A Model of 'Creative Waterfront': Establishing a Creative Environment Concept for Waterfront Development

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ABSTRACT

There have been a number of academic studies evaluating urban waterfronts and creative environments. A principal framework for the creative waterfront development model has yet to emerge, and thus there is a gap in the literature. Very few studies explore the combination of two subjects. Based on the review of a variety of research sources, including articles, journals, books, and examples, this study establishes a principal framework for the creative waterfront development model. The urban waterfront is home to a diverse group of people who enjoy its beauty, economic vitality, creativity, and natural beauty. To validate the principal framework model, confirmatory factor analysis (CFA) was conducted in addition to principal component factor analysis. Through subsequent analyses of variance, the model demonstrated the ability to distinguish between the levels of factors, such as awareness of people, support for entrepreneurs, creative spaces, creative activities, innovation, tolerance, quality of life, and physical comfort, as well as political support, social cohesion, diversity of function, economic contribution, and cultural protection. The one-way ANOVA test and the Tukey HSD post hoc test were used to explore differences in variables between subgroups of related variables as well as other demographic variables. All of the analyses were done with SPSS V.25 and AMOS V.24, with a 95% level of confidence.

This thesis presents a principal framework for the creative waterfront development model. In addition, this study contributes knowledge about the relationship between society and a principal framework for the creative waterfront development model. Kyrenia Waterfront was selected to evaluate the created model. The results showed

that a principal framework for the creative waterfront development model variables reflected varying levels of user involvement. As illustrated in the thesis, an adequate waterfront development process depends on considering the different interests of different user groups. Besides, most residents of the case area are positive about the area because of its unique urban features and the opportunity to socialize there. Locals say that in the future, more technology and novel ideas are needed to help people be more creative in this area.

Keywords: Waterfront, Waterfront Development, Social Consequences, Creative Environment, Kyrenia Waterfront.

ÖZ

"Kent kıyıları" ve "yaratıcı ortamlar" çok sayıda akademik çalışmada incelenmişlerdir, ancak prensipler çerçevesi oluşturacak yaratıcı kıyı modeli henüz geliştirilmemiştir, bu nedenle literatürde bir boşluk bulunmaktadır. Sadece birkaç çalışmada iki konunun birlikte incelendiğini görebilmekteyiz. Makaleler, dergiler, kitaplar ve örnekler dâhil olmak üzere çeşitli araştırma kaynaklarının gözden geçirilmesine dayanan bu çalışma, yaratıcı bir kıyı modeli oluşturmaktadır. Kıyı alanları, çok çeşitli kullanıcı grubunu ağırlayan ortamlardır. Kullanıcılar, kıyı alanlarında doğal güzellikleri, ekonomik canlılığı ve yaratıcılığı tecrübe etmektedirler. Oluşturulan modeli doğrulamak için temel bileşen faktör analizine ek olarak doğrulayıcı faktör analizi (CFA) kullanılmıştır. Daha sonraki çeşitli analizlerle birlikte insanların farkındalığı, girişimcilere destek seviyesi, yaratıcı alanların uygunluğu, yaratıcı faaliyetlerin yeterliliği, inovasyon mevcudiyeti, tolerans seviyesi, yaşam kalitesi, fiziksel uygunluk, politik desteğin yeterliliği, sosyal uyum, işlev çeşitliliği, ekonomik katkı ve kültürel değerlerin korunması gibi oluşturulan modelin değişkenleri arasında değerlendirme yapma fırsatı oluşmuştur. Tek yönlü ANOVA testi ve Tukey HSD post hoc testi, diğer demografik değişkenlerin yanı sıra ilgili değişkenlerin alt grupları arasındaki farklılıkları araştırmak için kullanılmıştır. %95 güven seviyesi ile tüm analizler SPSS V.25 ve AMOS V.24 kullanılarak yapılmıştır.

Bu tez yaratıcı kıyı konusunu bir prensipler çerçevesi modeli olarak sunmaktadır. Çalışma, toplum ve yaratıcı kıyı modeli arasındaki ilişkiye dair fikir edinmek için kıyıdaki gelişimi ve yaratıcı ortamları araştırmaktadır. Oluşturulan modeli değerlendirmek için Girne Antik Liman bölgesi seçilmiştir. Sonuçlar, yaratıcı kıyı

modeli değişkenlerinin, çeşitli kullanıcı grupları tarafından farklı düzeylerde değerlendirilebileceğini göstermiştir. Çalışmada da gösterildiği gibi, yeterli ve uygun bir kıyı geliştirme süreci, farklı kullanıcı gruplarının ve ilgi alanlarının dikkate alınmasına bağlıdır. Ayrıca, incelenen alanın sakinlerinin çoğu, benzersiz kentsel özellikleri ve orada sosyalleşme fırsatı bulmaları nedeniyle alan hakkında olumlu düşünmektedir. Yerel halk, bu bölgede yaratıcılığı teşvik etmek için ise yakın gelecekte teknolojik ve yenilikçi gelişmelerin hayat bulmasına ihtiyaç olduğunu vurgulamıştır.

Anahtar Kelimeler: Kıyı, Kıyı Geliştirme, Sosyal Sonuçlar, Yaratıcı Çevre, Girne Kıyısı.

DEDICATION

To My Family

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TABLE OF CONTENTS

ABSTRACT iii

ÖZ v

DEDICATION vii

ACKNOWLEDGEMENT viii

LIST OF TABLES xiii

LIST OF FIGURES xvi

1 INTRODUCTION 1

1.1 Problem Definition 3

1.2 Aims, Objectives and Research Questions 4

1.3 Research Methodology 5

1.4 Limitations 7

1.5 Structure of the Thesis 8

2 URBAN WATERFRONT DEVELOPMENT 10

2.1 Potential of Water and Urban Waterfront 11

2.1.1 Definition of the Urban Waterfront 13

2.1.2 Categorization of Urban Waterfronts 16

2.2 Principles, Issues, and Trends of Urban Waterfront Development 19

2.2.1 Urban Development 21

2.2.1.1 Definition of Urban Development 23

2.2.1.2 Features in Urban Development and Integration with Water 26

2.2.2 Urban Waterfront Development 28

2.2.2.1 Transformation of Urban Waterfront 31

2.2.2.2 Typologies of Urban Waterfront Development 32

2.2.3 Principles of Urban Waterfront Development 36
2.2.3.1 Physical Quality 36
2.2.3.2 Functional Aspects 40
2.2.3.3 Social Factors 43
2.2.3.4 Economic Facets 46
2.2.3.5 Cultural Features 48
2.2.3.6 Political Issues 52
3 CREATIVE ENVIRONMENT 60
3.1 Creativity and Creative Environment 61
3.1.1 Definition of Creativity and Creative Environment 63
3.1.2 Attributes of Creative Environments 66
3.2 Creative-oriented Studies for Urban Waterfront Development 71
3.3 Principles, Issues, and Trends of Creative Environment 79
3.3.1 Creative Economy 79
3.3.1.1 Creative City 82
3.3.1.2 Creative Class 92
3.3.1.3 Creative Industry 94
3.3.3 Principles of Creative Environment 97
3.3.3.1 Promoting Entrepreneurs 98
3.3.3.2 Creation of Creative Spaces 101
3.3.3.3 Protection of Culture 104
3.3.3.4 Updated and Renewed Physical Comfort 107
3.3.3.5 Provision of Creative Activities 108
3.3.3.6 Political Support 110
3.3.3.7 Social Cohesion 112

3.3.3.8 Quality of Life 114
3.3.3.9 Tolerance and Open-mindedness 116
3.3.3.10 Innovation and Technology 117
3.3.3.11 Awareness of Community 119
4 ANALYTICAL FRAMEWORK OF CREATIVE WATERFRONT 123
4.1 A Model of Creative Waterfront: An Approach to Combining Principles 124
4.1.1 What is and Why is an Approach to Combining Principles? 124
4.1.2 An Approach to Combining Principles for Creative Waterfront 125
4.1.2.1 Waterfront Development Principles 126
4.1.2.2 Creative Environment Principles 129
4.1.2.3 Combination of the Principles of Waterfront Development and Creative Environment 131
4.2 Evaluation of Developed Waterfront Examples in the Creative Environment 136
4.2.1 Barangaroo in Sydney 137
4.2.2 Tel Aviv Port in Israel 141
4.3 Links between Creative Waterfront Principles 144
5 EVALUATION OF THE CASE STUDY: KYRENIA WATERFRONT 146
5.1 Methodology for Case Selection and Evaluation 153
5.2 Questionnaire Analysis 156
5.2.1 Sampling Strategy 156
5.2.2 Data Collection 157
5.2.3 Data Analysis 157
5.3 Results 158
5.3.1 Descriptive Statistics 158
5.3.1.1 Demographic Variables 158

5.3.1.2 Questionnaire Variables 164
5.3.2 Reliability of Measurement Scales 168
5.3.3 Validity of Measurement Scales 172
5.3.3.1 Exploratory Factor Analysis 172
5.3.3.2 Confirmatory Factor Analysis 175
5.3.4 Comparison of Means 182
6 CONCLUSION AND RECOMMENDATIONS 195
6.1 A Summary of the Principal Findings 195
6.2 Final Remarks for Future Studies 201
REFERENCES 203
APPENDICES 241
Appendix A: Research Questionnaire for Users 242
Appendix B: A Principal Framework for the Creative Waterfront Development Model Variables 249

LIST OF TABLES

Table 1: Evolution of the issues regarding to waterfront development. 58

Table 2: Terminologies in creative "individuals, environments, developments, subjects, and objects" 64

Table 3: Keywords in the literature that discuss both "creativity" and "waterfront development" together 78

Table 4: Some examples of creative cities in seven fields (UNESCO, n.d) 88

Table 5: The evolving and changing nature of creative environments 90

Table 6: Creative Occupations (Deloitte, 2021, p. 11) 95

Table 7: Creative industry fields of DCMS (DCMS, 2001) 96

Table 8: Principles of creative environmental literature 122

Table 9: Overall information for Barangaroo Urban Development 139

Table 10: "Creative Waterfront" variables at Barangaroo 140

Table 11: Overall information for Tel Aviv Port Public Space Regeneration 142

Table 12: "Creative Waterfront" variables at Tel Aviv Port 143

Table 13: Methods for evaluating the Creative Waterfronts 155

Table 14: Descriptive analysis of variable: gender 159

Table 15: Descriptive analysis: age 159

Table 16: Descriptive analysis: nationality 160

Table 17: Descriptive analysis: user group 160

Table 18: Descriptive analysis: education 161

Table 19: Descriptive analysis: employment 161

Table 20: Descriptive analysis: visitor type 162

Table 21: Descriptive analysis: visit frequency 162

Table 22: Descriptive analysis: like to spend time 163
Table 23: Descriptive analysis: suggesting to others 163
Table 24: Descriptive analysis: well satisfied 163
Table 25: Descriptive analysis: easily accessible 164
Table 26: Descriptive statistics of questionnaire variables: creative environment 165
Table 27: Descriptive statistics of questionnaire variables: waterfront development 166
Table 28: Descriptive statistics of questionnaire variables: creative waterfront 167
Table 29: Reliability of the variables: creative environment 169
Table 30: Reliability of the variables: waterfront development 170
Table 31: Reliability of the variables: creativity waterfront 171
Table 32: Initial EFA for creativity waterfront 172
Table 33: Final EFA for creativity waterfront 174
Table 34: KMO and Bartlett's Test 175
Table 35: CFA for creative environment 176
Table 36: Correlation: creative environment 177
Table 37: HTMT ratios: creative environment 177
Table 38: CFA for waterfront development 178
Table 39: Correlation: waterfront development 179
Table 40: HTMT ratios: waterfront development 179
Table 41: CFA for creative waterfront 180
Table 42: Correlation: creative waterfront 181
Table 43: HTMT ratios: creative waterfront 181
Table 44: Comparing the means of all creative waterfront variables and user groups 182

Table 45: Tukey HSD post hoc test for user groups and important variables 182

Table 46: Comparing means of all creative waterfront variables and gender..... 184

Table 47: Tukey HSD post hoc test for gender and significant variable 185

Table 48: Comparing means of all creative waterfront variables and age..... 190

Table 49: Tukey HSD post hoc test for age and significant variables..... 191

LIST OF FIGURES

Figure 1: Thesis structure 9

Figure 2: (Adapted from Onen, 2007) the effects of water as a planning element in urban areas (Timur, 2013). 12

Figure 3: The relation of water, waterfront, and adjacent urban zone. 14

Figure 4: Some of urban peninsulas in the world in terms of Figure-Ground relations (Chu, Lan, & Deng, 2022). 19

Figure 5: Characteristics and trends of port-city interfaces (Hoyle, 2000, p. 404). 29

Figure 6: The relation between port and city (Hoyle, 2000, p. 405). 30

Figure 7: Positive features of waterfront regeneration projects (Jones, 2017, p. 336) 57

Figure 8: Negative features of waterfront regeneration projects (Jones, 2017, p. 338) 57

Figure 9: Placement of this study. 59

Figure 10: The Guggenheim Museum in Bilbao (URL5) 73

Figure 11: The Milla digital project in Zaragoza (URL6) 73

Figure 12: Diagram illustrating the relationship between tolerance, technology, and talent (Kalsø Hansen, 2007, p. 4) 86

Figure 13: Current condition of creative city factors (Carta M. , 2012b, p. 3) 87

Figure 14: Defining creative space as the intersection of creativity and build space (Thoring, 2019, p. 23) 102

Figure 15: Defining creative space typologies and spatial qualities (Thoring, 2019, p. 85) 103

Figure 16: Both creative and cultural industries (UNESCO; World Bank, 2021, p. 31) 107
Figure 17: An approach to combining principles of "Creative Waterfront" 126
Figure 18: Principles of waterfront development 128
Figure 19: Principles of creative environment 131
Figure 20: Combining urban waterfront development and creative environments components; the Creative Waterfront Model 132
Figure 21: Location of selected examples 137
Figure 22: Barangaroo then and now (URL1) 138
Figure 23: The views from three parts of Barangaroo (URL2) 139
Figure 24: Tel Aviv Port then and now (URL3) 141
Figure 25: The views form Tel Aviv Port (Landezine, 2010) 142
Figure 26: The model of creative waterfront variables (Appendix B) 145
Figure 27: Kyrenia waterfront 150
Figure 28: After regeneration of Kyrenia waterfront (photo: Alaa Albarazi, June 2021) 151
Figure 29: Means plot of “social cohesion and tolerance,” and user groups 183
Figure 30: Means plot of “creative environment and activities,” and gender 186
Figure 31: Means plot of “social cohesion and tolerance,” and gender 187
Figure 32: Means plot of “creative economy and economic contribution,” and gender 188
Figure 33: Means plot of “motivating entrepreneurs to invest,” and gender 189
Figure 34: Means plot of “political sufficiency,” and gender 189
Figure 35: Means plot of “functional opportunities,” and age 192
Figure 36: Means plot of “innovation and technology,” and Age 193

Chapter 1

INTRODUCTION

Numerous academic studies have explored urban waterfront developments and creative environmental concepts. However, few studies analyze both subjects concurrently. As a result, there is a gap in the existing literature.

To be competitive, urban waterfront development should draw from existing structures like social and cultural backgrounds, natural scenery, local history, unique textures, images, and identities. Literature shows that creative city features, particularly waterfronts, lead people to use their imaginations when living in the city and have satisfying experiences. In this way, it is imperative that the waterfronts attempt to identify a unique story to tell and apply creative environmental schemes that match their highlights and qualities.

Industrial uses are not the only uses of the waterfront. Due to their geographical location, these areas are also focused on transportation, trade, entertainment, and tourism. Therefore, these areas can be ideal for developing residential housing environments, hotels, sports facilities, recreational areas, tourist attractions, and jobs (Oakley & Johnson, 2013). Waterfronts are not only places for citizens to breathe, but also provide new opportunities for housing, recreation, and mixed-use development (Iwata & Rio, 2004). In this sense, architects, artists, managers, academic boards, advertisers, media organizations, and members of the fashion industry have

studied these subjects to advance in their fields. This study aims to develop a contemporary model by evaluating several academic studies. Besides, it is planned to implement various tests to validate the proposed model.

This study contributes to a distinct line of research within urban studies that looks at urban waterfront development from a case study perspective. This thesis argues that the creative class should be considered in the development process because it is the most productive class in society. Productivity, in this competitive world, is the most decisive factor for the success of developing cities. A final benefit presented by this gesture is that it provides a chance to evaluate development issues associated with waterfront areas. It also provides some novel perspectives that may be of use in future studies on urban waterfront development.

The thesis consists of six chapter. It begins with an introduction, describing the research problem, the aim of the study, research methodology, limitations, and structure of the thesis. In the second chapter, a review of urban waterfront development perspectives is presented. This chapter will outline all the dimensions regarding urban waterfront development studies. In the third chapter, a review of creative environment studies is presented. This section will discuss all the features concerning the creative city and creative environment concepts. In the fourth chapter, the Creative Waterfront Model is offered. The theoretical framework that identifies the variables of the Creative Waterfront Model is discussed. In the fifth chapter, an examination of the Kyrenia Waterfront is presented. This chapter explains why this particular location was chosen. Numerous statistical analyses are presented to empirically track various features of the Creative Waterfront Model. Finally, the closing remarks reflect on the numerous elements of urban waterfront development. They say that more research into

the different shapes and dimensions that can be used in city politics and administration is imperative.

1.1 Problem Definition

Few studies examine creative environments and waterfronts together, as mentioned earlier. A major obstacle to urban waterfront development is adapting to most of the existing creative city features. On the other hand, the uses of waterfronts are not properly arranged and are therefore focused on consumption. Several waterfronts are facing problems in becoming more liveable and attractive. Today, creative cities and environmental approaches are in high demand for social, economic, tourism, and physical development.

Today, consumption in the general sense is trying to penetrate every area of everyday life in contemporary life. Alternatively, creative cities are places where cultures are created rather than consumed (Goldberger, 1996). This study highlights the need for creative features for urban waterfront development, where their full potential could be valued.

Florida argues that communities that attract gays, bohemians, and ethnic minorities are the new economic powerhouses because creative employees, who establish and staff innovative, fast-growing enterprises, prefer to live there (Florida, 2002). On the other hand, while examining the research on the creative class, it is possible to find sources where some of its detrimental effects appear. These often include issues related to social exclusion, gentrification, displacement, social discrimination, and segregation. This thesis will consider the elements that might threaten the new model of the creative waterfront principles framework. This model will take shape in a framework where all

social circles can share space in harmony without exclusion to overcome prospective threats.

An analysis of the relationship between the creative environment concept and urban waterfront development is discussed, along with an evaluation of the selected case study. The Creative Waterfront Model, which was created with the literature review, will be evaluated concerning the case study and then updated based on the results. This model could promote physical, cultural, economic, and social development along the waterfronts.

1.2 Aims, Objectives and Research Questions

This study aims to combine the urban waterfront development concept with the creative environment concept in order to create waterfronts that are better, more appropriate, comprehensive and more appealing.

The sub-aim of the main objective is to examine the characteristics of waterfront development and creative environments. This exploration aims to integrate these two relevant topics into one cohesive whole. In other words, this study focuses on two concepts: creative environments and waterfront development in urban areas. An integrated, "principal framework model of creative waterfront" will then emerge from the study.

The main research question is, "How can creative environmental features be incorporated into urban waterfront development?" Additional sub-questions include:

- What are the role of water and urban waterfronts?
- What are the principles, issues, and trends of urban waterfront developments?

- How can creativity and a creative environment be defined?
- Are there studies that deal with both urban waterfronts and creativity together?
- What are the principles, issues, and trends of creative environments?
- How can the creative waterfront model be applied to the case areas?

1.3 Research Methodology

The methodology of this qualitative-based theory study was conducted with a case study approach. The study is based on a theoretical framework, the definition of a conceptual model, the formulation of assessment criteria, and a case study. The study's approach is qualitative, as the creative city as a subject has several clarifications and recommendations for the creation of creative environments. Moreover, the approach is explorative as the topic of research is generally novel. Yet, focusing on theoretical viewpoints and definitions, the second benefit of this technique is that it is interpretive, allowing the researcher to interact with the study (Cresswell, 2014). Because the case study approach is a complete one that includes data gathering and analysis, it can be used to test new ideas in actual situations (Yin, 2003).

In this sense, the methodology of the study is combined with two major parts:

1. Qualitative method;
    - Literature survey
        - Empirical investigation
        - Reference collection for literature review
    - Field survey
        - Observation
        - Collecting relevant data by photo, sketching, and recording
2. Quantitative method;

- Statistical data presentations via SPSS V.25 and AMOS V.24
    - EFA
    - CFA
    - ANOVA test
    - Tukey HSD post hoc
    - Demographic analysis

The research begins with a systematic survey of the literature to take out the theories of creative environment and urban waterfront development in general in order to have ideas about the topics in terms of theoretical insight. At the same time, the literature was extended also to other related fields like creative city features and waterfront regeneration features to determine the proper ways of combining these features in order to create a more suitable model of creative waterfront model. During the survey of the literature, different theories were analyzed and existing gaps in the theory were clarified. This is helping to create a more appropriate form of the recent theoretical approaches on how to create a creative waterfront. The theoretical investigation was a procedure to direct the investigator toward a proposed model that thusly could be tried on a chosen case to demonstrate its legitimacy. The theoretical model comprises appraisal criteria, which were later tested on the cases. Finally, in order to produce a more appropriate and applicable model of creative waterfront, the proposed theory-based model was developed which will be later applied to the case. Then the produced proposed model was applied and tested on the Kyrenia Waterfront. Lastly, the conclusion part was presented, which contains the consolidation of the outcomes and summarization of the pieces of evidence (Table 1).

Table 1: Methodology Design of the Research

RESEARCH BASED DESIGN	
↓	
THEORETICAL FRAMEWORK	**MODEL DEVELOPMENT**
SYSTEMATIC REVIEW OF THE LITERATURE; To take out theories, and indicators of creative environment concept and waterfront development concept.	DEVELOPMENT OF THE THEORY BASED MODEL THORUGH CASE STUDIES; To maintain the applicability of the proposed model
↓	
CASE STUDY EVALUATIONS	
GATHERING THE DATA ON THE SELECTED CASE and DATA ANALYSIS; To implement the developed model to the case and interpreting with conclusion and recommendations.	
↓	
COMBINATIONS OF THE RESULTS AND SUMMARY OF THE FINDINGS	

1.4 Limitations

The issues of the creative environment and urban waterfront development have their own combinations of different features. In this sense, it is imperative to understand each of the combinations in order to be able to create an adequate model for a creative waterfront.

In this sense, this thesis will investigate about creative environments, with a focus on the following:

- Urban waterfront development applications at the old city harbours and the city of Kyrenia's Ancient Harbour waterfront serve as a case study.
- A restriction on the combination of creative environmental features with urban waterfront development features in order to figure out what creative waterfront features there are.

1.5 Structure of the Thesis

This thesis has been structured to contain six chapters (Figure 1). Chapter one consists of an introduction to the thesis, including the definition of the problem, research aim, objective, research questions, research methodology, limitations, and thesis structure.

Chapter Two discusses the topic of waterfronts and different concepts of urban waterfront development. Following that, all dimensions are evaluated, and the waterfronts are clarified.

Chapter three presents the findings of a literature survey about creative environments and creative city concepts. This chapter also talks about theories about how creative city features work in different cities on their own.

Chapter four presents the proper research structure, which was proposed through a literature review. Besides, this chapter includes the development of theories that support the proposed model.

Chapter five is about the analysis of cases. At the beginning of this chapter, the method of case selection has been explained. The proposed model is then applied and evaluated in the city of Kyrenia Waterfront.

Chapter six presents the conclusion and recommendations. This chapter explains the theory and case-based findings of the research, and then, finally, recommendations for future studies have been explained.

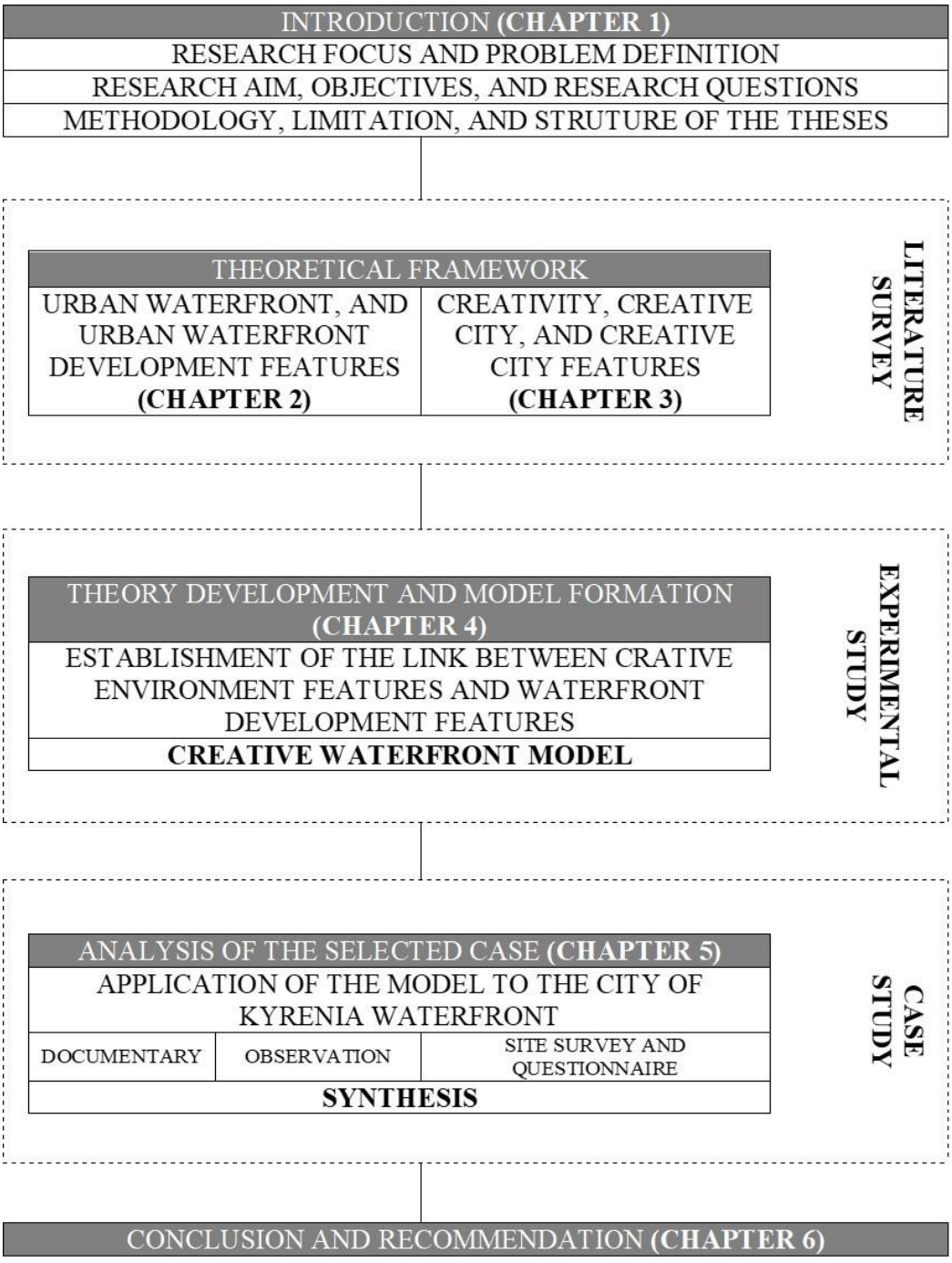


Figure 1: Thesis Structure

Chapter 2

URBAN WATERFRONT DEVELOPMENT

There are many types of waterfronts - such as lakefronts, waters of rivers, canals, harbours, or bay fronts (Iwata & Rio, 2004). Settlements appear to form around waterfronts due to their relationship with communities. These areas were once predominantly used for export and transportation (Hoyle, 2002). The city's identity is becoming increasingly shaped by environmental, social, and economic factors (Iwata & Rio, 2004). Therefore, waterfront impacts draw the interest of many disciplines, including planners and urban designers, politicians, and key decision-makers. Besides being used for industry, waterfronts have other functions as well. Their location also makes these areas an ideal location for transport, trade, entertainment, and tourism. Due to this, these areas can be ideal sites to build new housing environments, hotels, recreational areas, sports facilities, and employment opportunities. These waterfronts not only provide breathing spaces for residents, but also ample space for memorials, housing, recreation, and mixed-use development.

