourism that you have seen in the city?
- 6. What kind of changes related to tourism have you seen in the city in recent years (without considering COVID-19 pandemic)?
- 7. What kind of changes related to tourism have you seen in the city after the COVID-19 pandemic started?

REFLECTING – Specific information about the participant opinion of the current situation.

- 8. What do you think about how tourism is being managed by the local government?
- 9. How is the community coping with the changes induced by the decrease of tourism in the city?
- 10. From your personal perspective, do you think it is harder for locals to make a living with fewer tourists? Or do you see a positive aspect?
- 11. Is there any other particular issue in the city that troubles you?

OUTLOOK - Specific information about the participant opinion about the foreseeable future.

- 12. Do you think it is likely, possible, or desirable to go back to pre-pandemic tourism?
- 13. Once the pandemic is over, do you expect long-term changes?
- 14. Once the pandemic is over, what new opportunities do you see?

SOLUTIONS? – Additional questions for specific participants.

• If you could choose one part of the Venice for a pilot intervention (in order to solve some of the discussed issues), which one it will be? Why?

- Do you think it is possible to encourage alternative economic activities? How?
- How will you urge the government to intervene?
- Do you think there any way to further engage with the community?

WRAPPING UP – Finalizing the interview.

- Short conclusion and gratitude for the participant contribution.
- Information about how to follow up the research.

This is the end of the interview. Thank you for your participation! I am very glad you decided to contribute to this project. If you have any doubt about the interview, please contact me at the following email: f.a.chiappe@student.tudelft.nl.

Appendix C: Interview protocol for experts

Experts (e.g. academics, advisors, researchers, etc.)

Dear participant,

My name is Fabrizio Chiappe, I am a Peruvian architect and a graduate student at Delft University of Technology. For the final part of my academic formation, I am studying the effects of overtourism in the built environment of Venice. Without doubt, some of these effects have become particularly clear during these unusual times.

The main objective of this investigation is to analyze and understand the impacts that this phenomenon creates in the community, and utilize the current disruption created by the COVID-19 pandemic as a catalyst to implement new solutions that would have been usually disregarded under 'normal' conditions. Due to the novelty of the subject, the consequences that the pandemic has in the building stock of a tourist-driven city has not been studied before. Moreover, which solutions could be implemented to deal with both economic and overtourism issues are yet to be discussed. Consequently, the importance of this investigation relies in the certainty of finding future-proof strategies that are able to promote alternative uses for real estate assets, while contributing to enhance social and urban characteristics of the city.

Therefore, I would like to invite you to take part in an interview and share your thoughts about these topics. Your answers will contribute to my research as well as it would help the academic community and the city of Venice to shed some light over this unstudied subject. The following personal semi-structured interview has 14 questions and will require approximately 45 minutes to complete. The findings of this interview will be used to validate theoretical data, therefore allowing for the development of practical applications. If you choose to participate in this project, please answer all questions as honestly as possible, there are no right or wrong answers.

The information obtained from this interview is strictly confidential and will not be shared to third parties. However, the interview would be recorded by the author in order to review the answers and further analyze the information. There is no economic compensation for taking part in this interview, however your contribution would be of great importance in the development of this investigation, and therefore I offer my most sincere gratitude.

If there are any questions regarding the interview or the investigation approach, please do not hesitate in contacting me through the following email: F.A.Chiappe@student.tudelft.nl

Thank you in advance!

Kind regards,
Fabrizio Chiappe, Architect

Overarching theme for the interview

How the participant perceives overtourism and its effects on tourist-driven cities, and how this phenomenon has been altered by the COVID-19 pandemic.

INTRODUCTION – What is the study about.

- Short presentation about myself and the graduation project.
- Explanation of the purpose of this interview.
- Brief description of the interview protocol.

PROFILING – General information about the participant.

- 1. Where do you live?
- 2. What do you do for a living? What is your area of expertise?
- 3. Are you acquainted with the research case study: Venice (visited, or studied)?

TOURISM AND CITIES – Specific information about the participant and his/her view of tourism.

- 4. Do you think tourism is advantageous or detrimental for cities?
- 5. In your personal opinion, which aspects are influenced the most by touristic activities (economic, social, political, etc.)? Why?
- 6. Do you think tourism activities have changed in recent years (without considering COVID-19 pandemic)?
- 7. How does tourism changed after the COVID-19 pandemic started?

REFLECTING – Specific information about the participant opinion of the current situation.

- 8. How is the community coping with the changes induced by the decrease of tourism in cities?
- 9. From your personal perspective, do you think it is harder for locals to make a living with fewer tourists? Or do you see a positive aspect?
- 10. Can you think of an alternative economic activity for tourism-driven cities?
- 11. Which challenges do you see in the future for implementing a more sustainable tourism industry (from a social/urban point of view)?

OUTLOOK - Specific information about the participant opinion about the foreseeable future.

- 12. Do you think it is likely, possible, or desirable to go back to pre-pandemic tourism?
- 13. Once the pandemic is over, do you expect long-term changes?
- 14. Once the pandemic is over, what new opportunities do you see?

SOLUTIONS? – Additional questions for specific participants.

- How will you promote urban regeneration?
- Do you think it is possible to enhance urban resilience, by means of a physical intervention?

- How will you encourage alternative economic activities?
- How will you encourage the government to intervene?
- Is there any way to further engage with the community?

WRAPPING UP – Finalizing the interview.

- Short conclusion and gratitude for the participant contribution.
- Information about how to follow up the research.

This is the end of the interview. Thank you for your participation! I am very glad you decided to contribute to this project. If you have any doubt about the interview, please contact me at the following email: f.a.chiappe@student.tudelft.nl.