The literature on urban waterfront re/development is an interdisciplinary issue and is gaining popularity in the discussion. It is a discussion topic in urban planning, architecture, geography, and/or business. By using case studies in urban studies, this study contributes to a distinct research line of examining waterfront impacts. Since the creative class is the most productive in society, it should be integrated into the development process. This is because productivity is the greatest concern for

developing cities in today's competitive world. The purpose of this gesture is ultimately to provide an opportunity to critically examine the values and impacts of waterfront areas, and to articulate novel perspectives that could be useful to future studies.

Thus, there are various ways to categorize the research on urban waterfront development. This can be accomplished, for example, through the focus on the potential of water and urban waterfronts, and the development features of urban waterfronts. Moreover, the evaluation of the principles of urban waterfront development is an imperative issue for this study in order to provide a more adequate integration with creative environment principles.

A literature review and discussion are presented in this chapter so as to provide a theoretical context for the research. It discusses the definitions, issues, trends, and principles of urban waterfront development. In particular, the evolution and transformation of the waterfront are studied in order to identify research achievements and knowledge gaps.

2.1 Potential of Water and Urban Waterfront

For the long-term viability of cities, it is essential to establish a balance between nature and social life. Natural water elements in urban areas play a pivotal role in this process. Water provides human comfort on a physical and psychological level. Additionally, it adds aesthetic and functional characteristics to the existing environment. The aesthetic effect that natural water sources have on humans is one reason why they are so valuable in urban areas (Onen, 2007).

There are visual, auditory, tactual, and psychological effects. Waterfronts attract people because of the relaxing effect of water's visual landscape. Motion and serenity are overshadowed by water-related designs (Figure 2). An environment with flowing water (waterfalls, cascades, rivers, etc.) is exciting and vibrant. In its space, stagnant water creates the mirror effect. The optical properties of water make it an ideal reflection element. There is a sense of serenity and depth in the water surfaces as they are wide and quiet. Also, the deepening effect of water gives the living area a sense of spaciousness.

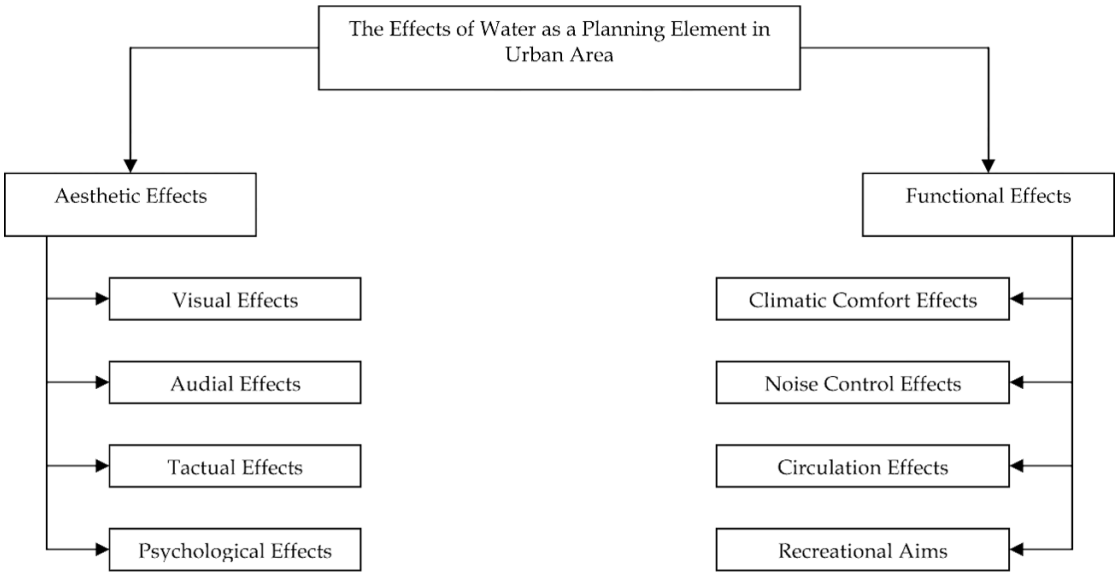


Figure 2: (Adapted from Onen, 2007) the effects of water as a planning element in urban areas (Timur, 2013).

As a symbol, the sound of water represents continuity, vibrancy, and joy as well as a state of life. Stagnant water makes a space seem serene, but moving water adds vibrancy and creates a musical effect.

A plan can experience the effects of water from dripping raindrops to being splashed by a waterfall completely submerged in a pool, lake, or sea. The act of diving in the

water serves as a form of escape from everyday life. In many faith systems, touching water symbolizes the attainment of religious serenity. The psychological effects of aesthetic factors may be more significant than the aesthetic effects. This effect is a result of the senses' perception of emotion. Moreover, water is also subject to psychological reactions as a result of human spirits (Onen, 2007).

Humans consider water to be a vital source of life. Humans find that water is refreshing to the senses. In urban areas, water has a functional as well as aesthetic purpose. Climate comfort, noise reduction, circulation benefits, and recreational activities are all included. Water surfaces can cool air by increasing the amount of moisture in an environment. This is especially true in continental climates. In addition, water is used to improve air quality outside. At a regional level, water surfaces control the temperature of the air. As a result of its visual and climatic effects, water is an essential element for urban areas in this region. Moreover, water areas in urban environments create a barrier to artificial sounds by creating a natural soundscape (Timur, 2013).

Water is a limiting and concealing element in the organization of space. Coastlines are the most likely places to see these effects.

2.1.1 Definition of the Urban Waterfront

Briefly stated, the waterfront is an area where water and land meet. Additionally, there is a water edge, and part of the land should be surrounded by water (Figure 3). This region contains the most human activities as well as the most varied elements. Both have a significant impact on each other. The waterfront areas are generally arranged in a belt along the coastline. Therefore, planners find ways to make these areas more attractive to the public so people will use them. Connecting traffic, setting up different functions, and communicating with the inner cities are the main challenges.

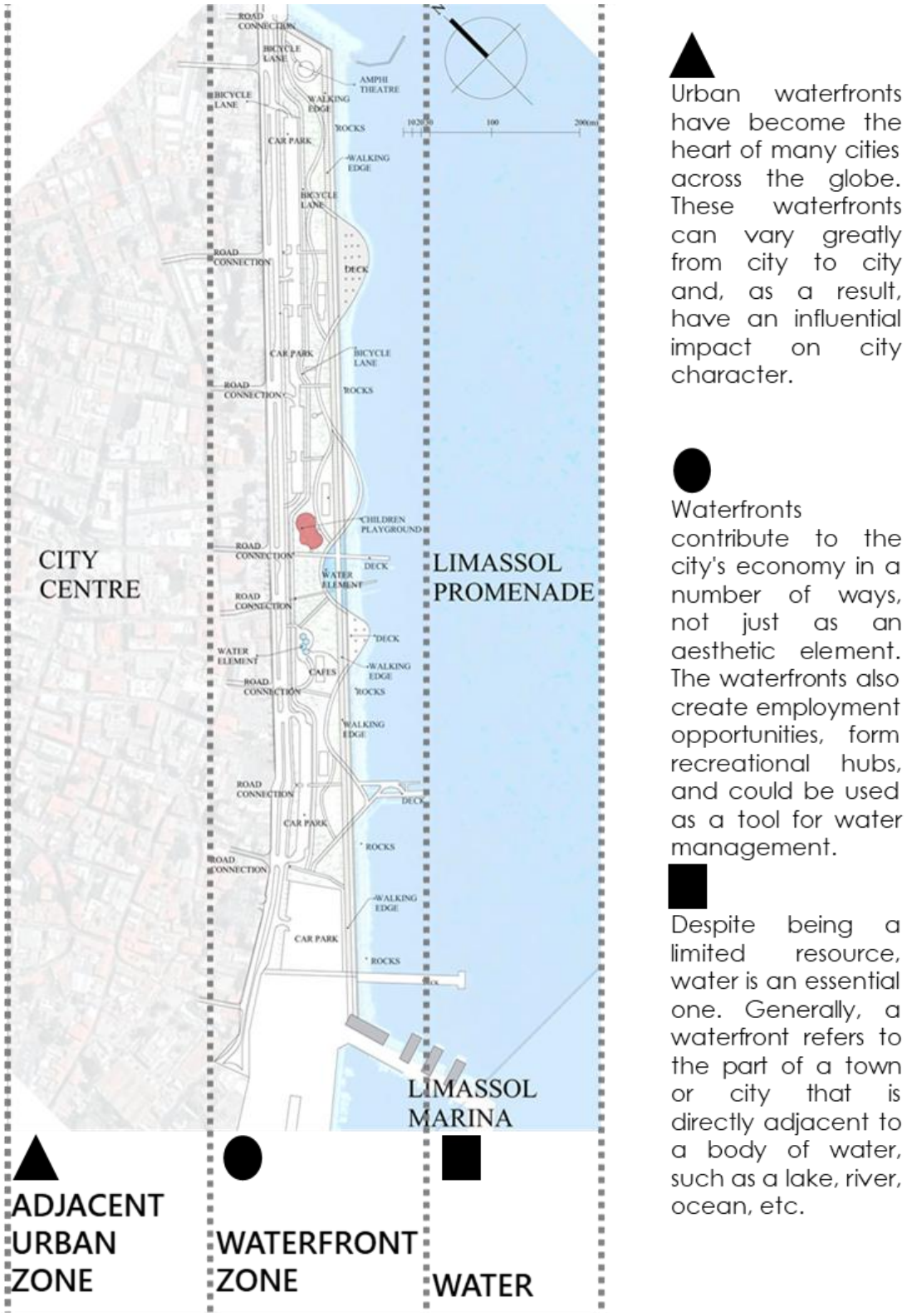


Figure 3: The relation of water, waterfront, and adjacent urban zone.

Waterfronts are the heart of the city; this area is home to new public parks, residential neighbourhoods, recreational areas, and mixed-use areas. Keeping these areas in

proper repair and developing them so that they meet contemporary needs means preserving and developing the city's identity. Water makes a sound that represents the continuation of life with its vibrancy and joy (Hattapoğlu, 2004). Furthermore, water creates a sense of serenity and has a calming effect on the city while it is moving (Timur, 2013).

In a literal sense, waterfronts have served different purposes, such as transportation, industrial, nourishment, and commercial (The Waterfront Center, 1999). Water facilitates communication between people and the environment, as well as makes the environment more comfortable and pleasant. So it is positively affecting people's productivity in their personal, professional, and social lives. Additionally, waterfronts are contributing to the city's economic development through industrial, manufacturing, agricultural, and central activities (Popovic, Vlahovic, & Vatin, 2015).

It is possible to analyse urban waterfronts from a variety of perspectives, including spatial, functional, and aesthetic perspectives. Port-city interfaces and waterfronts in urban areas tend to be linked. It is possible to conceptualize urban waterfronts as both a place of conflict and cooperation, as well as a transitional area between ports and urban areas (Hoyle, 1989).

As stated by Breen & Rigby (1994), an urban waterfront refers to the water's edge in cities and towns of all sizes. Water can take several forms, such as a river, lake, ocean, bay, creek, or canal. However, a waterfront is more than just water. It includes everything from wildlife habitats to container ports and the range of uses that fall between them. These uses may be planned and implemented over time by multiple owners and participants. Waterfront developments may include buildings that do not

front the water directly but are linked to it visually or historically. They may also be related to it as part of a broader scheme (Breen & Rigby, 1994).

2.1.2 Categorization of Urban Waterfronts

Several cities located on peninsulas, headlands, and small islands, as well as those adjacent to rivers, estuaries, and deltas, have long waterfronts, and these areas are divided into five distinct types of waterfront (Wrenn, 1983; Al Ansari, 2009; Timur, 2013), namely:

1. *Urban area located on peninsula,*
2. *Urban area located on a bay,*
3. *Urban area located on banks of a river,*
4. *Urban area located on banks of intersecting rivers,*
5. *Urban area located on a large body of water.*

There are various types of waterfronts based on their characteristics and dimensions, as well as their location and usage. In some ways, waterfronts provide evidence of the city's remarkable ability to adapt to changing economic and social conditions (Breen & Rigby, 1996), and can be categorized according to their functions as follows:

1. *The Commercial Waterfront,*
2. *The Cultural, Educational, and Environmental Waterfront,*
3. *The Historic Waterfront,*
4. *The Recreational Waterfront,*
5. *The Residential Waterfront,*
6. *The Working Waterfront and Transportation.*

Aslan (2005) and Hudson (1996) categorize waterfronts based on their geographical setting, which consists of:

1. *Straight coasts:* these coasts are not as deep as bays, and they have low defence capabilities,
2. *Bays, gulfs, or straits:* these areas are often used as ports,
3. *Islands:* these are surrounded by water.

As Moughtin stated in (1992), waterfronts can also be categorized into seven types based on their general locational aspects:

1. Coastal cliff; a cliff that extends vertically upward and sheers into the water.
2. Villages where fishing is the predominant activity with only narrow channels to access the coastline. This is because the majority of these villages are designed to be shielded from the sea wind. Perforated water edges are referred to as this kind of waterfront by Owen.
3. The beach, or the bank, instead of cliffs or rocks, where the water reaches a soft, sandy shore.
4. A bay or a dock that is surrounded by water.
5. A square or bay where the water edge encompasses the water.
6. Piers that protrude into the water.
7. A waterfront that is constructed in the opposite direction of the water serves as a dumping ground or a sewage system.

In assessing an area's accessibility based on the uses that it attracts, Craig-Smith (1995) proposes the following three categories of water dependency:

1. *Water-dependent:* Uses that are inherently water-related (for example, ferry and other maritime terminals, boat repair and construction yards, marinas and moorings, commercial fishing, and transportation);
2. *Water-related:* uses that are best suited to waterside locations but can be more effectively located elsewhere (e.g., industrial processing plants, some storage and warehousing facilities, and some public utilities);
3. *Water-independent:* a use that does not rely on riverside location and is not directly linked to the river (for example, apartments, hotels, public parks and reserves, and some retail and service facilities).

It can be summarized that several studies have proposed more sophisticated models that include a variety of categories. The classifications have nonetheless been limited geographically and are based on a case-by-case basis. Other analytical frameworks examine the level of interaction that is permitted or enabled with the water in order to measure the degree of water dependency.

According to Chu, Lan, and Deng (2022), land connected to water can also be classified as a peninsula. It is attached to a larger continent, though, from which it stretches. Peninsulas are a generic term that refers to enormous land masses that are encircled by water. An urban peninsula, a more microscopic geographical concept in terms of cities and architecture, refers to land in the shape of a peninsula that is surrounded by water, the confluence of waters, or the acute bend of rivers. They frequently surround an entire city or a section of one (Figure 4).

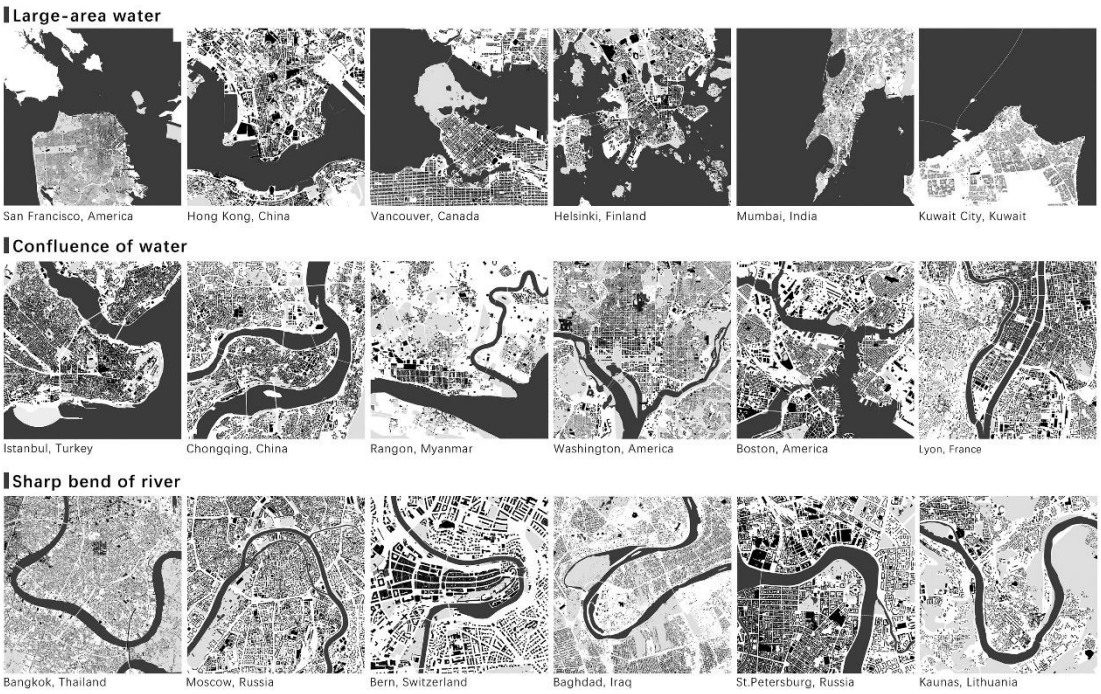


Figure 4: Some of urban peninsulas in the world in terms of Figure-Ground relations (Chu, Lan, & Deng, 2022).

2.2 Principles, Issues, and Trends of Urban Waterfront Development

Developing waterfronts is now a more affordable endeavour since the land left vacant after industrialization has now been turned into a dump. Lands that were left vacant after industrialization are now considered prime areas for development and, hence, offer greater returns. Located close to the water and the city center, these areas possess high aesthetic and functional values. There are many business opportunities available in large mixed-use developments. These projects aim to revitalize urban environments. In addition, there are social developments. Attracting environmental conservation, parks, and water-side walkways all contribute to the cultural landscape of the area.

Typically, waterfront development projects are thought to stimulate economic growth, attract visitors, improve water quality through improved management, enhance the city's image, increase the value of adjacent land, facilitate new opportunities and activities, and create new jobs.

Urban waterfront development is an increasing trend in developing cities around the world. Previously neglected urban waterfronts have become the focus of social, commercial, and recreational activities. The waterfront development field is a growing area of research for city planners, architects, historians, economists, government officials, and many others. This illustrates the multidisciplinary nature of this topic. In this sense, waterfront development is an imperative issue for every domain of the city. Thus, it is obvious that the waterfront development issue is not only limited to scientific research but also has many implications for applications, consultations, and management processes. Moreover, studies on waterfront development have a long history and are no longer relevant. In response, waterfront development features should be integrated with updated urban features to meet the contemporary needs of urban dwellers. In this sense, this study will provide an integrated approach to the creative environment concept with waterfront development features. This is a very novel discussion in the field of research.

In order to conduct this research, many research papers, master's and Ph.D. theses, institutional studies, books, and waterfront development blogs were reviewed. The focus was first on understanding the concept of waterfront development, followed by developing features for waterfront development.

Thus, there are various ways to categorize the research on waterfront development. This can be achieved, for example, through the focus on history and target groups, and the impact on the city's image and identity of waterfront development. This study also needs to look at waterfront development dimensions in order to make sure that the creative environment is well-integrated with the rest of the city.

The purpose of this chapter and the subsequent ones is to provide an exhaustive survey of the relevant studies in the topic domain. The literature evaluated was narrowed down from a much larger pool of sources to those that were suitable and relevant to the objective of this research. This was done in order to provide a much broader view of the complexities of waterfront development challenges. This chapter will explore urban development theories and the major forces that have shaped its transition over the last few decades. Additionally, it tries to construct a working definition of urban development, explain its principles and characteristics, and explore its evolution briefly. Finally, this chapter tries to build a study area by looking at how urban waterfront development has changed over time.

2.2.1 Urban Development

The urban environment is undergoing rapid transformation. Novel conditions become unstable and undulant when they are introduced and adopted. This rapid transformation is expected to have a detrimental effect on the nature, economy, social life, and functions of these cities over time (Carmona, Public Places Urban Spaces; The Dimensions of Urban Design, 2021). In recent years, many cities have witnessed deteriorating social environments, increased unemployment, abandoned land, and environmental degradation. The development of jobs, the enhancement of the environment, and the resolution of societal problems all require public policies that promote the reuse of derelict land and structures (Tanrıkul & Hoşkara, 2019).

Urban problems and opportunity ideas are inextricably linked to theories of urban change. The goal of this section is to show the main factors that have led to urban growth over the last few decades and how they have influenced the development of urban development strategies. The term "urban development" frequently implies that

the topic of development encompasses both physical and social planning, as well as development in both urban and rural areas concurrently. Urban planning can address a range of concerns and stages of development. There are "future-oriented activities" and "public service activities" in urban planning talks, even though they focus on how to improve the physical environment (Minea, 2008).

The history of urban or town planning methods, particularly the transformation in the underlying principles, has shaped the definition of planning. Since the 1920s, at least three phases of urban planning have occurred. The first phase of urban planning began with an emphasis on physical development, particularly in the 1920s and 1930s. Three distinct, but related, developments occurred throughout this time span. Town planning was once viewed as a form of physical planning. Town planning is centered on design, and town planning necessitates the creation of a master plan or blueprint to depict the spatial configuration of land uses and urban form. Later, in the 1950s, this notion was expanded to meet further socioeconomic concerns. This social movement started in the United Kingdom because of the people who worked in factories. The second wave began in the 1960s with two movements, Physical planning influenced the first wave's first movement, which viewed planning as a series of interrelated elements. The second movement is planned using a process-oriented method. Planning has developed into a method of rational decision-making. Unsurprisingly, despite strong support for removing municipal planning procedures from politics, this strategy become established in political procedure. Planning has begun to prioritize public engagement as a result of this argument. In the third wave, around the 1970s, planning as a rational process evolved into procedural planning theory. Throughout this period, planning has channelled social democracy's influence into planning techniques. This trend became

more noticeable in the 1980s and 1990s when planning had to take into account not just economic growth but also socialization and inequality (Taylor N. , 1998; Setiawan, 2013).

In contemporary practice, urban planning encompasses a vast spectrum of development. Its length history has shaped a number of influential ideas about urban planning and development. Urban development is now concerned with the United Nation Sustainable Development Goals, which encompass environmental, socioeconomic, and environmental economics. Urban development research and practice primarily focus on urban vegetation, assessment systems, city structures, land use, sociocultural awareness, sprawl, economic developments, transportation, and urban renewal (Hassan & Lee, 2015).

Different indicators were discussed as urban design advanced. It is well established that stakeholder involvement is a critical component of an effective development process. Numerous studies and empirical evidence indicate that involving the creative class in the development process is critical for the construction of productive, novel, and innovative urban settings. Cities nowadays aim to strengthen their ability to attract and promote themselves by analyzing and contemplating their prospects and threats. Meanwhile, for many, the concept of a creative city has become a unique lens through which to view urban development (Mostafa, Zeynab, & Saeed, 2021; Cinderby, de Bruin, Cambridge, Muhoza, & Ngabirano, 2021).

2.2.1.1 Definition of Urban Development

The dynamics of urban development are profoundly influenced by the broader structural transformation of societies.

Societies experienced significant transformations between 1990 and 2000: the collapse of political and economic institutions, new integration policies, economic globalization and the loss of the nation-state, mass migration, governmental retreat, and social transformation. Societal structural changes are most visible in urban settings. Applied to the examination of urban social, economic, cultural, and political processes, patterns, and structures, as well as urban planning processes, to enhance or preserve local comparative advantages (Schneider-Sliwa, 2001).

To have a more complete understanding of the subject of this thesis, it is critical to evaluate several definitions of urban development. Before examining urban waterfront development challenges and establishing the present state of the literature, comprehensive urban development definitions are necessary.

Urban development is a multifaceted topic that involves environmental, social, political, and economic considerations, among many others. As defined by the European Union, urban development is as follows:

> "Urban development covers infrastructure for education, health, justice, solid waste, markets, street pavements and cultural heritage protection. These constructions usually form part of specific sector programmes, including capacity building measures. Special attention is also paid to slums of large cities. Rehabilitation and reconstruction comprises in particular social infrastructure following natural disasters or conflicts." (European Union, n.d.)

In addition, urban development differs from rural development. It differs based on the scale, intensity, visual character, and presence of built structures. Based on this perspective, the Law Insider Dictionary defines urban development as follows:

> "Urban Development means development which is not of a rural character and is differentiated from rural development by its scale, intensity, visual character and the dominance of built structures. Urban development may also be characterised by a reliance on reticulated services such as water supply,

> wastewater and storm water and by its cumulative generation of traffic. For the avoidance of doubt, a resort development in an otherwise rural area does not constitute urban development, nor does the provision of regionally significant infrastructure within rural areas" (Law Insider Dictionary, n.d.).

Urban development entails enhancing living circumstances for recreation and work, education and health, commerce and provisioning, and people's movement between housing and work. This definition is derived from Kouamou and Pettang (2008), who state that:

> "The urban development is the act of improving living conditions, which are necessary for rest and for labour, for the health and education facilities, for the various exchanges and provisioning, for the moving of the population between their dwellings and their working place." (Kouamou & Pettang, 2008).

In addition to being a network of sectors within cities, urban development also refers to an urban social network. According to Pego (2022):

> "Concept that refers to the capacity of infrastructures and services created by the city. Urban development is also a network between the main sectors in cities, such as renewable energy, information technology, services, and mobility." (Pego, 2022).

From a more fundamental perspective, urban development is the process of converting vacant land into locations for businesses, factories, and residences. In the words of Gharbi, De Runz, and Akdag (2017), urban development is:

> "Urban development is the change of raw land into commercial, industrial, and residential building areas." (Gharbi, De Runz, & Akdag, 2017).

In summary, urban development is described as the process of improving living conditions in a city using comprehensive features for evaluating long-term wellness.

2.2.1.2 Features in Urban Development and Integration with Water

While several parts and characteristics of urban development have not been entirely represented in the aforementioned principles of urban development, they approximate the essence of urban development and distinguish it from prior urban programs. A critical component is a strategic vision and a long-term perspective. There is a growing understanding that developing a strategic framework is critical for resolving interconnected urban problems. This consensus is founded on the assumption that successful urban development requires strategic planning, local change, and a multi-agency collaborative approach (Hersperger, Grădinaru, Oliveira, Pagliarin, & Palka, 2019).

The second basic aspect of urban development is the awareness and acceptance of the uniqueness of the location, as well as the necessity of adapting any particular model of urban development to the circumstances in which it operates. In contrast to earlier urban strategies, urban development attempts to ensure that urban areas contribute positively to the national economy while also achieving a variety of social and environmental objectives (Workineh, 2021).

Effective urban development is critical for a diverse range of actors and stakeholders. This involves the local community, local, state, and federal governments, investors, economic activity, and environmental organizations at all levels, from global to small (Liu, Jin, & Dupre, 2022).

Integration is also a critical component of urban development, helping to distinguish it from the former's haphazard attempts to control urban change. Creating and

delivering an integrated and comprehensive answer to urban development's difficulties is a difficult task, but it is worthwhile (Shi, Xu, & Duan, 2022).

Throughout the 1970s, 1980s, and 1990s, urban waterfronts became a critical component of worldwide urban renewal and regeneration efforts, as waterfront urban communities adopted strategies for post-industrial urban growth. Darling Harbour in Sydney has been turned from a run-down waterfront into a tourist destination that highlights the city and its history. Baltimore's Inner Harbor, once a sign of industrial decline, has evolved into a symbol of post-industrial urbanization, complete with all of the associated undertones of gentrification, spectacle, social conflict, and unfairness. The urban waterfront in Melbourne, Australia, was renovated to represent the city's internationally oriented, economically conscious, and consumption-driven urban strategy. Hong Kong's waterfront has been renovated and greatly expanded as part of a renovation. This includes the development of whole brand-new urban infrastructures such as airports, trains, highways, tunnels, and bridges. Industrial and rail terminals that previously lined the waterfront of Lake Ontario have been redesigned and continue to evolve in Toronto. As part of the London docklands, a post-industrial zone has been transformed into a modernist pastiche, with luxury apartment balconies lining quaysides and cranes serving as antiques (Davidson, 2012).

In summary, the aspects of urban development include a strategic planning approach, a collaborative approach during development and implementation, public awareness, the importance of unique places, and the involvement of key stakeholders. In addition, an integrated approach to urban development is currently a challenge. This is a very significant issue for this thesis, which aims to integrate waterfront development principles into future-oriented development principles.

2.2.2 Urban Waterfront Development

The preceding sections explored the factors that influence urban change and urban development theories, as well as the evolution of urban policy. This section is devoted entirely to one sort of urban area: the urban waterfront. The urban waterfront, on the other hand, has a unique history of transformation and, as a result, unique urban concerns. This section attempts to describe the urban waterfront and examines how it has evolved over time.

Between the 1930s and 1960s, urban waterfront areas deteriorated. Following the industrial revolution, the population grew rapidly, and many contemporary industrial and transportation enterprises chose to settle near water in order to maximize their benefits. Significant amounts of sewage surged in and fouled the water, to the point where the locals no longer desired to live there. Additionally, the government made investments in other areas. In the 1970s, many industrial enterprises shifted to the service sector, and water purification techniques improved. Water and flora were in high demand in urban areas. The development of the waterfront region progressed rapidly as well, and the landscape improved vastly (Hou, 2009).

Geographically, early waterfront development studies were summarized in a series of straightforward examples or theories that have been frequently reprinted in the literature and require only a brief mention below. The model of the port-city interface reflects a range of interrelated spatial processes and implies that the waterfront and its redevelopment are subsumed inside a contentious port-city interface zone marked by conflict and only rare collaboration (Figure 5). Thus, it contextualizes waterfront revitalization in port cities within a broader spatial framework. In comparison, the port-city transition model takes a chronological approach to port-city interactions and, in

the final stage, elicits the renewed partnership between port and city that occurs as waterfront zones are revived (Figure 6) (Hoyle, 2000).

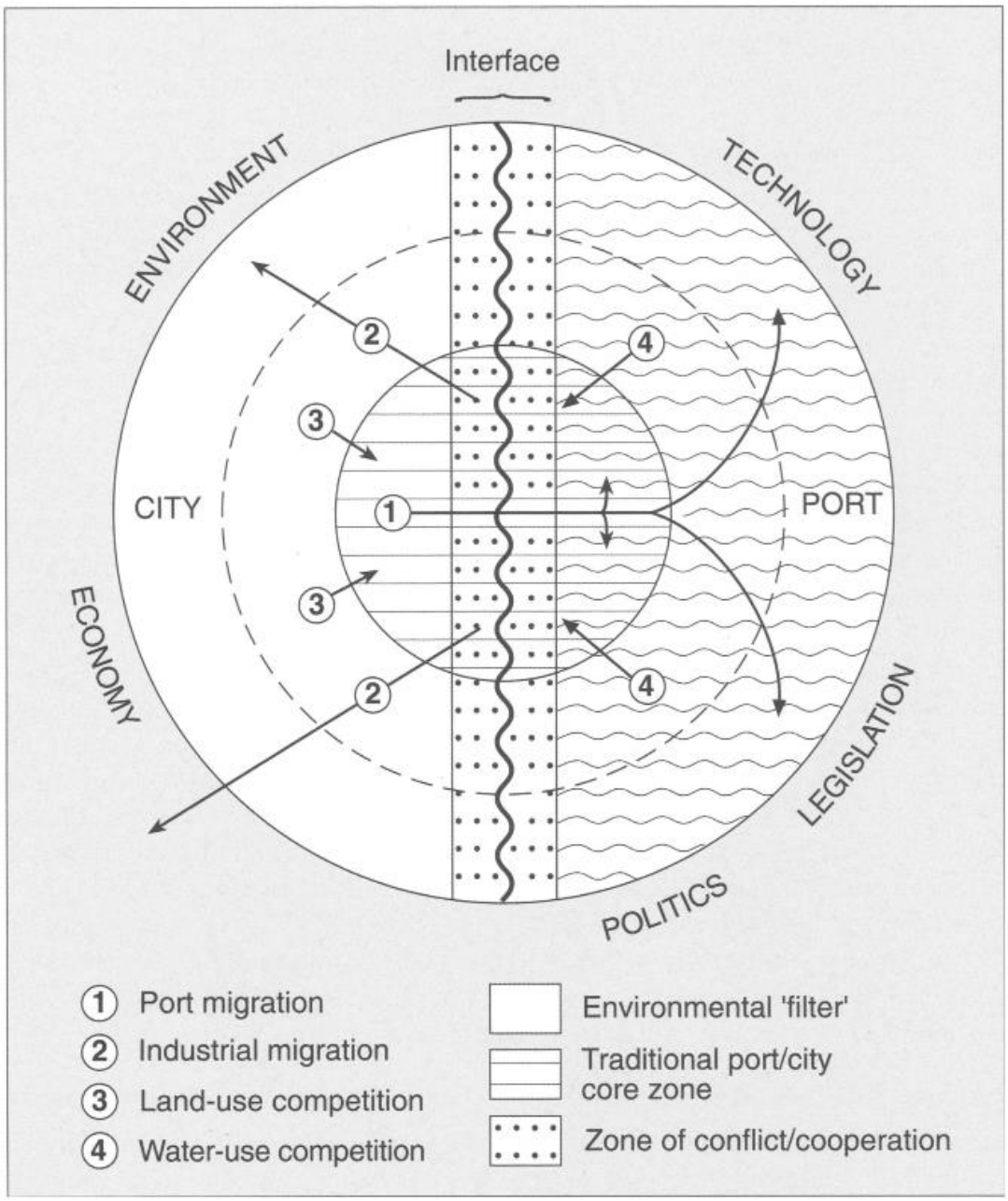


Figure 5: Characteristics and trends of port-city interfaces (Hoyle, 2000, p. 404).

In today's world, many cities are redeveloping their waterfronts and getting closer to their ports, and these simple diagrams show how these changes are happening (Hoyle, 2000).

STAGE	SYMBOL ○ City ● Port	PERIOD	CHARACTERISTICS
I Primitive port/city		Ancient/medieval to 19th century	Close spatial and functional association between city and port.
II Expanding port/city		19th - early 20th century	Rapid commercial/industrial growth forces port to develop beyond city confines, with linear quays and break-bulk industries.
III Modern industrial port/city		mid - 20th century	Industrial growth (especially oil refining) and introduction of containers/ro-ro require separation/space.
IV Retreat from the waterfront		1960 s - 1980 s	Changes in maritime technology induce growth of separate maritime industrial development areas.
V Redevelopment of waterfront		1970 s - 1990 s	Large-scale modern port consumes large areas of land/water space; urban renewal of original core.
VI Renewal of port/city links		1980 s - 2000+	Globalization and intermodalism transform port roles; port-city associations renewed; urban redevelopment enhances port-city integration.

Figure 6: The relation between port and city (Hoyle, 2000, p. 405).

Hoyle (2000) noted in his manuscript that waterfront redevelopment, both in port cities and elsewhere, is here to stay as a result of marine technology and transportation and as a characteristic of late-twentieth-century urban development. The relative success of such innovations will largely be determined by three factors of integration: first and foremost, integration of the past and present; second, integration of disparate goals and purposes; and third, integration of communities and their surrounding environments.

In summary, as studies and practices for city-port relationships and waterfront development progress, the consequences of numerous factors become apparent. The factors mentioned above include those of environmental, economic, technological, social, cultural, and political importance. Additionally, the development of urban waterfronts has benefited from the incorporation of influential parties, consideration of the past and future, and the incorporation of communities. It clarifies the thesis's procedure by emphasizing the critical nature of integrating creative classes into the planning phase. This integration will take the future (innovation) into account. Creative urban waterfront concepts will help clarify the characteristics of being productive, attractive, sustainable, and innovative.

2.2.2.1 Transformation of Urban Waterfront

Urban waterfronts have various modes of transformation, such as conservation, redevelopment, and development (Hou, 2009). The transformation concept in an urban context is also used as "regeneration." In urban settings, regeneration relates to the growth of areas where economic activity has disappeared or dysfunctional social functions have occurred, including deprived groups. It is aimed at improving the local environment and restoring environmental balance. The regeneration concept is an umbrella that includes different implementations like renewal, renovation, restructuring, rehabilitation, revitalization, conservation, refurbishment, restoration, and gentrification. The operation method is selected according to the needs of the site. In addition, the needs of the urban context can only be clarified by an adequate analysis process (Rosly & Rashid, 2013).

The regeneration of urban waterfronts has proved to be the focus of the urban agenda throughout North America and Europe since the 1970s. This is also true in all parts of the world, including Australia, Hong Kong, Japan, and other countries. Research increased from the early 1980s onwards. A review of international studies illustrates that most of the previous research on waterfront regeneration was concentrated on Western countries (Jauhiainen, 1995; Kilian & Dodson, 1996).

It is critical to recognize that urban regeneration as practiced now is merely a step in the evolution of urban areas. Even though regeneration is a never-ending process, the strategy used at any given time is based on a complex set of social, economic, and political decisions. As a result of the current complications of urban transformation and regeneration, new areas have opened up on the outskirts of many cities. It brings new hope for the future. Waterfront areas have evolved from abandoned industrial

property or old port uses to locations that aim to restore a city's image (Marshall, 2001). They also aim to recoup international investment and reintroduce residents to abandoned areas. Despite the huge prospects afforded by urban waterfront regeneration, cities face enormous hurdles. Locally and globally, these issues must be contextualized and addressed (Hussein, 2015). The following sections highlight some of the key concerns and mechanisms that have shaped and influenced current urban waterfront regeneration research and practice.

2.2.2.2 Typologies of Urban Waterfront Development

Dong (2004) notes in her Master's Thesis that waterfront development projects have taken a number of typical ways to redevelop formerly industrial waterfronts into vibrant locations for recreational, commercial, and residential activities:

1. *Waterfront as a tourist destination*
2. *Waterfront as an extension of the financial district*
3. *Waterfront as a new residential district*
4. *Waterfront as a platform for ecologically sensitive and sustainable development*.

Among Tsukio's (1984) three categories of waterfront planning are the following:

1. *Conservation:* Whenever possible, this type of plan preserves an existing waterfront property and restores it to its old status for the benefit of the public through dramatic renovations and the relocation of disused facilities. This is visible in Venice.
2. *Redevelopment:* the process of repurposing adjacent facilities in novel ways to revitalize harbors as vital parts of urban life. St. Katharine's Dock in London is an example of this style.

3. *Development:* The plan intends to develop a waterfront that fulfils the city's present demands by recovering land in areas where there is already no waterfront. Foster City, which has emerged in San Francisco, is a noteworthy example of this (Tsukio, 1984; Dong, 2004).

In urban waterfront development, sustainability is a prominent concern. Miller (2011) provides the criteria for sustainable waterfront revitalization in her thesis. These standards are outlined below:

1. *Recreation and leisure:* involving a large number of people; Multimodal and multi-scale interventions; adaptation to a variety of events; adaptability to changing circumstances; promotion of intercultural contact. Adapt to varied cultural environments. Respond to users' "fantasies" about unwinding and having fun; excite the senses of hearing, sight, taste, smell, and touch; Protection, exposure to sunlight, and favourable vistas; initiatives to promote informal activities; In addition, access to neighboring communities ensures the health and well-being of all community members, facilitating access and accommodating all generations.
2. *Development:* (development projects must demonstrate a return on investment or the ability to sell or lease the property within a reasonable timeframe; access to infrastructure and the site's buildability; sufficient funds to acquire and execute the project; and community support. Providing resources and programs for cultural, recreational, and public service along the waterfront; Reduced taxes, facilitation of land acquisition. Before launching development, establish a development entity. It can be a public-private partnership; the project's components must operate effectively together; public-private collaborations must be used at all times. When funding initiatives, a delicate balance must be struck; project agreements should

explicitly specify the duties and obligations of all participants. Developers must be aware of long project deadlines and high upfront costs. They must blend and integrate their projects into the surrounding environment. Additionally, they should not only think about their projects.

3. *Tourism:* All stakeholders in tourism must be active participants in the planning and implementation of the project. Many social and economic problems face the city, so all waterfront tourism projects must address them. All tourist centers must be occupied and employable year-round; all stakeholders must be involved in the planning and development of tourism projects. The various components of a project should be coordinated. Numerous tourist attractions should be consolidated into a single major one. Tourism should be planned with future generations and current needs in mind. Investment returns and environmental safeguards should be taken into account when making decisions about tourism. Keeping sites and local values alive and growing them should be a top priority. Gathering tourism resources, mediators, and/or collective representation is also imperative. Coordinating and networking between complementary products like hotels, restaurants, and so on is also critical.

Multiple objectives are achieved together during the regeneration process. Moretti (2008) says that waterfront regeneration can come in many different forms, including the following:

1. *New Urban Expansion:* This type of urban regeneration creates waterfront areas in areas that are available or reclaim areas that were once industrial or port areas.
2. *Waterfronts and Mega Events:* This area was developed in response to big temporary events such as the waterfront expos.

3. *A New Waterfront Itinerary in the City:* The waterfront renovation has resulted in the development of novel uses along the banks and in the neighboring areas. Public access is provided by pedestrian walkways.
4. *Reuse of Port Areas:* It includes waterfronts, which are regenerated regions that were formerly part of ports. By reusing these places, water is restored to the city's central business district.
5. *Flood Defense:* Structures that protect cities from flooding can be used to expand cities and make them more interesting.
6. *Urban Beaches:* Metropolitan beaches, according to urban planners, are man-made habitats within urban regions. They demonstrate a novel and alternative method of development by utilizing waterfronts in this manner. Temporary and moveable urban beaches are somewhat unfixed. They can be transported or repurposed in a variety of ways. During the hotter months (particularly the summer), such structures may be built over a street, a parking lot, a public park, or a demolished site. There are frequently vistas of urban waterfronts from urban beaches, as well as access to the water in these regions. As a result, these areas are compared to the kind of traditional beach scene that has umbrellas, palm trees, and thatched homes.
7. *Regeneration of the Riverfront:* A river, which connects many different parts of the city, has a lot of power to become a new public axis (Moretti, 2008; Timur, 2013).

In this respect, the classification of such organisms is very difficult. The development of urban waterfronts serves several purposes at once. Based on the project location, size, and type, the development typologies may differ. Furthermore, social conditions,

economic circumstances, educational levels, levels of awareness, political conditions, cultural contexts, and physical expectations are the factors that affect these types.

2.2.3 Principles of Urban Waterfront Development

The thesis's principal goal is to establish a set of guidelines for the successful development of waterfront property. This sustained performance is dependent upon a variety of external circumstances, including economic and political changes at the local, national, and international levels. Physical, functional, social, economic, cultural, and political aspects of waterfront development will be the primary factors explored in this thesis. It will be noted here that each of these six principles has critical components that contribute to the formulation of useful criteria for assessing the effectiveness of waterfront development.

Urban waterfront developments can provide high returns on real estate and property investments; socioeconomic revitalization for inner-city communities; the development of new visitor markets; job creation; environmental enhancement; historic preservation; city and regional promotion; improved infrastructure; destination branding; cultural creativity; and new creative districts (Desfor, Goldrick, & Merrens, 1988; Smith & Garcia Ferrari, 2012).

2.2.3.1 Physical Quality

When sensory experiences in urban settings are addressed, two kinds of quality of life can be identified: physical and emotional. The physical realm encompasses the built environment's tangible, physical, and material components that can be touched, altered, and modified.

Samavati and Ranjbar (2017) talk about physical factors in urban spaces that are thought to make people happy, like pedestrian-orientedness, bicycle-orientedness,

flexibility, legibility, variety, and place identity. Pedestrian-orientedness and environmental elements seem to be the most significant.

Nunes & Vale (2015) define the physical characteristics of urban environments as follows:

1. *User characteristics:* a description of the intended audience, such as age, occupation, and physical condition.
2. *Conviviality:* make use of the aspects of public space that promote interaction and social life.
3. *Purposes and uses:* special-purpose places such as the vehicle lane, parking lot, cycle lane, and pedestrian walkway.
4. *Travel speed:* Discuss not only vehicle speeds, but also the speeds of pedestrians, cyclists, and other street users.
5. *Connectivity:* this refers to the links, access, and flexibility of movement.
6. *Signs and signals:* these include street signage, license plates, signs, traffic lights, and advertisement panels, among other features.
7. *Height-width relationship:* the proportional relationship between the street width and the building's height in relation to its surroundings.
8. *Building spacing:* this refers to the distance between observable buildings from the neighborhood edge.
9. *Materials and colors:* these are the materials used to coat the neighborhood facades and the dominant colors used on each structure.
10. *Urban furniture:* they are benches, bus stops, and other mobile things that are erected in public spaces to provide resting or stopping areas.

11. *Doors and windows:* These are the openings through which each structure communicates with the exterior.
12. *Workmanship:* it is a characteristic that transcends the material utilized; it is also a human resource attribute.
13. *Construction details:* they are the features of each building, such as chutes, moldings, and indentations.
14. *Remarkable objects:* these are features that attract the attention of the public in addition to being memorable and occupying a certain space.
15. *Open Spaces:* large, visually unrestricted areas that may include squares or parks.
16. *Waterline:* the sea's or a river's waterfront.
17. *Vegetation:* that in urban areas consists of trees of varying sizes, bushes, and flowers.
18. *Light and shade:* this term refers to the amount of sunlight falling on a certain location, which is determined by the number of buildings and medium or large vegetation.
19. *Climate:* It defines the climatic effects and their magnitudes, including wind, sunlight, rain, and cold.
20. *Cleaning and repair:* these are two terms that refer to the maintenance of a certain location. Long-term solutions include maintenance, repair, and cleaning.

In terms of place-based physical visions, the following qualities are essential to urban environments: liveability, character, connectivity, mobility, personal freedom, and diversity (Carmona, Heath, Oc, & Tiesdell, 2003). Moreover, the built form of an area can be defined by various physical qualities, including typology, density, block size, building height, architectural style, street width, and street frontage. Physical quality

can also be defined by its cleanliness, appropriate seats, and the maintenance of lights, seating, and paths, as well as the maintenance of soft landscaping, aesthetic comfort, and ease of access (Alsumsam, 2017).

Through an examination of the Seattle Waterfront as a case study, Wessells (2014) explores how *"doing justice"* on the waterfront extends beyond physical characteristics by examining critical factors such as access, regional equity, and affordability.

Furthermore, Shah and Roy (2017) mention the following critical physical aspects of a sustainable waterfront:

1. *Safety aspects on the promenade,*
2. *General condition of infrastructure facilities,*
3. *General hygiene and maintenance (SWM),*
4. *Street furniture, and*
5. *Proper signage.*

In summary, the ongoing maintenance of waterfront spaces is critical. Proper maintenance plans must accompany waterfront development. Art pieces and urban furniture must be in proper physical condition in order to serve their intended purpose effectively and attractively. The disabled accessibility of waterfront areas is also critical to making them more welcoming spaces for everyone. To maintain the vibrant life of waterfronts, there should be a physically adequate connection between other activity places, the CBD, and waterfront regions. Urban balconies that are physically suitable can attract people to seaside regions. Relevant authorities are required to establish appropriate solutions to promote effective and comfortable pedestrian and public transportation access to waterfronts and other related activities and service

locations. There may be a need to design alternate transit solutions, such as a funicular or ropeway, for certain waterfronts. In urban life, the quality and quantity of public transportation options are also critical. Facilitating and enhancing local people's interaction with nature and natural resources is essential to effective development initiatives. Moreover, the morphological processes of waterfronts are connected to the evolutionary analysis of waterfronts, which examines design strategies, waterfront development processes, and physical and tourism consequences (Xie & Gu, 2015).

2.2.3.2 Functional Aspects

There are three types of outdoor activities in public space that Gehl (1987) breaks down into three groups: necessary, optional, and social. Each of these puts a different strain on the physical environment:

1. *Necessary activities* are activities that are essential for daily life and must be performed in practically all circumstances.
2. *Optional activities:* These include taking a walk, standing around, or simply sitting and enjoying life. They occur when the external physical conditions are ideal. They are, however, enhanced in high-quality environments and drastically diminished in low-quality environments.
3. *Social activities:* These rely on the presence of people in public settings. They include activities such as children's playing, street chatting, and meeting friends in a park; in other words, a variety of communal activities.

To attract users, an urban waterfront development must expand the range of accessible activities. Waterfronts are locations that may include picnic spaces, meeting areas, fishing areas, and areas for shooting activities. Additionally, throughout the design phase, playgrounds, green spaces, lighting components, and safety must all be

carefully considered (Zhao, 2020). Additionally, several functions are required to create an inviting environment along the waterfront. There should be recreational facilities along the waterfront, such as cafes and restaurants.

The functional diversity of the waterfront fosters a connection between people and water. Individuals spend more time in active and appealing environments (Moughtin, 1992; Ferri & Maturo, 2012). According to Jacob (1961), the city's diversity and ongoing activity are necessary for its existence and vitality.

Diverse functions greatly add to the tourism appeal of coastal regions. These functions include beach accessibility, marine biodiversity, aesthetics, historical and/or cultural legacies, appropriate infrastructure, and/or eating options. The waterfronts can be used for a number of purposes, including resorts, hotels, bungalows, restaurants, cafes, and retail establishments (Breen & Rigby, 1985; Moughtin, 1992; Sealey, Andiroglu, Lamere, Sobczak, & Suraneni, 2021; UNEP, 2009). This prompted communities to consider waterfronts as multifunctional spaces (Harvey & Caton, 2010; Long & Cui, 2020; Miloš & Dragana, 2021; Roberts, 2010).

Diverse uses at waterfronts include residential housing environments, hotels, heritage, sports facilities, recreational areas, tourism, local attractions, and new employment areas (Desfor, Goldrick, & Merrens, 1988), festivals, exhibition areas, concert activities, museums, and public arts (Breen & Rigby, 1996), transportation, industrial, nourishment, and commercial (The Waterfront Center, 1999), the diversity of cultural, commercial, and housing uses, (Giovinazzi & Moretti, 2010), leisure activities, exclusive housing, office developments, and retailing, restaurants, pubs, aquariums, festival markets, historic ships, hotels, and many others (Kostopoulou, 2013), and

industrial, manufacturing, agricultural, and service activities (Popovic, Vlahovic, & Vatin, 2015).

Due to their cultural and touristic attractions, these areas have been popular for centuries and continue to grow in importance. Festivals, exhibition areas, concert activities, museums, and public art are among these activities. In addition, cultural tourism and eco-tourism are impacting the cultural and recreational attractiveness of the local community as well as the interaction between visitors and locals (Breen & Rigby, 1996).

The development plan of abandoned waterfronts is a relatively regular occurrence in today's globe. In general, mixed-use development, which encompasses recreational activities, exclusive housing, office construction, retail, pubs, aquariums, festival markets, historic ships, and hotels, among other things, is gaining importance among today's generations (Kostopoulou, 2013).

Additionally, the waterfront can be made more appealing to users by providing new dwelling settings, hotels, heritage, sports facilities, recreation places, tourism, and local attractions, as well as enhanced employment opportunities (Desfor, Goldrick, & Merrens, 1988). Indeed, what is critical in designing a suitable public open space is to consider the requirements and demands of the users in order for the area to be appealing to them and incorporate their activities, thereby ensuring a longer period of usage.

Providing a wide variety of mixed uses in urban environments is critical to their vitality since the number of activities available to users helps bring a city's spaces to life.

Additionally, increasing accessibility in public spaces contributes to the generation of life and activity. Thus, addressing human needs in public open spaces has a significant impact on their use and is critical for human pleasure and well-being. In general, people want comfort, relaxation, passive and active engagement with the environment, and discovery in the urban environment (Alsumsam, 2017; Mostafa L. A., 2017).

Latip, Shamsudin, and Liew (2012) classify the waterfront's uses into three main categories:

1. *Water-dependent* uses are those that rely on the presence of an urban waterfront to function. Without the urban waterfront, the building would not be able to function. Marinas, jetties, boathouses, and a water-taxi station are all examples of these types of architectural usage.
2. *Water-related uses* includes building applications that will benefit from proximity to water, but can also be used in other regions. Restaurants, open space, parks, terraces, and resorts or hotels are all examples of these types of structures or projects.
3. *Water-independent* uses refer to structures that can function equally effectively without access to water in other parts of the city. Shophouses or shopping complexes, offices, workshops, mosques, residential areas, schools, and clinics are examples of this group of concerns.

2.2.3.3 Social Factors

When developing an urban design, the authors of Carmona et al. (2003) underline the necessity of defining the interaction between people and their environment. They argue that the ideal approach to conceptualizing the relationship between people and their

environment is as a continual two-way process in which individuals create and modify spaces while also being influenced by those spaces in a variety of ways.

Culturally, public space frequently acts as a metaphor for a community and its broader society. Francis (1987) asserts that public spaces serve as a showcase for community culture and serve as a foundation for communal life, depending on the ideas and values of those who use them.

Social interactions are based on social stimulation and response, which encourages additional responses. Individuals experience their own beliefs, attitudes, interests, and other personality characteristics. Nevertheless, they are heavily influenced by their experiences, such as their family, culture, nationality, ethnicity, social class, and lifestyle (Porteous, 1977). According to the debate above, people's participation in an urban context, their social interactions, and their public life are all influenced by their sense of safety and security. According to Gehl's (1987) research, there is a correlation between safety and security, urban space use, and life quality.

In summary, by developing social policies, urban waterfront development activities need to provide a fair distribution of quality of life in society. A proper urban waterfront development process depends on the mode of use, frequency, intensity, and realistic demands of people. Detailed information about education levels, age groups, income levels, and behavioral approaches are critical considerations during the design process of urban waterfront development.

The social dimensions of urban waterfront development can be evaluated under four headings: resources and identity, social status, access and activities, and waterfront

experience. Resources and identity reflect the character of the area, including the environment, culture, and history, as well as visual, societal, and cultural identity. Social status represents social, age, and ethnic groups; the existence of service areas; and the role of social or private housing. Access and activities are related to the accessibility of waterfronts to the public, the type of water activities, and traffic and parking conditions. And the waterfront experience is about the presence of water (sea, lake, river, etc.), restorative experiences, physical touch, tastes, and voices (Sairinen & Kumpulainen, 2006). From a global perspective, the waterfront should have more open spaces and physical activities. The middle class is increasing in many countries, which is why leisure activities are becoming more popular. The time and mobility of open spaces and recreational areas increased tourism activities and created different types of tourism, which are called cultural tourism and eco-tourism. In this sense, these areas started to include shops, cafes, and restaurants with water-based cultural and recreational attractions like the international water festival in Stockholm (Breen & Rigby, 1996).

In the process of establishing a vision for the waterfront, development or regeneration should be prioritized for the benefit of the community as a whole. This is not just for local residents and businesses (Benson, 2002). Sustainable waterfront development should take into account not just ecological and economic considerations, but also social considerations. As a result, planning processes must be open and provide meaningful opportunities for public participation. In other words, from the beginning, the community should be informed and engaged in conversations. Such an approach should be an essential part of waterfront development planning and sustainability.

According to a case study analysis of Barcelona, Wuijts, et al. (2022) reveal that stakeholders emphasized the necessity of a healthy, socially equitable, and safe city that promotes active living, provides clean air and high-quality public spaces, and protects people's health and well-being. A healthy, socially equitable, and safe city might be built by increasing the number of green and blue public areas, particularly in impoverished neighborhoods. For example, a waterfront regeneration project on the Bess River changed how people could get to the shoreline by walking and cycling. As a consequence, it also changed how they felt about their physical activity and their subjective health and wellbeing. Additionally, the creation of blue and green spaces, such as water squares, parks, or green playgrounds, provides cooling areas and water storage. These opportunities for physical activity, relaxation, and social interaction all contribute to improved health. While investments in high-quality blue and green spaces benefit resilience and public health, they also have the potential to exacerbate gentrification and increase socioeconomic inequities if these issues are not addressed during the urban planning process (Wuijts, et al., 2022).

In summary, social interaction, social cohesion, communal attractiveness, cultural appeal, safety and security, openness, health and wellbeing, the variety of green and blue spaces, relaxation places, and socializing opportunities are the significant issues for urban waterfront development. When social factors are not considered during the planning and implementation processes, gentrification and socioeconomic inequality become threats.

2.2.3.4 Economic Facets

In today's urban economic development programs, leisure and tourism are essential components of an overall planning strategy. However, urban tourism and related

cultural forms were not considered in growth plans during the 1950s and 1960s. Post-World War II urban redevelopment coincided with a transition from a production-oriented to a consumption-oriented economy (Breen & Rigby, 1985). Municipal governments sought to build the city of leisure in the midst of intercity competition by employing multiple techniques, including substantial private-public collaborations. The subsequent infrastructure, such as sports stadiums, conference centers, arenas, museums, parks, concert halls, and waterfront developments, helped attract tourists and raise local socioeconomic levels. In turn, a significant number of downtowns were redesigned, resulting in the emergence of new social communities and often leading to gentrification and displacement (Spirou, 2022).

Diverse redevelopment provides a shift in political emphasis to support economic development incentives (Jones, 1998; Pirlone, Spadaro, De Nicola, & Sabattini, 2022). Regarding economic situations, market changes, disposable incomes, prices, and inflation must be considered. Alternatively, from a sociological perspective, the features of the community are studied, which can influence product demand or alter management practices. There are ways in which investments in strategy and development might influence how businesses operate (Pirlone, Spadaro, De Nicola, & Sabattini, 2022).

Throughout the discussion of social aspects in section 2.2.3.3, it was mentioned that gentrification and socioeconomic inequality may emerge if social issues are not included during the planning and implementation procedures. As stated in economics-related discussions, economic expansion may also increase gentrification and social inequality. Therefore, waterfront development or rehabilitation must be viewed from

a broader viewpoint. This should incorporate physical, functional, sociological, economic, cultural, and political components in order to resolve these issues.

In a broader sense, revitalization is frequently operationalized via a range of socioeconomic indices, such as a gain in housing value and stock, a decline in unemployment, and an increase in household income. Thus, revitalization is also associated with enhancements to human health. According to this definition, wellbeing involves choice and behavioral freedom, good health, positive social interactions, and security (Nixon, Carlton, & Ma, 2022).

The increasing popularity of urban blue spaces as tourist destinations and residential areas has been linked to substantial economic benefits. Enhanced waterfront management also results in an improved local image, a rise in the number of visitors, the creation of jobs, new places of opportunity, the expansion of local businesses, an increase in municipal income, and lower operating expenses and rents (Brückner, Falkenberg, Heinzel, & Kistemann, 2022). According to the studies by Brückner et al. (2022), even though there are a lot of problems, urban blue regeneration can still be profitable and good for the environment and social well-being, especially in areas that don't have many resources.

2.2.3.5 Cultural Features

All citizens can share in the benefits of wealth through the medium of culture. This is because it can generate social and human capital, improve life skills, and transform an organization's ability to manage and adapt to changes. Culture is a way to define a rich, shared identity. As such, it encourages a sense of place pride, and cooperation between communities, making people feel more stable and sure of themselves (Florida, 2002).

The shift from a production-based to a service-based economy has made cultural projects the primary component of urban entrepreneurship, while social and demographic developments have boosted the demand for cultural facilities. Due to these radical reforms, culture has assumed increased importance as a method of settling the political and socioeconomic challenges of urban areas in the deindustrialization phase. It has risen to the top of the urban policy agenda (Gunay & Dokmeci, 2012).

Evans (2005) analyzed the correlation between culture and regeneration via the lens of three distinct categories. Culture-led regeneration, cultural regeneration, and culture and regeneration are their relative terms. In contrast to the first category, which concentrates on cultural activities and landmark projects as the symbols and drivers of urban regeneration, the second category examines disjointed alternatives to urban policy. According to this classification, cultural regeneration ought to be the optimal strategy for launching integrated methods that utilize culture as a tool for social and economic development. This study focuses on how the Kyrenia waterfront is being fixed up right now. This is accomplished by focusing on "culture-led development" in conjunction with the integration of environmental creativity.

Proper urban waterfront development operations must revive the cities' historical references to attract individuals to the waterfronts. In addition, the supply of cultural and artistic activities and exhibition spaces must be considered for an effective urban waterfront development process (Zhou, 2020). The constructed and non-built cultural entities of waterfronts comprise revived urban historical harbors; repurposed industrial heritage structures; revitalized marine images; and water-based urban life. They are differentiated by their particular urban texture and functions, their new iconic

landmarks, and their diverse leisure activities. Countries are reviving their valued areas by creating appealing activity spaces (Seçmen, 2018). Tourism and culturally-based activities are the most popular pastimes today. The objectives of these activities are becoming partially tied to economic goals and the creation of new employment possibilities. Countries are incorporating new applications into these strategies, thereby enhancing their unique qualities (Tiesdell, Oc, & Heath, 1996). By preserving historic harbors as showcases and repurposing them for creative purposes, port cities can enhance their creative capacity and creative spaces. It is essential to revitalize the waterfront with creative and cultural activities since they bring in money, create jobs, and enhance the appearance of the city and region (Kostopoulou, 2013).

According to the case study of the Golden Horn Regeneration of Istanbul by Gunay and Dokmeci (2012), the transformation of historic industrial facilities into cultural and educational hubs and the utilization of cultural features, such as Kadir Has University and the Rahmi Koc Industrial Museum, have the potential to have an impact on further social and cultural development. On the Kadir Has University Cibali Campus, for example, there are around 3,000 students. Taking into account the number of students who attend the Bilgi University Santral Istanbul Campus and the number of visitors to cultural features and events, such as international air races, fairs, water sports competitions, and conference organizations, it can be stated that the Golden Horn Cultural Valley Project has provided a space to connect Istanbul's diverse communities. As highlighted by interviewees, the rising number of students and tourists has enhanced the region's security and prompted the development of more transit linkages in the Golden Horn. Despite the recent emphasis on the social impacts of culture-led actions to improve social inclusion and quality of life through the

employment of social and educational programs in cultural complexes, the majority of visitors are newcomers, and society's access to cultural events is limited to their neighborhoods. There is also concern among community members that these initiatives do not contribute to the economic development of communities or improve the quality of life in the surrounding areas. Instead, they pose a threat to the gentrification of the urban area. Several interviewees stated that economic vitality is dependent on a specific geographical region. The opening of Kadir Has University, for instance, has led to various functions being available for new users.

Urban waterfront regeneration projects can also lead to "standardization" or "homogenization," a lack of social or community focus, commercial failure, and relationships between the public and private realms (Jones, 2017).

Culturally, the urban environment frequently reflects the whole of society. By fostering the private and public ideals of its users, a public space facilitates the expression of public culture and enhances the quality of life in a community. A person's beliefs, attitudes, preferences, and other characteristics are mainly influenced by their experiences as a member of a family, ethnic, social class, cultural, national, or lifestyle group (Porteous, 1977). They are the spectrum of colors required to construct urban communities. Following the previous theme, the perception of safety and security affects the presence of individuals in public places and their social interactions.

A lesson learned here is that the existing culture must be considered during the planning process. This will facilitate more effective transformations while integrating

appropriate functions, suitable physical conditions, and proper social integration. This is essential for preventing gentrification within urban cores.

2.2.3.6 Political Issues

Discourses that rationalize and regulate political agendas contribute to the development of new urban waterfront policies. Bunce and Desfor (2007) argue that the creation of policy discussion at various scales and focused on urban waterfronts is a means of generating a new social and environmental truth that prompts a re-evaluation of political ideals and physical usage.

More urban redevelopment initiatives are receiving political support on the grounds that they are capable of transforming cities into more efficient, productive, economically, and socially sustainable areas within the current global context. Effective leadership is crucial to the viability of urban waterfront development proposals and an effective design development process.

Good leadership can create a successful cooperation platform for relevant authorities that the urban waterfront development activity requires a good planning process, design procedure, and appropriate applications with the participation of all necessary stakeholders. In addition, urban waterfront development applications require ongoing maintenance, knowledge, and assistance to ensure a long-lived and acceptable environment.

Cities battle for mobile capital, cultural and sporting events, wealthy tourists, and the creative classes in the evolving urban political landscape (Florida, 2002; Florida, 2005). These are the forces propelling the current creative era. Waterfronts play an imperative role in the global competition of city branding as transforming

environments that attest to a city's revival and desires for better living conditions. Creative individuals choose to live, work, and play along revitalized waterfronts to satisfy their social and cultural demands. The construction of sanitized places that provide responsible inhabitants with a high quality of life in a safe and attractive setting is a contested expression of urban privatism. As a result, waterfronts are reterritorialized with a distinct place identity established by colonized spaces based on market consumption and high-income populations. So, the politics of public benefits is turned toward those who aren't included in regeneration (Boland, Bronte, & Muir, 2017).

Here, social justice in the neoliberal urban context must be regarded as a communal effort, not as individualistic consumption; only this can satisfy a substantial proportion of the people. According to Fainstein (2014), it can transform the urban policy debate from a singular emphasis on competition to dialog regarding justice. Planning should be an ethical endeavor based on fairness. A key to this is the ability of planners to make nonmarket motivated decisions that create opportunities for better planning.

Hagerman (2007) uses the city of Portland as a case study to show how reclaiming industrial and commercial riverfronts with links to liveability reduces worries about social and ecological displacement while raising concerns about social justice. Regarding waterfront redevelopment in Portland through the lens of liveability planning provides an opportunity to move further than blanket evaluations of gentrification. It is also committed to re-establishing industrial pasts into statements of urban renewal involving both nature and social life. Urban political ecology asserts that the transformation of landscapes must be studied alongside the economic and societal consequences of replacing industrial settings with settings of consumption.

Governance plays a critical role in linking the emergence, modification, and promotion of livability ideas (Hagerman, 2007). Therefore, it is necessary to evaluate the methods of studying waterfront redevelopment and gentrification.

To carry out adequate waterfront redevelopment, local authorities, governments, and influential leaders must create a collaborative platform for all stakeholders. In addition, it is necessary to educate locals to raise their level of awareness of emerging trends in social issues. Authorities involved in the redevelopment of waterfront areas have the primary responsibility of cultivating active citizens who can contribute to the resolution of local concerns. The purpose of this is to enhance social cohesion.

Theodora & Spanogianni (2022) argue that efficient management that is devoid of inadequately regulated administrative processes is necessary in order to promote:

1. Strategic orientations for the planning and management of the integrated coastal area, such as those concerning the regulation of residential growth in light of cultural and natural assets;
2. Ensure that the shorelines have long-term growth prospects within the context of sustainability and unimpeded access to the shorelines;
3. Proper economic and fiscal motivations and methods for local and regional growth;
4. Principles and practices of sustainable shoreline use at all levels of government, including local, regional, and national;
5. The essential connections between policy objectives, spatial (territorial and maritime), sector, and specialized (climate adaptation and neutrality, and emergency planning) strategy;
6. New kinds of participatory planning and spatial institutional frameworks at the local level primarily;

7. Determination of coordinators and clarification of responsibilities of stakeholders throughout all phases of the shoreline planning and management process;
8. Providing the necessary funds and monitoring methods;
9. Modernization of information monitoring, evaluation, and dissemination systems;
10. Organization of education and training for citizens;
11. Modernization of the existing regulatory arrangements by bringing them in line with EU regulations on the protection of ecosystems, the governance of constructions, and the development of a strategic, gentle urban organization and low energy usage;
12. Establishing means of communication and collaboration at the national and international levels so that individuals can share their thoughts and experiences.

Central and decentralized administrations are crucial to promoting the parameters listed above. In addition, they are responsible for the management of the rapidly increasing demand for land on shorelines as well as the correspondingly powerful motivations of private capital. There is no doubt that planning processes and practices are merely political and societal issues.

The relevant authorities should make an assessment of the physical quality of the environment and coastal use before making any declarations. The authorities are responsible for providing the physical arrangements that will improve the waterfront's usability. Accordingly, they are responsible for assessing current conditions and making the necessary arrangements to compensate for the inherent deficiencies that affect their use. Another vital physical contribution to waterfronts is the design of urban features, furnishings, and artwork that contribute to the design sensibility of their users. In this regard, the relevant authorities must examine the public transportation

nodes alongside the city furniture (bus, tram, Phaeton, bicycle, and dock) and formulate ideas regarding district-specific symbols within the scope of these designs. In addition, urban furniture and art objects displayed on the site must be of an acceptable standard. Both people with and without disabilities had to be able to get around safely and securely (Sealey, Andiroglu, Lamere, Sobczak, & Suraneni, 2021).

In overall summary, the planning and implementation of waterfront regeneration must incorporate multiple elements, namely physical, functional, social, economic, cultural, and political. A combination of these principles may assist in eliminating the risks associated with regenerated waterfronts. Although there are certain risks associated with regenerating waterfronts, the advantages are more significant and necessary (Figure 7). In addition to the risks highlighted during the discussion of principles in sections 2.2.3.1-2.2.3.6, Jones (2017) added several others (Figure 8). There is a need for established characteristics that incorporate creativity, innovation, and welfare programs in order to eliminate these risks and catch contemporary needs (Hoyle, 2000; Kostopoulou, 2013; Carta M. , 2012a; Jones, 2017; Sepe M. , 2009).



Figure 7: Positive features of waterfron regeneration projects (Jones, 2017, p. 336)

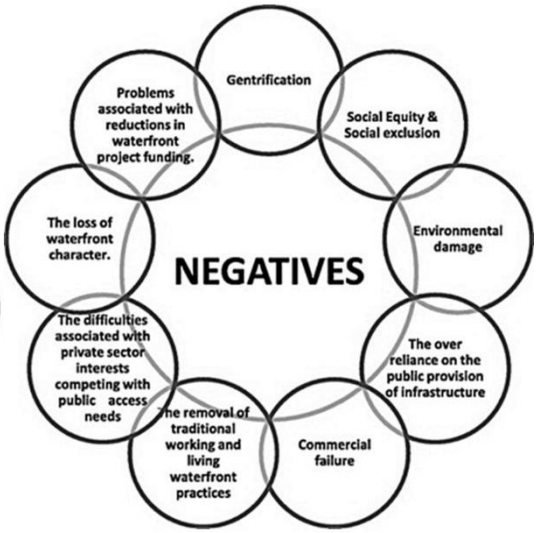


Figure 8: Negative features of waterfront regeneration projects (Jones, 2017, p. 338)

This thesis examines the physical, functional, social, economic, cultural, and political aspects of waterfront development. In this regard, it is vital to note that each of these six principles includes essential details that serve as valuable criteria for evaluating the efficacy of waterfront development initiatives. These six principles have evolved. These ideals are now related to numerous concerns (Table 1).

The principles of waterfront development remain relevant today. Since there is a potential threat to waterfront development planning and practice, the upcoming contributions to the existing principles are vital. Currently, technological advancement, innovation, and creativity are all crucial concerns, and creative environmental principles effectively address these issues.

Table 1: Evolution of the issues regarding to waterfront development.

Waterfront Development Principles	Decline Process from 1970s	Renewal Process			
	1980s	1990s	2000s	2010s	2020s
Physical	1. Flexibility of use (Gehl, 1987) 2. Accessibility (Gehl, 1987) 3. Rebuilding images, infrastructure, and the environment (Wrenn, 1983)	1. Less attention to the environmental issues (Jones, 1998) 2. Importance of Environmental incorporation (Jones, 1998)	1. Recreate the image of city (Marshall, 2001; Hoyle, 2002) 3. Urban competitiveness (Marshall, 2001)	1. City and water linkage (Meiner, 2010; Jones, 2017) 2. Creation of physical structure, settlement, and permeability (Carta M. , 2012a) 3. Opportunities for expansion (Timur, 2013) 5. A scale issue during development (Jones, 2017)	1. City and water linkage (Armenio & Mossa, 2020) 2. equitable and sustainable improvements in human physical, mental, cultural, and socioeconomic well-being (Angradi, Launspach, & Wick, 2022)
Functional	1. Diversity of building type (Gehl, 1987) 2. Office-led, and leisure-led development (Parkinson, 1989) 3. Necessary, optional and social activities (Gehl, 1987)	1. Diversity of building type (Breen & Rigby, 1994; Jones, 1998)	1. resorts, hotels, bungalows, restaurants, cafes, and retail establishments (UNEP, 2009) 2. Combining private and public uses, like retail and entertainment (Vallega, 2001)	1. Diversification of traditional port-related uses (Desfor et al., 2012) 2. Residential, leisure, tourism, commercial, and other public use opportunities (Smith et al., 2012; Kostopoulou, 2013) 3. Creative Waterfront regeneration 'Uses' (Carta, 2012)	1. playgrounds, green spaces, lighting components, and safety issues (Zhao, 2020) 2. considering waterfronts as multifunctional spaces (Miloš & Dragana, 2021) 3. Protect, improve, or restore the natural environment (e.g., green space, biodiversity) (Angradi, Launspach, & Wick, 2022)
Social	1. Increasing employment opportunities (Breen & Rigby, 1985) 2. The impact on interaction capabilities (Falk, 1989) 3. The impact on socio-economic characters (Falk, 1989)	1. Socioeconomic common life (Norcliffe, Bassett, & Hoare, 1996) 2. The growing environmental and social concerns (Jones, 1998) 3. local community participation (Jones, 1998)	1. Environmental and social concerns (Couch, 2003; Meyer, 2000) 2. Bring people back to deserted areas (Marshall, 2001) 3. Employment opportunities (Couch, 2003)	1. Importance of safe and secure use (Timur, 2013) 2. Innovation and creativity in waterfront regeneration (Jones, 2017) 3. Community resilience issues (Jones, 2017) 4. "standardization" or "homogenization" issues (Jones, 2017) 5. Social equalities / inequalities (Avni & Teschner, 2019)	1. Safe and secure use by the able and handicapped (Sealey et al., 2021) 2. Citizens' education and training (Theodora & Spanogianni, 2022) 3. Healthy, socially equitable, and safe city (Wuijts, et al., 2022; Angradi, et al., 2022) 4. A reliable indicator of income, homeownership, health, education, social cohesion, and divorce. (Angradi, et al., 2022)
Economic	1. Establishing a common ground for constructive action (Patton & Witzling, 1989) 2. The deindustrialization of production, labor market, and occupations (Ley D. , 1980) 3. Economic revenue generation through tourism (Wrenn, 1983)	1. Construction of business headquarters (Breen & Rigby, 1994) 2. Market-led approach (Brownill, 1990) 3. Lack of public funding (Jones, 1998) 4. Urban competitiveness (Pryke & Lee, 1995)	1. Public-private partnerships and extensive private investment (Shaw, 2001) 2. Recapturing global investment (Marshall, 2001) 3. Increasing local real income (Begg, 2002) 4. Place branding and marketing (Kavaratzis & Ashworth, 2005)	1. Entrepreneurial governance (Biddulph, 2011) 2. Economic globalization and competitiveness (Tallon, 2013) 3. Increasing marketing opportunity (Smith et al., 2012) 4. Creative Waterfront regeneration 'Production', 'Projects' (Carta, 2012) 5. Reuse opportunity (Timur, 2013)	1. Proper economic and fiscal motivations and methods for local and regional growth (Theodora & Spanogianni, 2022) 2. The economic benefits 'e.g., housing market impacts; increased tourism' (Hartig, Krantzberg, & Alsip, 2020) 3. International and national collaboration and communication (Theodora & Spanogianni, 2022)
Cultural	1. Contribution to cultural fabric (Breen & Rigby, 1985)	1. Preserving historical and architectural heritage (Jones, 1998)	1. Balancing cultural and quality of life (Shaw, 2001) 2. Buildings, structures, and artifacts that are part of cultural heritage (Vallega, 2001)	1. Temporary cultural event opportunities (Timur, 2013) 2. Cultural sensitivity, and capacity issues (Jones, 2017) 3. Maintain public safety, conserve cultural heritage, and memorialize local culture (Avni & Teschner, 2019)	1. Culture, health, and socioeconomic integration (Angradi, et al., 2022) 2. Networking socially and culturally (Ravagnan, Rossi, & Amiriaref, 2022) 3. Enhancing cultural heritage (Ravagnan, et al., 2022)
Politic	1. Development of short- and long-term strategies (Castells, 1989) 2. Planning and assessing waterfronts by considering conflict, cooperation, and competition (Hoyle et al., 1988)	1. Public-private partnership (Breen & Rigby, 1994) 2. Policy analysis and formulation (Krugman, 1996; Jones, 1998; Begg, 1999; Brownill, 1990) 3. Sustainability and resilience (Sorensen, 1993)	1. Network between waterfront communities (WCP, 2007) 2. Concerning the strategic planning framework (Couch, 2003) 3. Sustainability and resilience (Creel, 2003)	1. Consumed carelessly, often without planning (Agardy & Alder, 2010) 2. Legal instruments and institutional mechanisms, as required, to ensure the sustainability (Sano, Rosa, Brito, & Ferreira, 2010) 3. Visionary process management (Jones, 2017) 4. Promoting entrepreneurships (Jones, 2017)	1. Socioeconomic sensitivity, sustainability, and resilience (Le, 2020) 2. Adaptation to climate change, energy neutrality, and health crises (Theodora & Spanogianni, 2022) 4. Monitoring and providing funds (Theodora & Spanogianni, 2022)

By bringing together diverse members of society, creative environments facilitate the expression of ideas, desires, and needs. In this way, creative urban places contribute to the social fabric of communities. It is vital to have creativity in urban environments today. The use of creative environments to attract attention to the waterfront has become increasingly popular in recent years.

Based on the principles of urban waterfront development, this study examined creative studies relating to water and waterfronts. The aim is to establish a creative environment concept for waterfront development by linking the principles of these two dominant subjects. Consequently, it might also be able to locate this study on the placement chart (Figure 9).

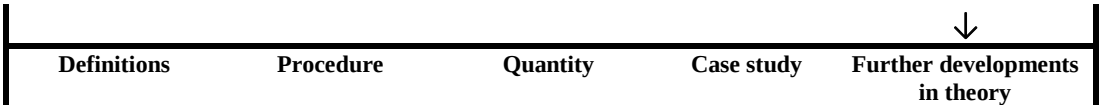


Figure 9: Placement of this study.

Chapter 3

CREATIVE ENVIRONMENT

> *"Creativity is the intellectual ability to create, invent, and discover, which brings new relations, entities, and unexpected solutions into existence"* (Wang Y. , 2009, p. 2)".

The movement of the creative class in search of a creative environment is a growing trend in waterfront development. A creative environment is one in which the physical, social, and functional characteristics of the environment are created or sought out by creative individuals, such as artists and writers. Examples of creative environments are creative workspaces (such as offices, studios, lofts, co-working spaces, and libraries); a local group such as a writers' group or cooperative; informal settings such as cafes and creatively active neighborhoods that encourage creative interaction; and creative cities such as New York and Paris (Harrington, 2020).

A creative environment is a term with an interdisciplinary literary origin. This topic is becoming increasingly prevalent in literature. Different areas might discuss creativity as a creative person, process, product, or environment (Taylor C. W., 1988). Furthermore, creativity is also flourishing in urban areas, indicating a turn toward creativity in society. Creativity is evident in numerous academic and social disciplines, including literature, urban planning, cultural policies, the economy, art, academic writing, theater, architecture, education, and economics (Richards, 1996).

Generally, a city refers to a highly organized and relatively permanent population center. Cities are more influential and substantial than towns and villages. There are cities in a variety of regions and countries. In addition, urban communities and their culture, which refers to the concept of the city, are known as urbanism (Lampard, 2017). The city is like a stage where economic, social, and cultural forces constantly change. The changes in the cities have received considerable attention from several players, whose opinions have become crucial to the demise of their living areas (Oktay, 2001).

Numerous cities experience an impact due to global developments and changes in various fields. Development and change are ongoing and unending processes. Today, development and change locate the individual at the center, which means that cities provide a platform for individuals to motivate and entice them to generate creative ideas and products. Consequently, it is possible to argue that creative individuals play a significant role in creative contexts; such people enable cities to promote themselves. Creative industries, creative classes, and the city's identity are integral parts of the creative environment.

This chapter provides an overview of the creative environment. Following the introduction, there will be an explanation of creativity. After that, there is a discussion on creative environments. Several examples of such spaces will be provided, along with a description of their associated principles and tools.

3.1 Creativity and Creative Environment

The subject of much discussion in the urban design and planning literature is how to create a thriving place, enhance lives for people, and establish an attractive site for

businesses and tourists. It has led to several different perspectives on topics, including quality of life, quality of place, satisfaction, and livability (Pratt A. C., 2011; Landry C. , 2008; Florida, 2005).

Creativity will stimulate social and economic progress in the twenty-first century. However, creativity is a very modern concept, dating back just over a decade (Pappalepore, 2010). Therefore, since there is no fixed, commonly used definition of creativity, it will be imperative to examine a variety of interpretations, the sum of which highlights distinct characteristics of this idea. Almost all of these variations share the concept of something novel. Amabile (1983) emphasizes creativity as a factor of uniqueness and effectiveness. Originality relates to novelty and uniqueness; ordinary things are not original because they are not creative. Original thoughts must be efficient to be creative. Effectiveness refers to utility, suitability, and adequacy.

> *"A creation is the cognitive process of the brain that discovers novel relations between objects, attributes, concepts, phenomena, and events, which is original, proven true, and useful"* (Wang Y. , 2009, p. 2).

Creative urban environments act as promoters of change, sustainable practices, and bottom-up creativity through a spirit of collaboration. In this model, creative locations shape a collaborative urban environment that facilitates and encourages the development of creative areas (Franqueira, 2009). Creativity derived from the urban context manifests itself in various ways, whether as a result of professions, as a response to the challenges of daily living, or as interventions by politically engaged groups willing to participate in the development of their urban environment. Cities are dynamic ecosystems that necessitate cultural infrastructure and associated spatial planning to create a creative environment. Even though innovation is a strong indicator of competitiveness, the cultural dimension and creativity play a pivotal role in nations

where linked paradigms are rapidly evolving. It is because policies for sustainable development view culture and creativity as facilitators and primary instruments for achieving designated goals (Maddah, 2021).

There is a correlation between creativity and urban planning, development, and administration that becomes evident. It is vital for this study, which seeks to enhance creativity and wellbeing at urban waterfronts by ensuring that they provide a space for innovation and support the sustainability of urban environments.

3.1.1 Definition of Creativity and Creative Environment

As previously said, there is no unified, widely recognized description of creativity; therefore, it will be essential to evaluate various definitions, as each highlights different features of this idea. The majority of these versions share the concept of something unique. Inspiration is a significant source of creativity, and aesthetic experiences enhance creativity (An & Youn, 2018). Additionally, creativity can be described as the execution of novel and original concepts (Guilford, 1950). Creative individuals generate a vast quantity of diverse and original ideas (Mumford & Gustafson, 1988).

Rhodes (1961, p. 307) proposed that creativity consists of four separate components, which he termed the “four P’s”:

1. *Person:* A description of a creative individual's traits,
2. *Process:* The elements of creativity,
3. *Product:* The result of creative activity,
4. *Press:* The environmental factors that foster creativity.

Originality, an essential aspect of creative creation, can be understood in two radically opposing ways. The original can signify the ancient, old, authentic, and, in contrast, contemporary, modern, and surprising. Creativity combines both of these definitions, being both old and new, historically knowledgeable and theoretically intelligent, and conscious of tradition and contemporary taste (Pope, 2005). Hubbard (2006) describes creativity as overcoming existing difficulties in novel methods.

Creativity is a fairly broad concept that can take many forms in numerous ways. There are many methods in which creative expressions appear in the literature. Creativity involves individuals, environments, developments, subjects, and objects (Table 2).

Table 2: Terminologies in creative "individuals, environments, developments, subjects, and objects"

Creative	Individuals	Environments	Development	Subjects	Objects
	Class	City	Initiatives	Thinking	Production
	People	Milieu	Policy	Health	Capacities
	Entrepreneurs	Place	Development	Treatment	Arts
	Talents	Space	Policy-making	Potentials	Facilities
	Workers	Infrastructure	Planning	Hype	Identity
	Professionals	Atmosphere	Capital	Ideas	Character
	Policy-makers	Industries	Struggle	Life	Spectrum
		Hotspot	Ways	Effort	Activity
		Cluster	Urban Development	Arts	Appearance
		Scene	Interventions	Identity	Dynamic
		Neighborhood	Business	Character	
		Niches	Economy	Dynamic	
		Sphere	Problem-solving	Act	
		Hub	Network		
		Area	Process		
		Zone	Sector		
		Workplace	Future		
		Axis	Technology		
		Core	Restructuring		

Hence, creativity and culture assumed a considerable influence on the technological developments of the previous period and hence on the creation of new products and industrial methods. The fact remains that innovation could never occur without creative means of thinking. To support this notion, one may refer to the definition of

creativity developed by Hall (1998): creativity is a novel and original production considered significant enough to be added to the culture.

The creative environment represents a phenomenon of the inventive site layout that is pretty new. It consists of two sections: creative and environment, which define the field of study between creativity and the built environment.

The complexity of the context fosters creativity as well as clustering. The quality of place is the intersection of spatial traits, situations, and processes. In this respect, Florida (2002) describes the quality of place in a manner that interprets these various facets as he discusses the characteristics of urban areas that attract and retain creative activities and people.

Modern knowledge-based economies emphasize the creative city, which serves as an excellent focus for urban development. In the transition to a post-industrial economy, where production and heavy industry have left urban centers, the creative city emphasizes the transformation from the relevance of geography and natural assets for a city's economic vitality to a focus on the people and places that are the producers and consumers of creativity in art, culture, technology, and other creative sectors. The discussion of the creative class emphasizes a group of highly mobile metropolitan residents. It also highlights the significance of the quality of place in the struggle to attract them. Similarly, creative industries, such as art, media, film, software, and biotech, are recognized as having a unique set of geographical and network requirements for accomplishment, such as the need for flexible and affordable environments, like live-and-work areas for artists and innovation labs for entrepreneurs, and benefiting from the knowledge transfer and cooperation cultivated

by industry sectors (Simeti, 2001). Proponents of the creative city want a distinct, comprehensive approach to development and government where the economy, culture, and urban design are all worked on at the same time to generate a creative environment.

For instance, Shanghai has prioritized the development of three forms of creative spaces, including creative parks, blocks, and urban regions that encourage the creative environment and develop a versatile maker space experience (Wang R. Z., 2007). The objective is to use creative industries to enhance strategic assets and strengthen the city's identity in terms of innovation. As a result, the creative cities network of the United Nations designates Shanghai as a city of design (Liang & Wang, 2020).

3.1.2 Attributes of Creative Environments

> *"Creative places are new type of urban spaces where groups of people collaboratively promote and manage a mix of creative initiatives in the fields of art and culture, economy and production, social services and urban regeneration."* (Franqueira, 2009, p. 35)

Evidently, various domains have played and will continue to play a crucial role in shaping economic and social developments in urban areas. Among these is culture, which is considered one of the drivers of economic advancement, the globalization of worldviews, and citizen engagement in politics. In addition, knowledge-based businesses that promote a knowledge-based economy are crucial to attracting and retaining talent, which is imperative for the prosperity of nations and cities. Furthermore, social enterprises can play a significant role in compensating for the increasing deficiencies in the welfare system in the classic region.

In light of this discussion, Franqueira (2009) noted that creative places have three key attributes:

1. Artistic and cultural output, the industry with the highest economic growth and the lowest unemployment rates.
2. Knowledge-based businesses: The transition from an industrial-based to a knowledge-based society has resulted in novel forms of value creation.
3. Social initiatives: the apparent inadequacies of the welfare system warrant alternative strategies to meet needs and provide services formerly provided by the national government.

Helmy (2015) states that creative places transform public space into a living, flexible, innovative, and participatory environment. The following are basic descriptions of pertinent attributes:

1. *Innovation:* When applying an original solution to a particular design problem or creating a creative environment, fresh ideas are typically required. Similarly, it is also about experimenting with established ideas in a new context. For instance, the design of particular locations transforms them into unique venues, which may include surprising design elements that stimulate creative functions and entice people to use them; this is experiential space.
2. *Livability:* Creative spaces create a high quality of life by being attractive, safe, and well-organized. They make places functional by providing safety, comfort, a quality setting, and various recreational and cultural activities.
3. *Connectivity:* Creativity is dependent on the connectivity, interaction, and integration of all components of a location within a unified and consistent spatial system. In such a scenario, the planning and coordinating of special events that occur concurrently or in parallel with other events is able to bring forth a sense of

collective sequence that would otherwise be impossible with a single, dispersed event program:

4. *Interaction:* Interactive locations encourage spaces where "insiders" can interact and engage, thus transforming this popular city plaza into an event space. By fostering a sense of belonging, strengthening relationships, and bridging social divides via special initiatives, activities, and the configuration of cross-cultural gathering spaces, people can cultivate a sense of belonging and bridge social gaps.
5. *Flexibility* means the capability of public space to respond effectively to varying natures and situations and accommodate changes that affect its effectiveness.
6. *Imaging:* the act of reproducing or representing the perception and identity of a place, responding to and reinforcing its unique perception and visual identity. In several instances, guests have a more favorable impression of places they visit than locals, who may be more cognizant of the problems.
7. *Sense of Place:* An area needs to have a sense of its identity in terms of its physical attributes, contemporary and historical landmarks, and unique environmental attributes. These locations foster and nurture a sense of community and civic pride.

According to Helmy (2015), there are four primary types of locations that might serve as examples of creative places:

1. *Single Sites:* This category focuses on sites as a standalone component. Places, such as urban squares, plazas, pedestrian zones, promenades, corridors, or parks, where activities focus on a single location, characterize this type.
2. *Multiple Locations:* This classification comprises connected and unconnected sites within a given context. This category classifies linked activities in disjointed settings or linked settings with diverse or fragmented activities.

3. *Creative Hubs:* This category covers campuses or facilities for cultural production sites in a physically confined location, such as fashion design regions, historic urban areas preserved, or new media campuses.
4. *Cultural Incubators:* this type involves extensive cultural infrastructure in a particular spot for several linked activities and diversified performance venues for various performing arts.

Additionally, Dovey et al. (2016) indicate that the creative hubs of the British Council fall into six typologies:

1. Studio: The workspace serves a few people or small businesses.
2. Network: An association of members and businesses.
3. Center: Buildings that occupy a large scale and consist of various assets, for example, a café, bar, cinema, factory area, shop, or exhibition space.
4. Online platform: primarily communicates with various audiences via the web and social media.
5. Cluster: A group of businesses and individuals grouped in a specific area.
6. Alternative: Exploring new communities, sectors, and financial models as an alternative.

Chaloupková & Kunc (2022) explain how the British Council sorts creative hubs in the following way:

1. *Creative spaces* are environments that establish their own separate artistic and cultural milieu. Typically, they are launched and administered by individual and collective art projects, occupying various types of space to provide an area for the production, display, or storage of artwork while fostering community values. The stated aim of creative spaces is to provide space for communal use. The main point

is that a creative space relies on its audience and usually has a solid financial plan to make sure it does well.

2. *Co-working spaces* can be thought of as organizations created by a small group seeking space for collaboration, with a fair number of partners of between 50 and 250 users.
3. *Maker spaces* share the same basic features as co-working spaces as they provide spaces for collaboration and co-creation. The primary distinction is that producers use specific tools that are typically not profit-driven.

> *"Creative tourism takes place within creative spaces or places of creation."* (McCartney & Chen, 2020, p. 161).

Moreover, urban tourism development and management are increasingly focusing on innovation. Increased interest in fostering creative tourism is consistent with creative city and creative economy development objectives in various major and minor areas. The policy spectrum of these future tasks, which aims toward attracting creatives, also addresses the needs of creative tourists, including urban travellers seeking extraordinary cultural opportunities. In a tourist market that is becoming increasingly competitive, traditional cultural tourist destinations are also changing through the application of creativity. Ethereal tourism experiences are emerging due to an understanding among key stakeholders that tourism should be immersive and interactive with the local culture. The creative shift occurring in the tourism sector shows the need for a growing requirement for creative classes to interact with tourists so that both groups can learn and grow (Li & Kovacs, 2022).

Consequently, researchers have developed several methods for classifying research relevant to creative environments. In addressing creative settings such as cities, places,

or hubs, it may be necessary to emphasize the process, the relative position to the target groups, and the principles.

3.2 Creative-oriented Studies for Urban Waterfront Development

Researchers and policymakers have made it very clear that urban waterfront development aspects are still relevant today. The construction of urban waterfronts must incorporate a variety of contemporary features to meet the evolving needs of urban life. Accordingly, the creative city notion is one of the current characteristics contributing to a city's economic viability and competitiveness. These features occur primarily in metropolitan areas. Therefore, waterfronts must discover ways to integrate unique characteristics to maximize the city's benefits, attract varied and skilled individuals, and foster innovative ideas. This section will present established studies investigating creativity in collaboration with waterfront development.

Waterfronts may face some difficulties in presenting their values to a larger audience. Besides, the creative city concept is a method of inviting qualified audiences into the city. Therefore, the creative city concept is often associated with urban settlements without considering the waterfronts. However, only a few researchers have pointed out waterfronts as creative milieus. A waterfront plays an essential role in a city's identity and image with its unique landforms, types, and activity opportunities.

Richards & Wilson (2007) mention in their book *"Tourism, Creativity, and Development"* that Barcelona has served as a model for its waterfront and street art from Montreal to Madeira. As part of the Beaubourg redevelopment in Paris, which houses the Pompidou Grand Projet Culturel, it has benefited from its cultural portion and the regeneration of the Raval neighborhood, as well as the MACBA art museum,

as one of the first places to express the area undergoing gentrification through art and visitor-centric facilities. Most visitors do not access the fee-based gallery displays or library but rather gather in the plaza, cafés, and foyer areas. Following Pompidou's renovation, its outdoor elevators are no longer open to the public, thus separating culture from the visitor. In contrast, Barcelona has invested heavily in public art and outdoor museums, with over a thousand sculptures built for urban spaces, including works by Miró, Lichtenstein, and Calatrava.

As noted by Vanolo (2008, p. 380) in his paper titled *"The Image of the Creative City: Some Reflections on Urban Branding in Turin,"* Turin, as a case study, has been defined by its clear and proven strategies. This evaluation relies primarily on subjective-objective documentation, and surveys are still lacking, except those disclosing slight increases in tourism activities. But it is evident that this focus on urban cultural initiatives has made the city quite stunning and vibrant in the eyes of its residents; in other words, the district's inner image is improving, as indicated by survey results. The appreciation of depictions of "the buzz" occurs in particular through the portrayal of prominent landmark locations in the city; this is the case of Murazzi, the Po River waterfront district (with several clubs for youthful nightlife), and Quadrilatero, a significant neighborhood recently gentrified by "creatives" (primarily young artists and trendy communities). Such places are a big part of the idea of a lively city because they show the stereotypical image of an urban playground to people looking for night-time entertainment.

Sepe & Di Trapani (2009) noted in their conference paper *"Creativity and Sustainable Urban Regeneration: Rethinking Cities for Cultural Tourism"* that two symbolic case studies of creative clusters, the Guggenheim Museum in Bilbao (Figure 10) and the

Milla Digital Project in Zaragoza (Figure 11) (which are both related to urban waterfront regeneration), are committed to residents, cultural tourists, and other visitors. Further considerations might be made, particularly concerning the efficacy of cultural tourism. During the completion stage of both projects, it is vital to ensure that policy decisions do not solely emphasize the potential for cultural development. As part of the long-term success of urban and cultural regeneration, it is imperative to make sure that the local people are involved and united at all levels of the process, which is significant to improving and centralizing identities in terms of economic, social, and environmental sustainability.



Figure 10: The Guggenheim Museum in Bilbao (URL5)



Figure 11: The Milla Digital project in Zaragoza (URL6)

In her conference paper titled *"Urban Policies, Place Identity, and Creative Regeneration: The Arabianranta Case Study,"* Sepe (2010) investigates and analyzes another case study relating to urban waterfront development to illustrate creative regeneration. In the case of Helsinki's Arabianranta, its history and identity must be considered and strengthened through a commitment to innovation, which will then stimulate a positive economic cycle. In the case of Arabianranta, the district's identity has evolved, influenced by its location and history. Furthermore, it involved the development of the most relevant urban policies and methods and the participation of students and residents on several occasions. In addition to these ingredients, several

others appear to have positive impacts. These impacts range from reducing property market strain to promoting events not solely focused on consumption. They also range from the participation of architects and artists to incorporating local socio-cultural capital. A recent study about the Helsinki Virtual Village portal showed that not everyone believes that a virtual community can add value. However, combining historical memory and technological innovation seems to be a winning combination.

The journal article, *"Waterfronts between Sicily and Malta: an integrated and creative planning approach,"* by Carta (2012) discusses how waterfronts have a "plural identity" that manifests as a polysemy that consists of seven categories, namely seven multiple points of view, which form the entire waterfront. Thus, the following principles are essential for the regeneration of creative waterfronts:

1. *Structure:* A fluid city should be perceived differently from a line in that it should appear as a series of places, functions, points of intersection, and seams that link the coastline and city and link the port with urban activities.
2. *Uses:* Fluid cities are more than just harbor areas. They are also places where various activities occur, such as work, relationships, culture, and leisure.
3. *Permeability:* A fluid city does not have a protected border. An osmotic interface is a porous boundary that is rough in some places and soft in others.
4. *Mobility:* Cities are not local hubs but rather crossroads where multiple infrastructure bands (of land and water) cross over and feed into each other; they are the centers of a globally-irrelative energy network.
5. *Settlement:* A settlement is more than a hub; it is a meeting point, a synthesis of space and community, an area where customs, functions, and flows come together.

6. *Production:* Fluid cities are not merely places of entertainment. They are also sites of production and trade; they are finely-tuned functional machines.
7. *Projects:* As a result, a fluid city is neither purely historical nor purely futuristic. But rather a synthesis of both. In this context, appropriately applied knowledge of history is necessary to create future visions, whereas implemented strategies provide appropriate interpretations of the past.

Kostopoulou's (2013) journal article *"On the Revitalized Waterfront: Creative Milieu for Creative Tourism"* examines how transformed waterfronts might serve as creative milieus to encourage creative tourism and enhance the urban economy. Port cities may improve their creative spaces and, consequently, their creative potential by maintaining historic harbor areas that highlight their unique character and fully utilizing the waterfront urban landscape to facilitate creative enterprises. Creative and cultural enterprises can be a potent tool for waterfront diversification, not only for generating revenue and employment opportunities but also for enhancing the city's image. Thus, historically transformed waterfronts as creative milieus can serve as catalysts for urban economic transformation and creative tourism development, allowing locals and visitors to rejoin historic harbor locations not just for business, socialization, or leisure but also for creative and cultural events. Uniquely designed agoras with the potential for creative usage by locals and tourists alike arise from revitalizing historic waterfront locations as creative milieus. In this scope, tourism exploitation of the natural and urban surroundings of the waterfront should be more compatible, including the creative use of the site, while maintaining the essence of the setting to establish an image of the city's intensity of competition. The geography of waterfront development at various regional and scalar levels implies that it is crucial

to conserve and promote the uniqueness of specific sites and ecosystems. For this purpose, cross-disciplinary assessments and management are necessary to explore the unique characteristics of different cities that have not yet entered into urban waterfront design. Future studies should be conducted on Mediterranean waterfront areas, whose history and tradition, representing the events of the Greek, Roman, Arab, and Ottoman empires, preclude conventional redevelopment projects and may establish a distinctive Mediterranean creative milieu image.

In their article *"Waterfront Areas as Hotspots of Sustainable and Creative Development of Cities,"* Girard, Kourtit, and Nijkamp (2014) note that historical port zones may place a short-term strain on a city's effective practices; however, they provide extraordinary sustainable and creative development opportunities for urban centers in transformation. Through the redevelopment and novel functionalization of the waterfront and harbor region, sustainability may be achievable with enhanced resilience and inventiveness in integrating economic expansion, ecological protection, and social opportunity. This study encourages a participatory approach to the regeneration of the urban waterfront, thus expanding the creativeness of the region and creating a new image for the area as the foundation for future economic, environmental, and cultural growth.

Jones (2017) states in his article *"Regenerating Urban Waterfronts, Creating Better Futures, From Commercial and Leisure Market Places to Cultural Quarters and Innovation Districts"* that the continued prosperity of waterfront regeneration strategies will be heavily dependent on a framework that represents approved development criteria that encourages inclusivity, mixed and innovative projects that promote sustainable planning, creativity, visionary design concepts, cultural diversity,

and innovation. Several outcomes provide the foundation for the successful initiation of urban waterfront initiatives and the achievement of comprehensive macro-regeneration and urban policy objectives, contributing to an area's long-term economic, social, and cultural development and well-being.

Miloš and Dragana (2021) state in their article *"Mythology as a Driver of Creative Economy in Waterfront Regeneration: The Case of Savamala in Belgrade, Serbia"* that shorelines can have global or entirely individual interpretations, depending on the viewpoint and impression of the residents, urban planners, stakeholders, governments, and artists. A smooth process between the city areas surrounding the waterfront demands meticulous planning to highlight the spiritual and practical relevance of the shore. The examples provided in the article are just illustrative of the participation of cultural workers in the redevelopment of the Savamala neighborhood, while they portray an effort to overcome the inadequacies of the creative city development approach as a whole. In Serbia, the creative economy is dominant in the public sector, particularly in the arts, culture, research, and development. Savamala is a unique and excellent example of an assembly of privately funded entrepreneurs, start-ups, artists' workshops, and cultural institutions. Savamala provided just the setting for such activities, and the linkage between cultural heritage and the creative economy grew significantly as the area gradually became a myth for those who participated in its creative economy. With all these improvements, this location has become one of the top tourist hotspots in Belgrade.

Contemporary port districts may thus serve both as land and water access points for people and commerce and as focal points for sustainable urban growth. To properly understand and exploit this opportunity, it will be necessary to construct an empirical

framework that establishes a connection between the new prospects offered by traditional port regions and creative urban development (Table 3).

Table 3: Keywords in the literature that discuss both "creativity" and "waterfront development" together

Studies	Keywords	
Tourism, Creativity, and Development *(Richards & Wilson, Tourism, Creativity and Development, 2007)*	Creative hardware's, Creative software's,	Creative Orgware
The image of the creative city: Some reflections on urban branding in Turin *(Vanolo, 2008)*	Place-branding by culture and creativity of the cities,	Attractive urban image
Creativity and Sustainable Urban Regeneration *(Sepe & Di Trapani, 2009)*	Socio-economic and Cultural impacts, Branding,	Distinctive image and identity,
Urban Policies, Place Identity and Creative Regeneration *(Sepe M. , 2010)*	Culture, Communication, Cooperation	Innovation, Quality of Space
An Integrated and Creative Planning Approach for Waterfronts *(Carta M. , 2012a)*	City competitiveness, City Quality, Structure, Uses, Permeability,	Mobility, Settlement, Production, Project,
Waterfront Regeneration as a Creative Milieu *(Kostopoulou, 2013)*	Culture, Open-door creative spaces, The diversity of Use,	Economic Growth, Quality of Environment, Quality of Life
Waterfront Areas as Hotspots of Sustainable and Creative Development of Cities *(Girard, Kourtit, & Nijkamp, 2014)*	Waterborne transport, Recreation, Culture and aesthetic,	Increased number of pedestrians, Improved image of history and future,
An innovative way of regeneration of waterfronts *(Jones, 2017)*	Vision and innovation, Culture, Creativity, Capacity building, The public realm, Cultural capital, Leadership, Resilience,	Economic and social Facilities, Fusion and Diversification, Entrepreneurship, Connectivity, Integration, Social equity
Mythology as a Driver of Creative Economy in Waterfront Regeneration: The Case of Savamala in Belgrade, Serbia *(Miloš and Dragana, 2021)*	Inclusiveness, Creative economy, Funded entrepreneurs, startups, artist workshops, and cultural performances,	Participatory, Art, culture and R&D, Cultural heritage and creative economy relationship.

Based on the research conducted on creativity and waterfront development, it has emerged that it is imperative to integrate the evolving needs of communities into policy and development practices. Moreover, it is vital to cooperate with the creative class at all stages of the waterfront development process to achieve a more holistic approach to growth. In light of these lessons, this thesis explores the creative environment and

waterfront development in detail and then integrates them to enrich broader creative waterfront principles. In this regard, the next section will describe the principles of a creative environment (Section 3.3). The following chapters will describe the method of integrating those principles (Chapter 4) and a case study analysis based on the incorporated model variables (Chapter 5).

3.3 Principles, Issues, and Trends of Creative Environment

Numerous research studies have examined the process and requirements for designing creative city models for specific cities using the case study method. A primary objective of those studies is to identify the potential of cities such as Bilbao, Zaragoza, Gothenburg, Baltimore, and other creative cities. In particular, these studies focused on the images of the city, opportunities for creative classes, and the role of technology, art, and science in culture and tourism. Public places, technological areas, and waterfronts “to name a few”, as well as areas that exhibit artistic activity, were studied in these studies.

A limited number of research articles exist regarding the opportunities for creativity in developed waterfronts by determining the economic, environmental, and cultural characteristics most conducive to creative tourism and creative industry development (Kostopoulou, 2013; Sepe & Di Trapani, 2009; Carta M. , 2012a). In this sense, this study aimed to contribute to the research on creative environments by developing waterfront development principles that incorporate creative environment principles.

3.3.1 Creative Economy

The creative economy is a model that encourages social inputs, cultural sensitivity, and human-based development. In addition to creating employment, it provides a way

to join the global economy (UN, 2004). In other words, the creative economy is a means for growing and developing the economy by using and evolving creative values.

The creative economy has a positive impact on economic and social activities by developing the social status of the city, creating employment, and improving the quality of life in the city. It has an imperative role in creative talent and the quality of entrepreneurship. From a sociological point of view, it shows how the creative class works and how dynamic their culture is. On the other hand, the economic dimension of creativity has significant implications for cities (Kerimoğlu, 2017).

Creative economy planning and implementations have a framework that offers cultural and creative hardware, software, and orgware (Richards & Wilson, 2007):

- Creative hardware: infrastructure/spaces for creative production, consumption, and presumption;
- Creative software: atmosphere/ambiance, fashion, quality of life, perceived diversity, 'vibrancy';
- Creative orgware: sectors, industries, clusters, policies, and governance.

The creative economy is a system characterized by rapid change and perpetual morphing, as suggested by its fluid name. It has posed significant challenges to policymakers, who have generally attempted but failed to establish basic policies to guide its development. Some authorities have struggled between appealing to economic growth or sociocultural advancement, tradition and heritage, or new cultural forms at the expense of fundamental policy goals. This era has taught us that: policies and perspectives that perceive the creative economy as separate or independent from the economy and society are counterproductive. Introducing the idea of the creative

economic ecosystem has helped rethink networks, connections, and interrelationships (Pratt A. C., 2021).

Conventional models are evolving into interdisciplinary ones. As in an orchestra, where different instruments collaborate to produce new symphonies, the union of economics and creativity brings together economics, culture, technology, and art. It provides a unique and untapped opportunity for economic growth. The creative economy, and hence creativity, is an effective method for dealing with the intricate dynamics of the rapidly evolving globalization era. It might become a tool capable of incentivizing and fostering economic growth in addition to job creation, human capital development, and the introduction of various financial channels. Creativity cannot be the primary and sole catalyst for economic growth. Therefore, it will interact and integrate positively with the numerous economic, cultural, and institutional forces that define a society (Colombo, 2015).

Literature on the creative economy focuses on the innovative processes identified in the relationships between industries involved in establishing economic foundations. These are in the spheres of technology, knowledge, and cultural output. Research in these fields demonstrates that the location of relevant enterprises and industries is crucial to innovation through rivalry and existing linkages and interactions. Furthermore, firms producing goods and services related to technology, human resources, and the arts are considered crucial to the global and local economies. According to the literature on the creative economy, industry innovation is reductive to the knowledge and skills of talented members of the creative class. According to research on urban residents, urban environments encourage diversity in career opportunities, cultural arts, and tolerance. These creative class individuals value active

recreational lifestyles, objectivity, and trust in particular, in response to research on their driving interests (Kuzin, 2008). Several studies highlight these forces, warning readers about the migration patterns of creative workers to urban environments that foster particular characteristics. They emphasize the increasing competition among regions seeking to establish creative economies. In Florida (2002), the economy is driven chiefly by the beauty of an urban setting; decisions are considered significant to the final success of a community seeking economic prosperity. Research indicates that this link is difficult to observe in real life. Critics contend that the model may not be adequate to explain the connection between the "creative class" and economic growth.

According to Costa (2022), the creative environment contains several values, such as cultural, economic, social, environmental, citizenship, and participation values. These economic value aspects of the creative environment include:

- Economic viability (about the direct production of economic activity and the vitality of the proponents, or "directly economic boost" arising from the development proposal);
- Economic expansion and local prosperity (assuming all indirect economic impacts on society and all externalities affecting actors in the territory);
- Structure changes (accomplished in conjunction with other economic factors, changes in economic structure, or structural changes).

3.3.1.1 Creative City

According to a literature review, creative cities are an emerging research topic across several disciplines. These include city planners, urban designers, architects, and researchers studying tourism, economy, management, and culture, among other fields.

Such evidence indicates that creative cities can exert a significant impact on cities. The term and idea of the creative city appeared in the late ’80s. The creative city was a tool for the regeneration of cities in the globalization process. At the beginning of the ’90s, the creative city became more popular in a discussion where several cities emerged as potential cities that motivate creative people to produce and invent innovative ideas, including London, Tokyo, New York, and Amsterdam (UNCTAD, 2008). Nowadays, creative individuals have become an invaluable source for the successful future of cities. The world is currently living in a creative age, and the people who have original ideas play an increasingly significant role in cities’ economic growth, competitiveness, and attractiveness.

Landry & Bianchini (1994) recommend a series of practices to become a creative city, which includes:

- Removing the impediments to creativity that bureaucracies create,
- Establishing a creative environment by analyzing organizational errors and achievements,
- Laying the groundwork for a creative environment by recognizing creative abilities as a catalyst like immigrants,
- Creating a creative environment by striking a balance between cosmopolitanism and localization,
- Establishing a creative atmosphere by creating space for creative individuals and endeavors,
- Establishing a creative environment through revisiting urban management.

Further, Landry (2000) describes the creative milieu or the physical place where ideas and inventions develop. It consists of both physical structures to accommodate activities and soft structures to facilitate network connections. While the material is philosophical, Landry gives a set of methods for creative thinking and action in the context of urban planning. According to Landry, this is a mental toolkit comprised of a five-step plan for promoting the Creative City:

1. Planning and Preparation Stage: Find a problem and make people aware of it; collect examples of solutions; and set up cross-sector partnerships.
2. Evaluation of Potential Obstacles: evaluate local resources to determine the opportunity for improvement and the viability of a creative strategy. The evaluation should include a description of creative projects and their potential problems to enable a process to get around them.
3. Formulating measures for determining the success and failures of strategic objectives
4. Execution involves carrying out the task and managing it. Implement trial initiatives to encourage innovation and assess whether the activity should be a part of a broader Creative City Action plan or a small-scale effort.
5. Communicating, spreading, and expressing: Academic research and public meetings should be used to communicate successes and errors.

Advanced research and arguments about the creative city deal with the application of ordinary things, with extraordinary methods, invented by ordinary people in every sphere of life (Thackara, 2006). As one of the two pioneers of the creative city concept, Richard Florida' focuses on innovation, technology, and talented people. The other prominent name for the creative city concept is Charles Landry, while most other

scientists concentrate on location and culture. Due to this, tangible principles are more significant for Florida, and intangible aspects carry more weight for Landry (Trueman, Cook, & Cornelius, 2008).

Tolerance refers to accepting people from all backgrounds, races, and social classes. Talent refers to university graduates, artists, architects, or culturally influential individuals. In addition, technology pertains to innovation and high technology. A place can develop only when it incorporates these 3T's: Talent, Technology, and Tolerance (Florida, 2005). There is no doubt that talented people and technological developments have relations and provide economic benefits that allow for the growth of places. Furthermore, tolerance provides attractive places for talented and creative societies that provide qualified population growth (Hansen, 2007). Figure 12 illustrates the relationship between 3T, showing that they should exist together in balance; only one of them is not sufficient for a successful development.

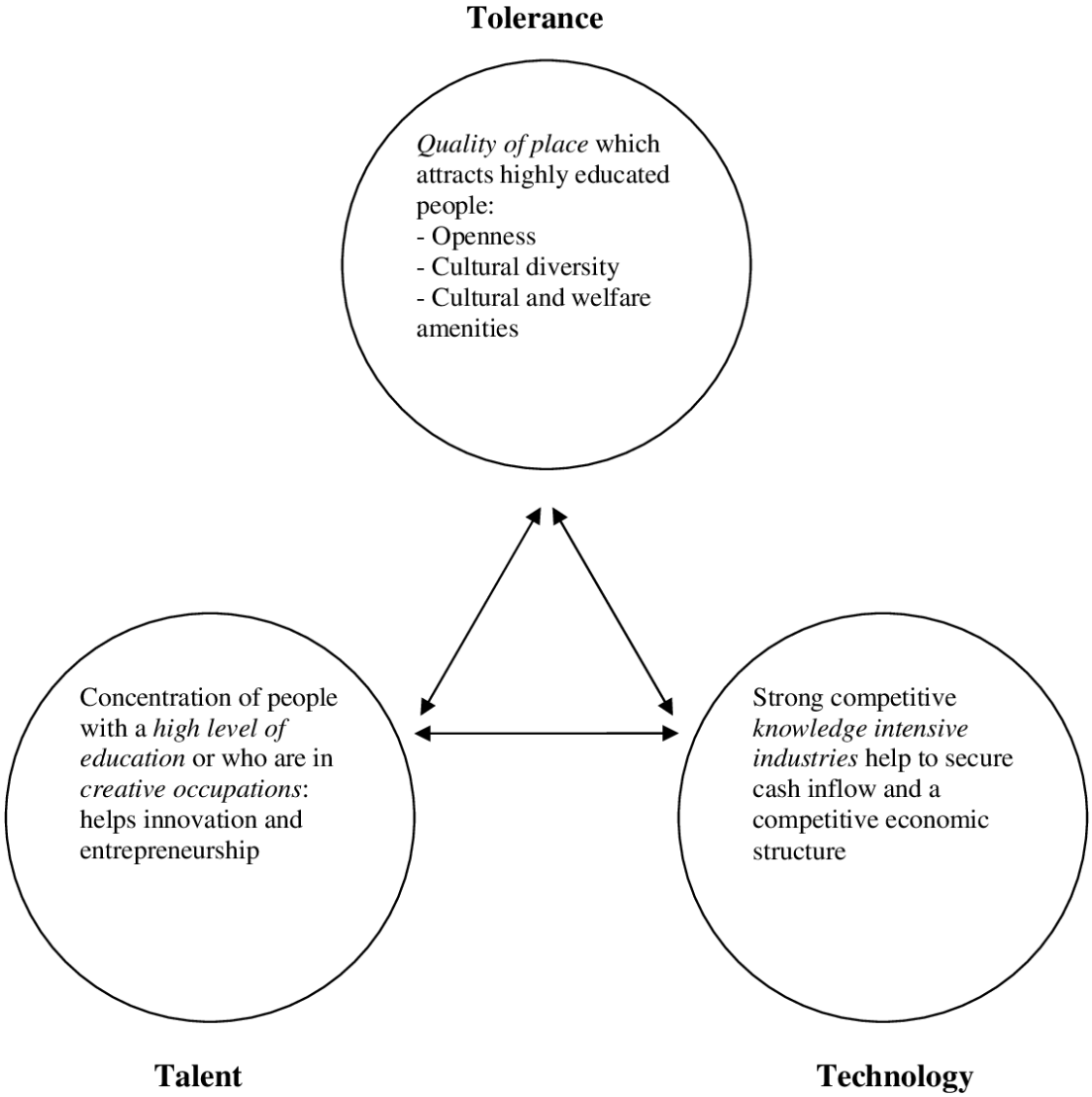


Figure 12: Diagram illustrating the relationship between tolerance, technology, and talent (Kalsø Hansen, 2007, p. 4)

In addition, Carta (2012b) argues that accessibility, relationality, experience, connectivity, and multiplicity are essential terms for new urban interactions; the Italian creative city, for example, no longer customizes itself solely through the basic types of sectorial, property, and materiality. In the current evolution of the creative city, culture, communication, and collaboration are the primary competitive criteria, particularly from an Italian perspective (Figure 13).

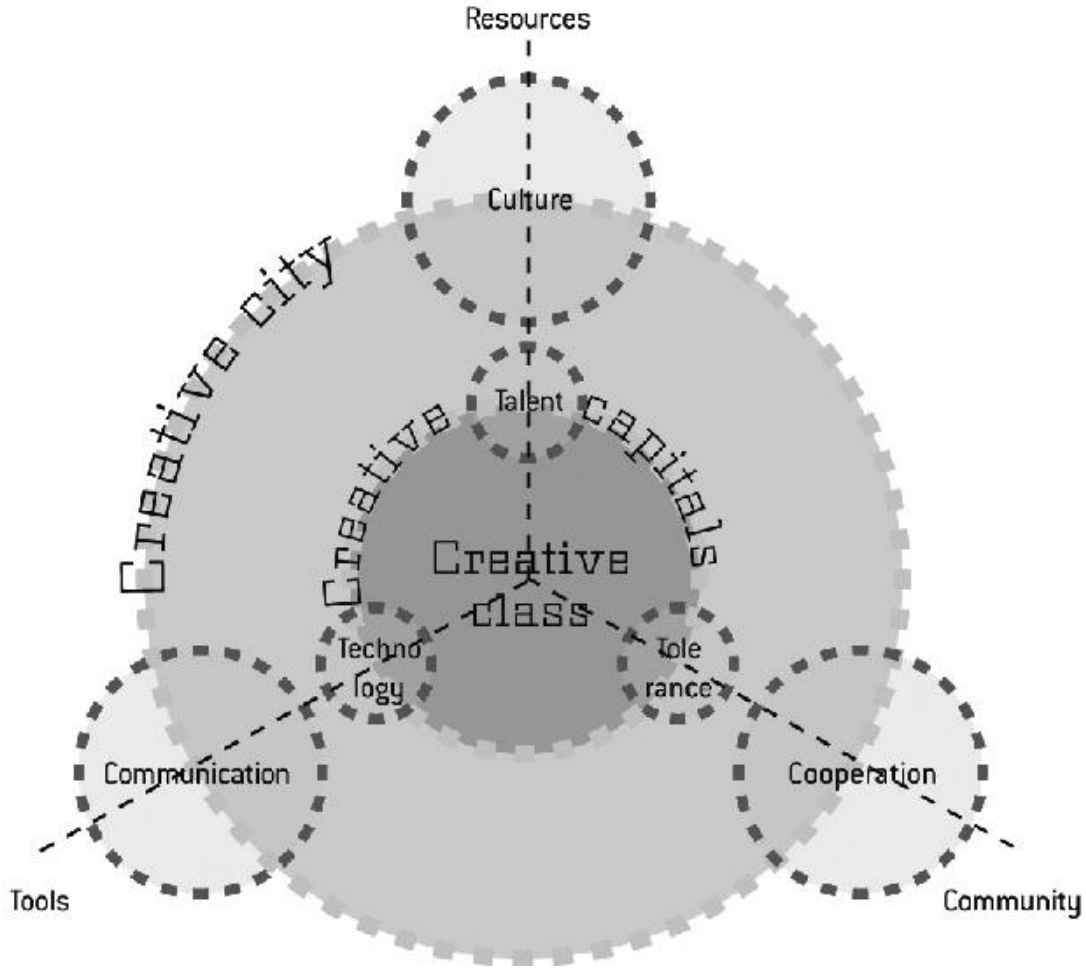


Figure 13: current condition of creative city factors (Carta M. , 2012b, p. 3)

The UNESCO Creative City Network (UCCN) is a 2004 initiative of the United Nations Educational, Scientific, and Cultural Organization (UNESCO) to facilitate cooperation between cities that prioritize creativity throughout urban development. Today, UCCN consists of 180 members from 72 countries, representing seven creative disciplines: Crafts and Folk Art, Design, Film, Gastronomy, Literature, Music, and Media Arts (Table 4).

UNESCO's (n.d) goal was to make it easier for the public and private sectors and the local people to work together so that:

1. Increase the production, delivery, and distribution of cultural activities and commodities;
2. It creates creative and innovative hubs and broadens opportunities for cultural sector artists and professionals;
3. It encourages access to and participation in cultural life, especially for marginalized or vulnerable individuals and groups;
4. Integrate culture and creativity fully into strategies for sustainable development.

Table 4: Some examples of creative cities in seven fields (UNESCO, n.d)

Creative fields	Some examples of creative cities
Crafts & Folk Art	Kütahya, Limoges, Cairo, Tunis, Carrara…
Design	Istanbul, Budapest, Graz, Torino, Bilbao…
Film	Sofia, Bitola, Rome, Terrassa, Bristol…
Gastronomy	Gaziantep, Parma, Alba, Burgos, Zahle…
Literature	Baghdad, Lviv, Prague, Heidelberg, Barcelona…
Music	Bologna, Liverpool, Glasgow, Kansas City, Kingston…
Media Arts	Lyon, Braga, Linz, Austin, Guadalajara…

Urban design can exhibit in numerous ways. It demonstrates the complexity and sophistication of this field (Bahrainy & Bakhtiar, 2016). Since the urban design concept emerged in the late 1950s in North America, this field has existed. And this field started to address civic issues by developing large-scale designs (Carmona, Heath, Oc, & Tiesdell, 2003). Architecture, landscape architecture, and urban planning find common interests in urban design (Carmona, Heath, Oc, & Tiesdell, 2003).

City governance and policy implementation require creative approaches to meet societal demands. According to Eglitis and Ezara (2016), creative city implementations consist of the following:

1. There are several strategies for the city, including a vision and action plan. It should offer economic development with direction.
2. Investing in professional and postsecondary education has been essential to meeting the economic needs of future generations.
3. Implementing social innovation into public governance will engage the authorities in formulating and integrating policy initiatives.
4. Providing supportive environments, including physical space, business incubator services, and knowledge and skill development opportunities to encourage creative sector entrepreneurship is essential.

Culture, innovation, information, and technology certainly contribute to the creative environment, and talented individuals feel comfortable in such an environment.

It is possible to define the creative urban environment concept in various ways and perspectives that show this is a multidisciplinary issue. The topic of the creative urban environment has been discussed primarily concerning culture over the past few years. Later, the importance of novelty ideas, flexible spaces, mixed spaces with artists and skilled people, physically liveable spaces, psychologically completed spaces, attractivity, technology and research, inspiration spaces, inventions, gentrification problems, instability, diversity, usefulness, ethnicity, identity, profile, leadership, networks, security, education, different arguments and discussion opportunities, public policies, productivity, loyalty, authenticity, economic developments, branding and marketing the city, art-led and place-based development with multisector partnerships, urban planning, adaptive reuse of heritage buildings as an art gallery or other kinds of creative activity became significant aspects of cities today (Table 5).

Table 5: The evolving and changing nature of creative environments

GOLDBERGER (1996)	**LANDRY (2000)**	**HALL (2000)**	**McCREERY (2001)**	**FLORIDA (2002)**
-Instead of consumption, creative places are the areas where cultures are created.	- It is a welcoming place for creative people. Creative people can use their creativity to produce novel ideas.	-Creativity is a source of instability for creative change. It is a flexible space that is open to change. -Creative places have a suitable mixture of artistic and other skilled workers.	-A creative city is a place that is physically liveable and psychologically complete. There is room for new creative achievements, which are supported by created spaces, myths, memories, and dreams.	-The creative city is an attractive and tolerable space for talented people and technological developments.
LANDRY (2006)	**THACKARA (2006)**	**SCOTT (2006)**	**TRUEMAN et.al. (2008)**	**SWYNGEDOUW (2011)**
-A creative city is an open and inspiring space for decision-makers and stakeholders to harness the potential of cities as products, tools, and urban qualities.	- The location of spontaneous inventions made by ordinary people.	- The creative city concept of Florida is only attractive to elite groups that ignore the comfort of locals and workers and lead towards gentrification.	- The creative city can become more appropriate if it consists of the 12 dimensions listed below. *.innovation, .instability, .culture, .diversity, .ethnicity, .identity, .profile, .leadership, .networks, .technology and research, .security, and .education.*	-The creative city should not only be limited to the creative class. These spaces should be places for all kinds of people, where there are different arguments and discussions.
RICHARDS (2011)	**LASTEN, & UPCHURCH (2012)**	**NICODEMUS (2013)**	**GRODACH, CURRID-HALKETT, FOSTER' & MURDOCH (2014)**	**GOLDBERG-MILLER (2015)**
Creative cities, the creative industries, creative districts, and creative individuals attract policy-makers, the media, and the "creative classes" in general. People tend to develop their creative potential by enhancing their productive or consumption skills.	To create some cultural amenities, temporal festivals and fairs, and creative destinations, the city planners needed to be aware of the authenticity of the experience. In this sense, they can offer opportunities for varying demographics.	Creative city-making is known as "creative place-making." It is burning with the idea of making the physical places substantial arts and cultural intervention areas.	The creative economy has a strong relationship with culture. A cultural destination planning approach can promote cultural motivations and loyalty. It is important to protect authenticity in fast-developing cities.	"Creative Cities" are places where cultural policy, economic development, and state and private support come together and play vital roles. -Stakeholders, including urban planners, policymakers, elected officials, and the cultural community, put forward an agenda based on various planning documents to brand the city as a creative destination and cultural powerhouse.
REDAELLI (2016)	**GRODACH (2017)**	**BATABYAL AND BELADI (2018)**	**GOLDBERG-MILLER (2019)**	**O'CONNOR, GU, & LIM (2020)**
Creative place-making focuses on arts-led, place-based development through multisector partnerships.	The creative city is taking shape through the visions of urban cultural and economic development policies. It is still the trending discussion topic in today's policy arena.	How can cities be creative? Cities can utilize local public goods such as cultural amenities, quality schools, and public transit to effectively carry out the "attract" function for the creative class.	There are three aspects of the creative city paradigm that help to understand the breadth and depth of this nascent topic area: -economic development. -urban planning. -public policy.	The Creative City included projects related to heritage, the construction of new art galleries and music halls, the promotion of festivals and cultural tourism, the development of housing and upscale retail and leisure facilities, and the creation of start-up and co-working spaces, etc.

Creative cities allow decision-makers and stakeholders to realize the potential of their cities and transform them into high-quality products, valuable places, and urban qualities. Further, creative cities are adaptable spaces ready to change and adapt to upcoming developments (Landry C. , 2006). The cities need economic gains and a dynamic atmosphere created by designers, engineers, architects, artists, young managers, academic platforms, advertisers, media organizations, and fashion industries (Vivant E. , 2013). Several elements of the creative cities include innovation, cultural dynamics and interactions, artistic productions, knowledge exchanges, and lifestyles (Girard & Nukamp, 2009).

In their conference paper *"Looking for the Creative City: Urban Development through Education and Cultural Strategies in Medellin, Colombia,"* Zamudio and Barar (2013) discuss the pros and cons of creative cities based on research conducted at La Salle University's Faculty of Habitat Sciences, Program of Architecture and Urbanism: The use of technology to create links, the opportunities for redeveloping problematic urban areas, the independence of urban centers from manufacturing, the value of innovation and creativity, the promotion of cultural practices that may enhance social cohesion and investment, and the promotion of city or town branding that could lead to a rise in tourism are among the advantages. Several disadvantages can arise, such as the possibility that urban improvements will result in gentrification, the broadening of segregation gaps through urban areas, the transformation of redeveloped locations into intellectual ghettos, the unemployment of great numbers of former manufacturing workers, the inflation of land and real estate values, and the decreased employment security of creative sector workers. There have been several recommendations based

on the potential dangers of creative cities. The further suggestions of authors are as follows:

1. Inclusion of everyone in the urban regeneration process
2. Regulation of real estate prices and rental costs
3. Reinvesting earnings in urban development for the poorest communities.
4. Engaging local communities at the beginning of the development process.
5. Giving new employees more job security.
6. Fostering an urban area that has a large number of different people is a vibrant city.
7. Providing access to more inclusive public venues for integration.
8. Promote cultural and educational events that bring people of all social classes together, not just the creative class.

In addition to the positive impacts of the creative city, a few scholars have emphasized the unfavourable effects of creative workers in cities. These researchers believe that the creative class may cause gentrification and displacement (Ley D. , 2003; Vivant & Charmes, 2008; Scott, 2006). Conversely, most researchers have noted that talented people can produce innovative and impressive productions, which provide a valuable economic boost to the city and enhance the creative class. This thesis will be focused on the beneficial attributes of creative environmental concepts to demonstrate the attractive and creative qualities of waterfronts. Thus, a thorough assessment of relevant discussions and systematic integration of achieved principles constitute critical factors in determining the adequacy of this study.

3.3.1.2 Creative Class

The creative classes fall into two distinct categories: super-creative core and creative professional. The super-creative core group includes scientists, engineers, university

professors, poets, writers, workers from the entertainment industry, artists, architects, designers, culturally significant individuals, researchers, and analysts. Creative professional groups represent the people in work management, high technology, financial services, law, and health services (Florida, 2002). The creative class prefers to locate in places with 3Ts (Figure 12). Florida (2002) also thought of the "creativity index," which is a combination of the "creative class index," "innovation index," "diversity index," "talent index," "gay index," "melting-pot index," and "bohemian index." He wanted these to be measures of the quality of a place, especially the things that attract talented people to a location.

The creative class consists of artistic and professional individuals. Certain types of urban services, social attitudes, and individuals must exist to encourage such individuals to settle in the city. Among these are collaborative environments, outdoor recreation, and social tolerance. In her Ph.D. dissertation, *"Creative Clusters and Place-Making: Analyzing the Quality of Place in Soho and Beyoglu,"* Durmaz (2012) explains that creative cities utilize a variety of terminology to identify the creative class. These definitions vary based on the nature of the activity involved, whether this comprises just non-profit activities, such as the arts, or for-profit activities, such as architectural design and media. Across the classic literature on location theory, there are two approaches: the firm-oriented approach (the industry approach), which explains regional concentrations of creative firms operating on path-dependent urban workflows, and the artist-oriented approach (the occupational approach). The second approach emphasizes the significance of place quality. Those involved in creative industries concentrate on the products they offer, whereas those in creative professions concentrate on the skill content and work method. In addition, creative knowledge

workers are creative entrepreneurs who are not just artists but also involved in the business.

Though Florida praised the "soft infrastructure" of creative urban environments, the creative elite would demand accommodation, leisure and recreational amenities, upscale hospitality and commerce, and perhaps a gallery, and this would require capital investment and development approvals. As seen by the tidal wave of global capital-led urban development over the past two decades, the term "gentrification" is already rendered useless by its enormity and scope. Florida's "creative class," which is socially exclusive, focused on consumption, capital-intensive, top-down, and fully justified by strict economic measures, led to almost the opposite of what the Creative City ideal predicted (O'Connor, Gu, & Lim, 2020).

3.3.1.3 Creative Industry

> *"Creative Industries are those industries which have their origin in individual creativity, skill, and talent and have a potential for wealth and job creation through the generation and exploitation of intellectual property."* (DCMS, 2011, p. 6).

The creative industries include film and television, publishing, museums, music, performing arts, programming skills, crafts, architecture, design, and those who engage in creative activities outside of the creative industries. A creative economy includes those working in the creative industries and those with creative responsibilities outside of the creative industries. The occupations related to this definition appear in Table 6. The creative economy is also valuable insofar as its relationship with individual creativity indicates that it generally entails the invention of new knowledge, which will generate spill over advantages for other sectors. Typically, creative sectors generate technological advancements, especially in the IT

sector. Additionally, the creative industries help disseminate knowledge, such as through publication. The news media, in particular, and other sectors of the creative economy, can promote democratic accountability by providing the latest information, probing institutions, and questioning decisions (Deloitte, 2021).

Table 6: Creative Occupations (Deloitte, 2021, p. 11)

Creative Occupations Group	Example subgroups
Advertising and Marketing	Marketing and sales directors Advertising and public relation directors Public relations professionals Advertising account managers and creative directors Marketing associate professionals
Architecture	Architects Town planning officers Chartered architectural technologists Architectural and town planning technicians
Crafts	Smiths and forge workers Weavers and knitters Glass and ceramic makers, decorators, and finishers Furniture makers and other craft woodworkers Other skilled trades not elsewhere classified
Design: product, graphic and fashion design	Graphic designers Product, clothing and related designers
Film, TV, video, radio, and photography	Arts officers, producers, and directors Photographers, audio-visual and broadcasting equipment operators
IT, software and computer services	Information technology and telecommunications directors IT business analyst, architects, and system designers Programmers and software development professionals Web design and development professionals
Publishing	Journalists, newspapers and periodical editors Authors, writers and translators
Museums, galleries and libraries	Librarians Archivists and curators
Music, performing and visual arts	Artists Actors, entertainers and presenters Dancers and choreographers Musicians

The cultural and creative industries fall into three broad classifications. These tasks involve art and culture, design, and the media. One international network for creative industries is the Department for Digital, Culture, Media, and Sport (DCMS).

The objective was to foster cooperation between creative industries, improve the creative class's level of expertise, and subsequently discuss economic difficulties (DCMS, 2001). The Department for Culture, Media, and Sport has classified the creative sector according to thirteen creative fields (Table 7).

Table 7: Creative industry fields of DCMS (DCMS, 2001)

Advertising	**Designer Fashion**	**Publishing**
Architecture	**Film & Video**	**Software & Computer Services**
Art & Antiques Market	**Interactive Leisure Software**	**Television & Radio**
Crafts	**Music**	
Design	**Performing Arts**	

Creative industries integrate culture, communication technology, and innovation into the production process, tradable commodities and services, and market-based consumption. It requires hardware (equipment, technology, and studios) and software (creative individuals, image creators, ideas, and sounds); performance, theater, visual arts, installations, dance, and musical performances (Montgomery, Developing the media and cultural industries, 1996). The creative industries have a wealth of content, including culture, art, media, and design. These opportunities are crucial to cities' economic development, employment opportunities, and social well-being. It makes it possible for creative cities to accommodate contemporary industries such as software programming, publishing, architecture, design, radio, television, advertisements, film, music, performing arts, visual arts, graphic arts, video, computer gaming, and fashion (UNCTAD, 2008). The creative industries play a vital role in economic development in cities by boosting productivity, providing employment opportunities, and fostering creative clusters (like advertising, architecture, art trade, software, computer games, film, and photography). The responsible authorities must establish studios and working spaces for creative industries. Efficacious regeneration activities also

determine the suitability of creative industries. Some resources highlight the disadvantages of regeneration projects. Inappropriate regeneration has led to the phenomenon of gentrification, which has resulted in cultural collapse and identity loss. Conversely, appropriately developed creative industries can enhance social interaction and diversity within the city. A significant part of the creative and productive life of cities is attracting children and younger generations to creative activities and artistic pursuits (London Development Agency, 2006). Various creative sectors include craft, arts, culture, the creative industries, research and development, and copyright businesses. Focusing on these three areas has two significant benefits. First, they encompass a wide variety of economically valuable creative activities. Second, because each category is measured based on distinct statistical sources and indications, it is possible to capture multiple characteristics of the creative economy. Creative Industry 4.0 will benefit from the possibilities presented by new technology. From the design and production perspective, four significant opportunities exist: higher efficiency; unlimited creativity; increased interaction; and flexibility that enables cost-effective customization. The promise of knowledge-based creative products is not limited to the digital creative business; it also applies to more traditional arts and crafts (UNCTAD, 2022).

3.3.3 Principles of Creative Environment

The thesis's other principal goal is to establish appropriate guidelines for fostering a creative environment. This sustained performance depends on various external circumstances, including economic and political changes at the local, national, and international levels. Aspects of the creative environment: "promoting entrepreneurs; creation of creative spaces; protection of culture; updated and renewed physical comfort; provision of creative activities; political support; social cohesion; quality of

life; tolerance and open-mindedness; innovation and technology; and awareness of community" will be the primary factors explored in this thesis. Each of these eleven principles has critical components that contribute to the formulation of appropriate criteria for assessing the effectiveness of a creative environment.

In addition to physical patterns like authenticity, attractiveness, spatial diversity, the richness of cultural and leisure features, cinemas, open-air sports facilities, and the presence of third places for socialization, Florida (2002) suggested that socio-cultural aspects like openness to diversity, ethnicity, sexual orientation, tolerance to alternative styles, the existence of a vibrant cultural image, street culture, and urban buzz are variables in the soft infrastructure (the appearance of the city and socio-cultural characteristics) and hard infrastructure (job opportunities, higher wages, and affordability of housing). Based on the creative assets index, the following factors and parameters have been identified as critical when explaining creative cities: openness and tolerance; human and social capital; government regulations; innovation, research, and development; new technologies; actions involving the natural environment; quality of life (venues, amenities, facilities); cultural capital; participation in cultural activities; tourism; recreation; and creativity (Hartley, Potts, MacDonald, Erkunt, & Kufleitner, 2012).

3.3.3.1 Promoting Entrepreneurs

Florida (2002) asserts that creative classes have the goal of generating innovative forms. They are skilled professionals who produce ideas as opposed to physical objects. They may be innovators or entrepreneurs. These individuals' "core groups" and "professional groups" are employed in the commercial, financial, legal, and medical professions. The concept of "creative entrepreneurship" arises from several

investigations as the fundamental bridge that enables researchers to link creativity as a human characteristic to the economic realm. Beginning in the 1970s, the emergence of entrepreneurship as a means of self-expression strengthened this trend. Thus, referring to the creative class is a clear admission of this truth, with the final focus being on the individual (the entrepreneur) as the source of creativity (Gerosa, 2022). A creative entrepreneur is an individual who is not just an artist but also an entrepreneur (Smit, 2011).

Following the path of evolving and institutionalized economies, new urban scholars have reemphasized the importance of effective regulations or organizations (economic efficacy). The evolving paradigm of cities relies on entrepreneurship and citizen appeal. Because of their visual and promising nature, urban areas enjoy a significant level of popularity. It remains to see what attracts competent locals and potential immigrants. The objective of index creation is to provide an answer to this query (Hartley, Potts, MacDonald, Erkunt, & Kufleitner, 2012). Consequently, typical objective indicators of demographic or market expansion are vital but insufficient for evaluating creative cities. To envision a creative city, we must also understand how it promotes the production of fresh concepts and how well it can accommodate modes of meaning and significance that are not rooted in the present. How does an urban environment function as an experimental environment for the residents whose lives revolve around such endeavors? As a demographic generation, this consists of the young, who want to begin productive lives and have weak links to previous arrangements, and entrepreneurs and immigrants who wish to reinvent or enhance their lives. All are only successful to the extent that they can influence the lives of those around them, which they can do by influencing their perceptions of significance and

choices of worth. In a creative city, residents must be receptive to altering their preferences, and interpretations of significance, in response to the examples and recommendations of socially linked and respected individuals. If this social learning is possible, cities are inherently creative and can become global cities (Hartley, Potts, MacDonald, Erkunt, & Kufleitner, 2012).

Cities will need to foster artistic, technical, and creative abilities; encourage local talents; expand the creative industries; provide a lively cultural and artistic environment, and arrange services like education to enable all this. The city must ensure a harmonious match between such operations and purposes and the built structures. In general, educated individuals prefer urban areas and city regions that function on a micro-scale, are legible and permeable, and have appropriate and acceptable land-use mixtures. It is also crucial to support firms by maintaining a low tax base. Cities that fail to do so will fall behind in the upcoming creative economy or any economy. Creativity should be encouraged, but only in tandem with industrial, technological, and economic development. The most significant people in this are visionary political leaders, artists, innovators, and entrepreneurs. The former sets the conditions for the latter to invest and succeed (Montgomery, 2005).

Hill, Manning, and Frost's (2022) empirical findings highlight the innovative perspective of "entrepreneurial placemaking." Ongoing research is required to investigate the effect of entrepreneurial placemaking in the evolution of creative hubs in evaluating the extent to which co-creation and multi-actor rethinking might improve creative hubs and the microbusinesses that comprise them. Further study is needed to verify these results in various creative sectors to provide alternative perspectives on

how local artisan entrepreneurs might rethink and economically expand creative clusters.

3.3.3.2 Creation of Creative Spaces

Creative spaces are hotspots for cultural and creative production and consumption that attract resources, individuals, and capital. In addition to boosting well-being and quality of life, creativity contributes to the local educational system, space for integration and experimentation, and space for convergence and exploration. People's happiness is linked more and more to the social, cultural, and environmental aspects of their lives, including economic factors (Bury, 2013). Similar definition comes from Chaloupková and Kunc (2022) as creative spaces are independent creative and cultural spaces. Individual and collaborative art projects typically establish and maintain these spaces that provide a physical location for the production, display, or storage of works of art while fostering community values. The original purpose of creative spaces was to give communities space. The key argument is that a creative space relies on its community and usually has a robust financial strategy to support it.

The term "creative space" indicates a phenomenon of inventive workplace design that is relatively new. It consists of two keywords, "creative" and "space," which identify the research field between creativity and the built environment as represented in Figure 14 (Thoring, 2019).

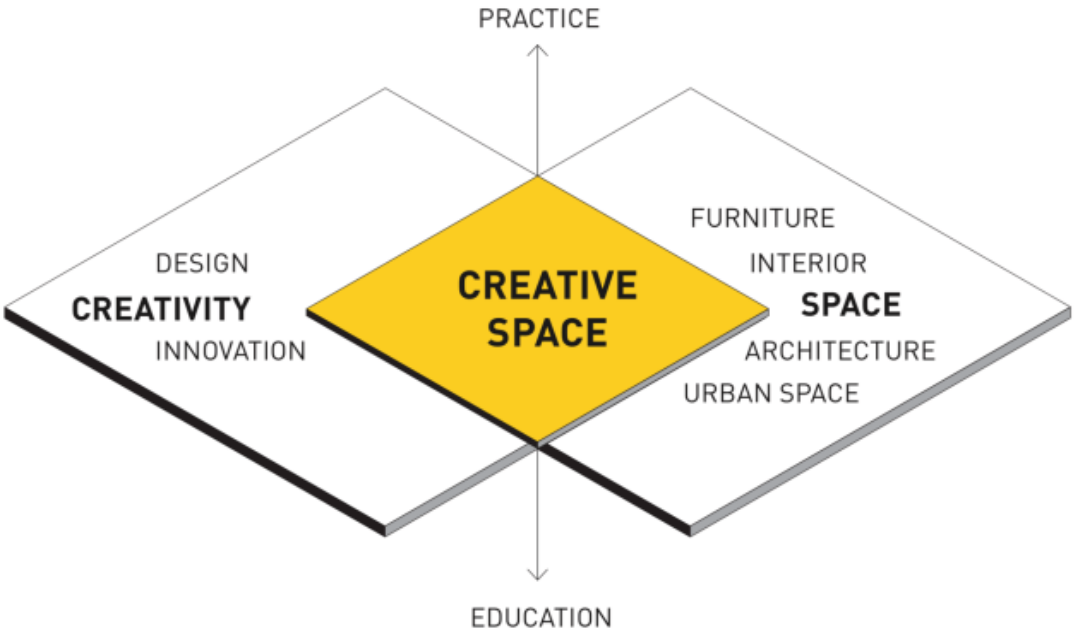


Figure 14: Defining creative space as the intersection of creativity and build space (Thoring, 2019, p. 23)

Thoring's (2019) empirically-based categorization of creative spaces defined five categories and five features of a creative environment (Figure 15). Creative space falls into five categories related to creative activities: personal space, collaborative space, making space, presentation space, and intermission space. Furthermore, a creative workspace may provide the following characteristics: it may provide stimulation, serve as a knowledge processor, act as a reflection or influence of organizational culture, facilitate social interaction, and facilitate specific workflows. Thoring (2019) says that successful creative work needs to provide enough stimulation, make it easy to process information, fit into a culture of innovation, encourage people to talk to each other, and help process workflows.

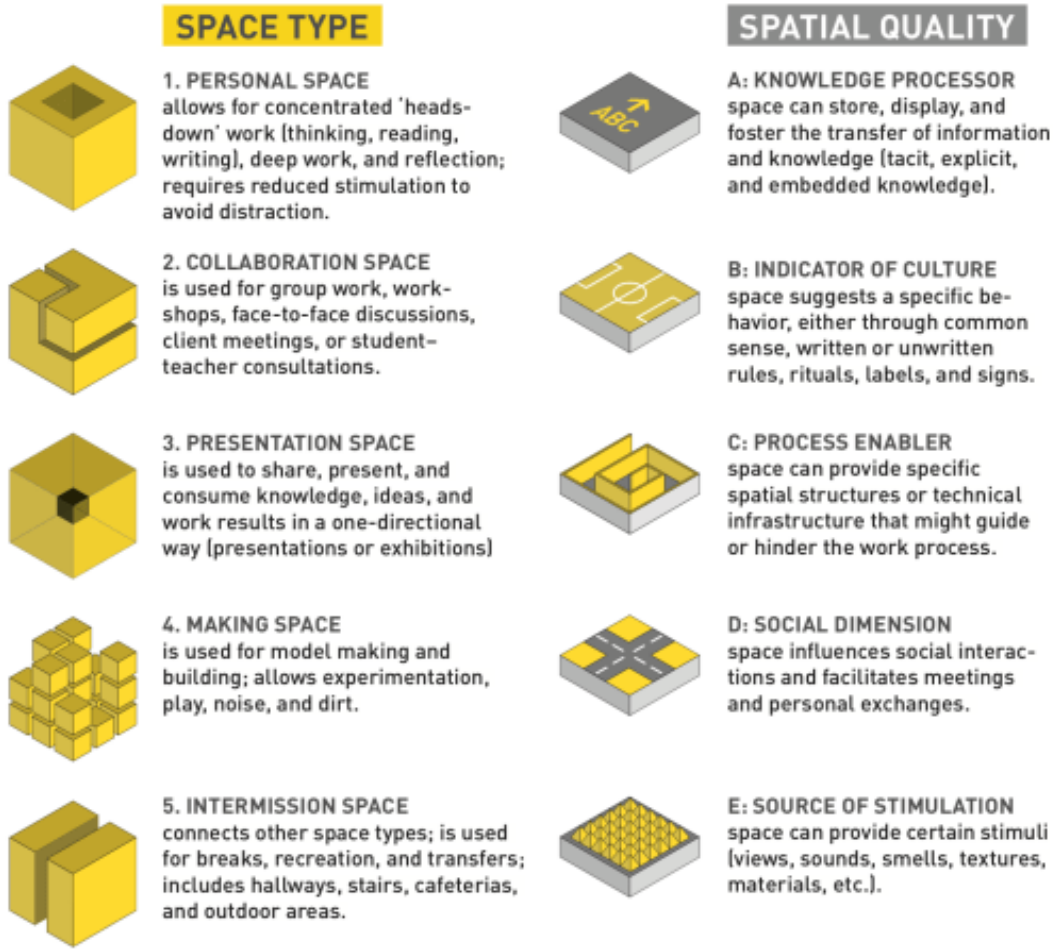


Figure 15: Defining creative space typologies and spatial qualities (Thoring, 2019, p. 85)

Creative tourism occurs in creative spaces or places of production, including art studios, art villages, historic districts, and those linked to creative sectors like film and fashion. The term "creative spaces," or rather those who allude to "spaces for creative activities," refers to "locations where creative activities occur to provide tourists with genuine cultural experiences and guide them through an understanding of the culture and the people in that culture." Those creative spaces can serve as a magnet for creative classes, whose involvement can enhance the creative vibe of a location for locals and visitors. In addition, their involvement can promote local identity, innovate, and extend the tourism experience, thus giving the city a competitive edge (Li & Kovacs, 2022).

3.3.3.3 Protection of Culture

Cities are sophisticated spaces whose performance is evaluated based on their creative class, educational level, surroundings, mobility, and technology. They serve as critical nodes (networks) to help make the necessary creative changes to enhance social cohesion and productivity and thus protect regional natural resources, history, and culture (Rodrigues & Franco, 2018). Cultural diversity refers to the non-biological behaviors that separate one society from another, their situational values, and define the dynamics of their resiliency, adaptation, or resistance to changing circumstances or external forces.

The city is constantly striving to solve its problems by increasing or removing them. Currently, concerns for the prosperity of the city demand that it be defined by openness, tolerance, and diversity, encouraging culture, recognizing differences, and abolishing the hierarchies between economic, social, and environmental advancement (Vlachopoulou & Deffner, 2011). The growth of a creative environment is dependent on the unique qualities of locations, such as the urban environment, cultural resources, demography, and social aspects (Kourtesis, 2008).

It is important to utilize cultural resources such as art, heritage, cultures of youth, ethnic minorities, communities of interest, traditions, dialects, rituals, perceptions of a place both locally and externally, jokes, songs, literature, myths, tourist guides depicting the place, topography, natural and built environment characteristics, diversity and quality of leisure, culture, drinking, eating, and entertainment facilities, as well as local crafts when developing a cultural planning approach (Bianchini & Ghilardi, 2004).

Shao et al. (2019) say that the effect of culture on creativity can manifest in three ways:

1. Different cultures or contexts have different implicit and explicit concepts of creativity.
2. People in different cultures, especially those from individualist and collectivist cultures, exhibit variation in their favored creative processes and creative processing methods when involved in creative endeavors, such as usability seems more important than innovation in the East, whereas innovation is at least as important as usability in the West;
3. Creativity can be evaluated using diverse methods that rely on culturally relevant topics or resources, and outcomes are only valid when culturally related or fair measurements apply.

Culture and creativity can serve as resources for revitalizing products, industries, locations, and catalysts to create urban and regional economic structures. Nevertheless, culture and the economy are entering a new era characterized by a growing link between culture, creativity, and technological innovation (Vermeulen & Psenner, 2022). Cultural and socioeconomic conditions influence how individuals improve their creativity. It must gain exploration while investigating creativity or introducing a Western-developed paradigm and methodologies for the creative process. According to the environment in which it will operate, the creative product is valued differently, perceived to possess varying degrees of creativity, and solves issues differently (Cabra & Guerrero, 2022).

Costa (2022) describes creative environments as having various characteristics, including cultural, economic, social, environmental, citizenship, and participation features. The author assumes the following dimensions concerning cultural values:

- Aesthetic/cultural significance (about the inherent artistic and creative worth of the initiatives and their subjective significance);
- The cultural wealth (consisting of cultural enrichment, heritage preservation, and the creation and reinvention of a sustainable cultural heritage);
- Creative embedding in the social context (related to artistic/creative grounding in the societal context, territorial embedding, and links with social well-being).

Culture and creativity have enormous potential to provide cities and communities with social, economic, and environmental benefits. The cultural and creative industries are crucial drivers of the creative economy and constitute significant employment opportunities, economic expansion, and innovation, thereby contributing to the competitiveness and sustainability of the city. Through their contributions to urban regeneration and sustainable urban development, cultural and creative industries make cities more desirable places to live in and foster economic growth. Culture and creativity also contribute to social cohesion on a local scale, facilitating the formation of creative networks that promote innovation and development and provide opportunities for individuals who are frequently socially and economically excluded (UNESCO; World Bank, 2021).

UNESCO and the World Bank (2021) referred to intangible cultural heritage, creative, and cultural industries, including the following cultural realms: audio-visual and interactive media; literature and press; performing arts; visual arts and crafts; ICH; design and creative services; and heritage and tourism events (Figure 16).

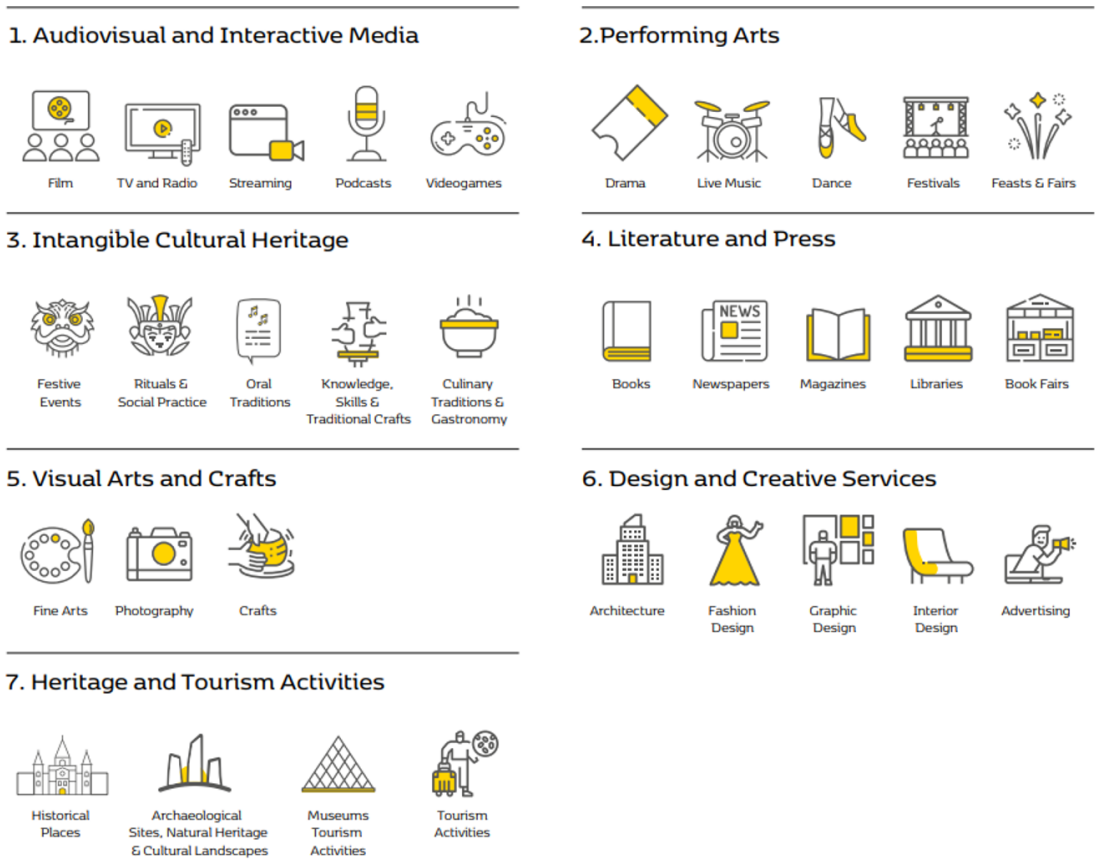


Figure 16: Both creative and cultural industries (UNESCO; World Bank, 2021, p. 31)

3.3.3.4 Updated and Renewed Physical Comfort

The city's physical characteristics, such as its natural resources, played an instrumental role in the city's policymaking process. When nature and technology converge, industries emerge that fuel the local economy. The city's lifestyle also developed (Langan, 2015).

From the viewpoint of Costa (2022), the creative environment possesses multiple values, including cultural, economic, social, environmental, citizenship, and participation values. The following dimensions are assumed for environmental values by the author:

- Preserving and enhancing the physical environment (through maintaining physical integrity and effective management of physical resources);

- Responsible resource management (including effective resource management);
- Environmental quality and species richness (ensuring the decrease of negative environmental externalities and the protection of ecosystems).

According to Syahrir and Pramono (2021), the physical components contribute to shaping a creative city's image. Consequently, these components consist of districts, pathways (transportation networks), street furniture, edges, preservation, landmarks and icons, and open space. Creating a city's physical aspects by integrating cultural and folk art generates distinctive characteristics that draw visitors. Also, these results should encourage city planners and designers to help city administrators understand the importance and uniqueness of visual branding for brand formation to make their cities more competitive and attract tourists.

3.3.3.5 Provision of Creative Activities

In the context of the "creative city," urban culture, media, leisure activities, sports, and education are incorporated into the city, and the solution to the current social and economic crisis lies in creative practices, as evidenced by urban renewal schemes and experiences resulting from the heterogeneity, diversity, and interaction that the city has traditionally offered (Amin & Graham, 1997). In this context, the term "creative" refers to various creativity-related activities involved in design and innovation processes, such as idea generation, prototyping, sketching, and presentation (Thoring, 2019).

According to Thoring (2019), creative activity spaces include personal space, focus space, collaboration space, making space, experimentation space, exhibition space, presentation space, sharing space, disengaged space, intermission space, relaxation space, well-being space, unusual space, play space, virtual space, preparation space,

exploration space, illumination space, verification space, analysis space, incubation space, and reflection space. According to Elisondo (2021), creative activities, especially in a pandemic situation, include cooking; painting; drawing; physical activities; reading; playing; sewing and embroidery; weaving; photography; music (playing instruments and composition); crafts (rings, bracelets, and decorative objects); cleaning and tidying the home; vegetable garden and gardening; yoga and meditation; writing; courses (language, computer, and art); dance and body expression; social activities on virtual platforms; and children's homework. Based on several studies, Remoaldo et al. (2020) propose that creative tourism activities include cooking classes, handicraft classes, storytelling sessions of local tales, and "batik painting," pottery, handicrafts, art-making, and festivals. In addition, there are craft workshops encompassing textiles, pottery, ceramics, leather, metal, and wood; fine arts workshops such as painting, sculpture, drawing, and illustration; photography, video, and digital arts workshops; performing arts workshops and community-engaged, participatory artistic residencies; storytelling workshops; gastronomy-focused workshops in which visitors learn about food-related cultures and culinary techniques; and gastronomy-focused workshops in which visitors learn about food-related cultures and culinary techniques.

A creative space includes both educational and professional situations. Similar creative activities exist in both environments, but educational institutions emphasize knowledge transfer and learning. Nonetheless, training also plays an essential part in practice.

3.3.3.6 Political Support

A "creative city" promotes participation in planning by encouraging communication that might (and even should) begin with individuals and become a tool for decision-makers, leaders, and politicians. The creative city expands on the notion of sustainability and strives for economic, social, environmental, and cultural harmony. It stimulates creativity that can begin at the bottom level of the urban organization hierarchy; explores; examines; develops society's internal forces, and collects data from the external environment. It views diversity as a crucial ingredient for growth and seeks novel and inventive solutions to urban environmental problems. It promotes the concept that the spread of the outcomes will begin with even the smallest of innovative and creative efforts. Lastly, it necessitates the input, agreement, and involvement of everyone involved in planning, incorporating them into the process. Governance requires the expertise of subject matter experts, but it can also influence the views and ideas of the populace. Creative City is a novel planning framework that encourages the use of soft processes in all facets of urban life. It fosters an alternate viewpoint, sharpens individuals' critical attitudes to various topics, and can create a strategic framework for successful implementation by employing current procedures, techniques, experiences, and instruments “indicators and models” (Vlachopoulou & Deffner, 2011).

Beamer (1999) describes six criteria that control the decisions of politicians: accountability, reliability, equity, obscurity, and horizontal and vertical transferability. Creative Politics examines how politicians use these principles to generate and implement policies within a broader framework of public expectations, intergovernmental politics, policy histories, legal initiatives, and state constitutions.

Costa (2022) mention that the creative environment encompasses cultural, economic, social, environmental, citizenship, and participatory values. Costa assumes the following aspects of citizenship and participation:

- Expression of identity (presuming that identities are revealable and that individuals have the freedom and ability to declare their identities);
- Civic engagement (encompassing access and involvement difficulties, citizenship rights, and cultural expression as a means to feel included);
- Governance and the quality of policies and procedures (making sure there are appropriate formal and informal ways to regulate the creative sector, including structures that are democratic and open).

According to the creative society policy model developed by Venckūnas (2022), it is vital to examine the experiences of previous policies if a government's knowledge society policies and creative society policies succeed. It helps specify the challenges and solutions of earlier social policy forms and discloses key legal and organizational features of innovative social legislation in a particular country. Nevertheless, the government may explore other sectors in light of the government's development strategy (region). Then, the configuration and implementation process of this framework should evaluate using the primary strategic management steps (i.e., evaluation of the present situation; estimation of strengths, weaknesses, opportunities, and threats assessment; vision; mission; strategic objectives; operational control; continuous improvement; monitoring and renewal of processes). It is also necessary to evaluate the feasibility and likelihood of implementing creative social policies.

3.3.3.7 Social Cohesion

Society is understood in its most fundamental sense as the place where individuals live and belong socially, united by common and functioning interconnectedness and subject to daily connections, societies, and institutional frameworks. Based on the size of a region, society may be constituted of a single or several ethnic, religious, or social groupings, each with its own cultural identity and habits but subject to certain political and legal authorities and dominant cultural standards.

Creativity is essential for enhancing how people live together as a community, cooperating to address issues relating to social cohesion, urban form, transportation, educational opportunities, and environmental responsibility. It is valuable since it proposes social attractiveness measurements and their connection with creativity. It is also significant because it is relatively "micro" and based on extensive studies (Hartley, Potts, MacDonald, Erkunt, & Kufleitner, 2012). The relevant indicators are classified by Hartley et al., (2012, p. 41) into four groups:

1. *Outcomes:* a healthy cultural life, wide-ranging creativity, social connectivity among varied individuals, and a commitment to the quality of life in Silicon Valley;
2. *Participation:* the involvement of citizens in culture and art events and the extent to which various individuals participate collectively;
3. *Assets:* the diversity of cultural resources that exist in society, including talent in the creative sector (non-profit, public, and private), venues and facilities, and the aesthetic value of our area.
4. *Levers:* cultivating cultural assets and promoting interactions with them through arts education, leadership, investment, and policy.

> *"Cultural education is highlighted as laying the foundation for social cohesion; cultural and creative sectors are to play a role in revitalizing cities and keeping rural areas alive."* (UNESCO, 2022, p. 211)

According to Costa (2022), the creative environment includes a variety of values, including cultural, economic, social, environmental, citizenship, and participation values. Among these social dimensions are:

- Social cohesion and equity (ensuring a certain degree of equity and inclusion in admission and strengthening society both internally and externally);
- Participants' satisfaction (offering constructive and meaningful experiences, enhancing knowledge, and broadening perspectives);
- Involvement in the social fabric (participation of the local community in activities).

Cultural cities that are concurrently creative and cosmopolitan are more effective than others in maximizing their cultural involvement due to their creativity, innovation, open-mindedness, and social cohesion-defining characteristics. It implies that cosmopolitanism is the regional characteristic that activates the local capacity to utilize cultural involvement productively. By stimulating cultural sites and locations with public participation, numerous culture-related enterprises (e.g., events, promotion, and tourism) flourish, resulting in positive and extensive economic impacts. Moreover, links between cultural engagement and social cohesion or a sense of belonging may reduce the costs associated with resolving conflict and lower crime rates. Engagement in cultural activities can also be viewed as an alternative kind of education as it improves human capital through the acquisition of new issues and better transferable self-expression skills (Cerisola & Panzera, 2022).

3.3.3.8 Quality of Life

According to Landry (2008), creative industries establish attractive images for urban centers, promote social cohesion, retain talent, innovation, and enterprises, and promote cities' livability as a quality of life and location. How individuals can protect and improve their quality of life and well-being in the face of change is one of the most pressing concerns facing several European urban areas. Recent studies indicate that promoting cultural heritage is one effective method for sustaining a society's identity and strengthening the economy and innovative enterprises (Durmaz, Platt, & Yigitcanlar, 2010).

The design phase of creative development requires a commitment to an overarching artistic vision, which is essential for providing development purposes and promoting local participation. As a result, our perspective transformed from "creativity" as a framework for places to use in pursuing progress to "creativity" as a concept for transforming lives and improving quality of life. Maintaining a broad vision that supports all place users necessitates various local stakeholders, frequently involving collaboration between public, commercial, civil, and knowledge entities. This kind of broad participation could also help fight gentrification and commercialization, two prevalent problems in creative development (Richards, 2020).

It should be a component in the growth of creative-based strategies for enhancing the localized quality of life and distinctiveness by providing amenities that highlight the particular characteristics of regions. Creative tourism development contributes to the environmental health of small towns by giving options for sustainable growth while safeguarding the local quality of life. There are, however, many obstacles associated

with this approach if it is unregulated and if it develops and expands rapidly (Keller & Velibeyoğlu, 2021).

Following Muhammad (2017), among the factors determining the quality of life and well-being in creative cities, the availability of culture and recreational opportunities is crucial. Thus, for creative environments to be livable, they must maintain a high standard of living, excellent educational systems that promote creativity, various cultures and art, pleasant health services, and accommodation at reasonable rates for creative industries. In addition to efficient infrastructure and excellent public transportation, abundant amenities such as cafes, restaurants, and shops facilitate mobility and understanding of urban life. In addition to public facilities such as hospitals, schools, and utilities, livability varies by access to public transportation, infrastructure, and housing affordability. In addition, there must be an abundance of cultural venues where people can engage in cultural activities, including museums, theaters, libraries, operas, exhibitions, and cultural centers, which are regarded as the centerpiece of any urban renewal process because they can bring together diverse social, economic, and cultural aspects. The cultural department of the city of Helsinki, for instance, oversees a large number of cultural institutions that offer a variety of cultural activities and exhibitions and galleries of amateur and professional artists to Helsinki residents. These facilities are accessible, open, and versatile. The number of museums, libraries, theaters, and other cultural institutions, and their impact on a region, can indicate cultural facilities. As well as offering a variety of leisure facilities, a creative environment allows residents of the city to engage in a wide range of activities and interests, including cafes, restaurants, outdoor sports pursuits, parks, bustling street life, and other accessible recreation activities. There are many of the

world's leading retailers located in this region, and a large number of hotels, theaters, cafes, and restaurants are all part of the recreational and leisure area.

3.3.3.9 Tolerance and Open-mindedness

Florida (2002) maintains that the presence of a significant creative class, comprised of both artists and professionals, stimulates economic growth. In addition, he explains the urban amenities, societal attitudes, and sectors that appeal to the creative class. They consist of collaborative work environments, outdoor leisure, musical performances, and social tolerance (It is an open-minded society, capable of accepting a diversity of social groups and ideas).

A common concept in urban creative city literature is the concept of openness, tolerance, and diversity, popularized by Richard Florida. This category consists of three subcategories: tolerance and openness, diversity and demographics, and civic engagement. Using the above indicators, one can evaluate the degree of openness of a society concerning outsiders and dissenting views and practices. Open communities tend to be more conducive to creativity. A well-known indicator of openness, diversity, and tolerance is the "gay index." The gay index measures the proportion of people in same-sex couples to all partners compared to the national average. The analysis of diversity has expanded to include not only "sexual" but also "spiritual" and "ethnic" diversity, using fragmentation and diversity indexes and including measures about youth population dynamics and income equality. In addition, civic engagement is considered conducive to creativity in global creative cities. Several indicators should be considered, including the proportion of divorces, censorship/freedom of the press, the number of "populations of concern" per capita, for example, refugees and asylum seekers, and the number of visas issued to refugees and asylum seekers. Further, sexual

openness is measured by examining (equally weighted) the percentage of registered gay partnerships in the city; religious openness; nationality openness, religious diversity, nationality diversity, demographics, and civic engagement (Hartley, Potts, MacDonald, Erkunt, & Kufleitner, 2012).

> *"The strategy highlighted the responsibility of public cultural institutions to ensure their regular programming includes creative content by, with and about gender minorities. It also stressed the importance of supporting new cultural platforms that celebrate LGBT creativity, which will lead not only to a more diverse culture and creative landscape, but to a more inclusive social context in general."* (UNESCO, 2022, p. 258)

Similarly, some other indicators of a city's openness and diversity encompass press freedom, the number of visas given to refugees, religious and nationality openness, religious diversity, nationality diversity, the number of young people, income inequality, voter turnout in the most recent national election, the proportion of the population expressing tolerant perceptions toward minorities, and the proportion of people involved in arts and culture in other cities (Mohammad, 2017). The significance of cities as agents of tolerance and social inclusion for LGBT individuals is an aspect of urban studies. Formerly, cities were considered a mixing pot of distinctions and social diversity; more recently, they have emerged as a wellspring of innovation and creativity. Tolerance entails a city free from the barriers imposed by cultural, governmental, and religious differences (Agovino & Corbisiero, 2020).

3.3.3.10 Innovation and Technology

Technology and innovation stimulate creativity, as there is a correlation between a region's inventiveness and its technological advancement. The advancement of technology has significantly impacted the arts, culture, and creative sectors; it fosters individual innovation and provides a virtual cultural universe. Digital technology liberates the concept as a global product, as it may reach varied audiences across the

globe. On the contrary, it localizes, customizes, and personalizes culture. It also generates the notion of engagement with the work, transforming the audience into actively participating, as in interactive art. Technology development in a region generally refers to the number of homes with computers and Internet access; how much the area spends on research and development centers as a percentage of the Gross Domestic Product, how much its human capital goes to technology and science, how many patients it receives, and how technology fits into the arts and culture (Mohammad, 2017).

Post-industrial society and a knowledge-based economy require an industrial culture to unlock all the technological and social innovation potential of older industrial regions. These developments can result in novel growth pathways, particularly for small and medium-sized towns where the knowledge-intensive sector is less developed than in large cities (Kozina, Bole, & Tiran, 2021). Creative cities are locations that can produce and implement new ideas, projects, and innovations and attract and retain creative individuals and organizations from the creative industry. In particular, the creative city should speak through its technological infrastructure or investments in hard and soft initiatives that enable the establishment of competitiveness over other entities (Wolniak & Jonek-Kowalska, 2022).

Digital technology such as podcasting, interactive tours, instant performance downloads, and interactive performances, third spaces (Wi-Fi technology and work moving out of the office; it is the third space between work and home), branding (aimed at creative individuals), and internationalization, including exhibitions and tours, are the primary factors influencing the changing relationship among creative individuals and groups. Also, knowledge-based industries focus primarily on high-tech

manufacturing and knowledge-based services like telecommunications, IT services, and research and development (Hartley, Potts, MacDonald, Erkunt, & Kufleitner, 2012).

The expanding digital and technology sectors demand a steady supply of skilled human capital, a trend that is beginning to appear in smaller cities. As a result, creative hubs are expanding in cities such as Olomouc, Pilsen, and Zlín, where the lack of a creative environment inspires creative individuals to develop space that enables them to engage in a flourishing digital and creative economy. With the evolution of society, rising digitization, modernization, “Information and Communication Technologies,” and technological advancement, the need to protect competent human resources, which are starting to develop in smaller cities, is under growing pressure (Chaloupková & Kunc, 2022).

3.3.3.11 Awareness of Community

Creative change necessitates originality of thought, viewpoint, desires, and aspirations. The essential requirement is a comprehensive understanding of the current innovative frameworks, such as the capacity of cities to establish networks; improve the historical and cultural context; the reliability of governance arrangements; planning strategies; and a comprehension of how to use the information and environmental awareness among residents and actors. Managing this transformation will require corporate cultures to embrace the entrepreneurial spirit (Landry C. , 2000).

In its paper titled "Re/shaping Policies for Creativity," UNESCO emphasizes numerous awareness-related concerns in 2022. Consequently, the pertinent issues are listed below:

- Raise awareness within developed and developing countries' governments and strengthen their capacity to execute preferential treatment policies and practices and ultimately profit from them.
- Raise awareness of special privileges to encourage the free flow of cultural goods and services and the importance of ensuring artists and other cultural professionals have equitable working circumstances.
- Understanding how the cultural and creative industries contribute to climate change and the importance of reducing their environmental impact.
- Over time, people have become more aware of how important gender equality is, both as a human right and an integral part of sustainable development.
- Increase the government offices' knowledge of artistic freedom.
- Create adequate arrangements for artistic freedom at the national and regional levels through capacity-building, legislative formulation or amendment, analysis and monitoring, communication, and awareness-raising.
- Creating a global hub for the exchange of ideas and the promotion of artistic freedom
- To promote respect for cultural expression diversity and raise awareness of its importance at the local, state, and global levels.
- Promote understanding of the importance of protecting and promoting cultural expression diversity, primarily through educational and public awareness activities.

Creativity is not just being recognized in the design world but also in adjacent fields, such as business and information technology, that are becoming increasingly aware of the value of creative behavior. Start-ups have traditionally relied on innovative ideas

and creative techniques, but multinational corporations are also developing design and innovation departments and hiring Chief Design Officers (CDOs) across their enterprises. In educational environments, creativity enhancement is receiving increasing attention (Thoring, 2019).

Mohammad (2017) provides the following suggestions to assist urban designers, urban planners, and decision-makers in addressing creative city features:

- Enhance the creative city concept's awareness among urban practitioners and policymakers.
- When designing initiatives for the city, cultural and aesthetic elements should be taken into account.
- Enhance community awareness of the city's cultural heritage and preserve and safeguard it.
- Create a database containing a dynamic, up-to-date list of all creative industries in the city. It aims to accomplish this through the implementation of several action plans.
- Hold periodic conferences and meetings with legislators, local leaders, specialists, and other interested parties to discuss new options available in the area and to examine the city's challenges from many angles.

This thesis addresses eleven elements of creative environmental literature. In this regard, it is necessary to emphasize that each of these eleven principles contains essential information that serves as valuable criteria for assessing the effectiveness of innovative environmental efforts. These eleven concepts have grown and are now applicable to a wide range of issues (Table 8).

Table 8: Principles of creative environmental literature

PRINCIPLES	EXPLANATIONS	REFERENCES
Promoting Entrepreneurship	Consultancy and/or funds for working spaces, education activities, and interaction spaces.	(London Development Agency, 2006) (Grodach, 2017) (Eglitis & Ezera, 2016) (Pratt A. C., 2011) (Landry C. , 2000)
Creation of Creative Spaces	To attracting the creative talents and enabling successful creative work progress.	(UNESCO, n.d) (London Development Agency, 2006) (Eglitis & Ezera, 2016) (McCreery, 2001) (DCMS, 2001) (Sepe M. , 2010) (Kostopoulou, 2013)
Protection of Culture	To protecting the existing and/or essential historic context, cultural heritage, unique values.	(London Development Agency, 2006) (Grodach, 2017) (Rein, Kotler, & Haider, 1993) (Florida, 2005) (Evans G. , 2007) (Colomb, 2012) (Wyszomirski, 2000) (Landry C. , 2008)
Updated and Renewed Physical Comfort	The updated physical tools in order to have the contemporary needs and catch required physical well-being.	(Girard, Kourtit, & Nijkamp, 2014) (Vanolo, 2008) (Gold & Ward, 1994) (Kostopoulou, 2013) (Richards, 2011) (Wrenn, 1983; Carta M. , 2012a) (Giovinazzi & Moretti, 2010)
Providing Creative Activities	Creative activities can be understandable with the level of creative works at the city.	(UNESCO, n.d) (DCMS, 2001) (Landry C. , 2008) (Eglitis & Ezera, 2016) (Evans G. , 2007)
Political Support	Political authorities are the place that having chance to provide required fund, working place, and discussion platforms between creative classes.	(London Development Agency, 2006) (Richards & Wilson, 2007) (Grodach, 2017) (Landry C. , 2000) (Yassin, Bond, & McDonagh, 2012)
Social Cohesion	Different age groups, ethnicity, education levels, and/or genders are providing variety of people, which is essential for creative works.	(Vivant & Charmes, 2008) (Landry C. , 2008) (Evans G. , 2007) (Grodach, 2017) (Vivant E. , 2013) (Scott, 2006) (Thackara, 2006)
Quality of Life	The accessibility is essential issue in order to attract the people. Besides, safety is important for life quality.	(Girard, Kourtit, & Nijkamp, 2014) (Vanolo, 2008) (Gold & Ward, 1994) (Kostopoulou, 2013) (Richards, 2011) (Carta M. , 2012a) (Wrenn, 1983) (Giovinazzi & Moretti, 2010)
Tolerance and Open-mindedness	Openness of the environment expresses the level of being public. The creative environments are the places where all people are welcoming and enjoy.	(Florida, 2002) (Landry C. , 2000)
Innovation and Technology	The city must follow the contemporary developments in different fields to come across with realised innovative ideas.	(Jones, 1998) (Sepe & Di Trapani, 2009) (Florida, 2005) (Landry C. , 2008) (UNCTAD, 2008) (Kostis, Kafka, & Petrakis, 2018) (Ucar, 2018) (Girard & Nukamp, 2009)
Awareness of Community	Awareness of people with education, activities, events, etc.	(Colomb, 2012) (Grodach, 2017) (Eglitis & Ezera, 2016) (London Development Agency, 2006) (UNCTAD, 2008) (Memişoğlu & Kalağan, 2017)

Chapter 4

ANALYTICAL FRAMEWORK OF CREATIVE WATERFRONT

The ensuing analytic model is a theoretical construction that illustrates a potential principle approach to the "Creative Waterfront Model." Moreover, this framework helps in empirical research, where it serves as a means of classifying, systematizing, and studying diverse real-world approaches to the "Creative Waterfront Model" and displaying its principal characteristics in both verbal and actual broad terms.

The framework enables a holistic analysis of the various "creative waterfronts," wherein each type differs by qualities inscribed in the particular discourses that comprise each conceptual line. From a theoretical standpoint, these categories may represent "ideal types," providing evidence for their separation. However, the reality is a complex place, and real-world techniques are more likely to blend aspects of multiple types.

The various options for the "Creative Waterfront Model" will be connected to one of the forms, and their characteristics will be displayed in two key components: the waterfront development principles and the creative environment principles. Based on the study of the two discourse streams, these elements correspond to the various categories discovered through the literature review analytically. It would be possible

to benefit from the derived principles by linking real-world techniques more closely to a particular case.

4.1 A Model of Creative Waterfront: An Approach to Combining Principles

In sections 2.2.3 and 3.3.3, the principles of waterfront development and the creative environment emerge, drawing from the preceding chapter's examination of prior studies. The author divides a "typical" waterfront development idea into six components: physical, functional, social, economic, cultural, and political. In addition, the author divides the current creative environment principles into eleven characteristics: promoting entrepreneurs, creating creative spaces, protecting culture, updating and renewing physical comfort, the provision of creative activities, political support, and social cohesion. Moreover, the quality of life, tolerance and openness, innovation and technology, and community awareness all come into play. Each component differs by the presence of particular linkages, events and issues, and results. There is a description of the interconnection of dynamic relationships in section 4.3.

4.1.1 What is and Why is an Approach to Combining Principles?

An "approach to combining principles" is to examine and integrate spatial forms and functions as a set of interconnected aspects. There are various reasons why it is advantageous to evaluate waterfront development using an updated conceptual framework.

Viewing a waterfront development in conjunction with innovative environmental concepts provides a foundation for answering questions like "Who was involved?" "What can occur?" and "What can happen?" during each principle. This method permits the representation of evolution as a series of linked events and circumstances.

Tables and figures make it easier to organize complex information into a format that makes sense, making it possible to keep detailed records of cases.

Moreover, it is an essential approach for combining principles relevant to research purposes. Additionally, it also plays a crucial part in the waterfront development process. Typically, waterfront developments are lengthy endeavors that adhere to certain guiding principles. Multiple studies have identified the existence of distinct concepts or stages. Indicators of physical, functional, social, economic, cultural, and political attributes exist to demonstrate the various waterfront development approaches.

The author also divides the current creative environment principles into eleven characteristics: promoting entrepreneurs, creating creative spaces, and safeguarding culture. Other factors include updating and renewing physical comfort, offering creative activities, receiving political support, and fostering social cohesion.

This chapter introduces the "Creative Waterfront" approach to integrating concepts as an analytical framework for organizing the Kyrenia case documentation. In addition, it will provide a conceptual foundation for the guiding hypothesis and subsequent study and evaluation of Kyrenia's waterfront development.

4.1.2 An Approach to Combining Principles for Creative Waterfront

Previous research has demonstrated that waterfront development and creative environments employ distinct principles. Various stakeholders, concerns, and consequences are related to each concept. Following previous research findings, the figures and tables below demonstrate how a model of creative waterfront development has emerged through a combination of approaches.

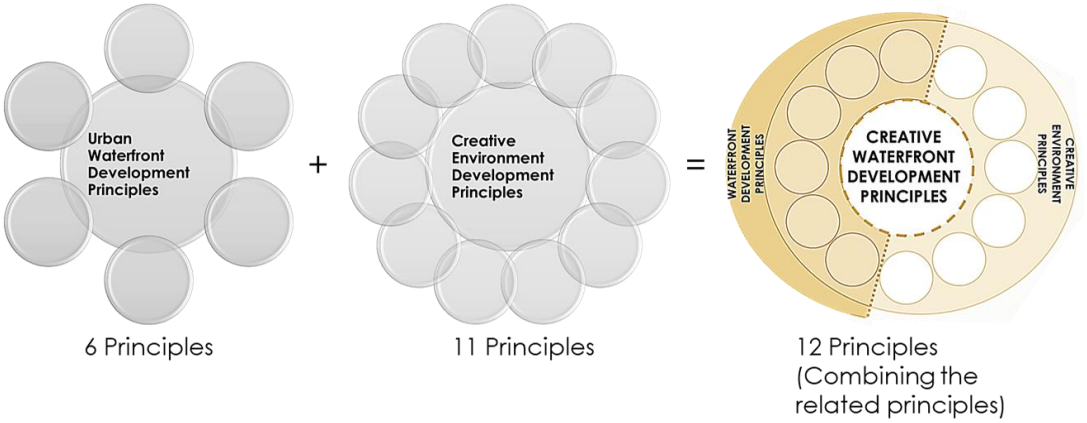


Figure 17: An approach to combining principles of "Creative Waterfront"

As illustrated in the figure above, the broad principles of creative waterfront development fall into twelve phases by combining six waterfront development principles with eleven creative environment principles. There are related principles in both aspects that those principles are incorporated together. This study aims to have a comprehensive model to explain the current theory and develop an application form to evaluate relevant cases.

4.1.2.1 Waterfront Development Principles

The following principles emerged during the investigation of waterfront development theory in section 2.2.3:

- ***Physical quality:*** Continual preservation of waterfront areas is essential. Proper maintenance strategies are crucial to the development of waterfront areas. Artwork and urban furniture must be in good physical condition to serve their intended function successfully and aesthetically. It is also essential that waterfront areas be accessible to people with disabilities to make them more welcoming. If waterfronts wish to remain vital, there should be a physical connection between other significant places, the central business area, and waterfront regions. Physically appealing urban balconies can draw individuals to coastal regions.

- ***Functional aspects:*** The vibrancy of urban environments needs to provide a wide range of mixed uses, as the activities available to users help bring urban places to live. Increasing accessibility in public spaces also contributes to the development of life and activity. Consequently, meeting human needs in public open spaces impacts their utilization and is essential for human pleasure and well-being. People living in cities want to be comfortable, relax, interact with the environment both passively and actively, and discover new things.
- ***Social factor:*** Urban waterfront development operations must ensure a fair distribution of quality of life in society by establishing social policies. An appropriate urban waterfront development procedure depends on the form of use, frequency, intensity, and people's actual needs. For urban waterfront development, it's essential to have detailed information about education levels, age groups, income levels, and how people act.
- ***Economic facets:*** There are enormous economic benefits associated with the growing popularity of urban blue spaces as tourist destinations and residential regions. Better waterfront management makes the town look appropriate, brings in more tourists, creates jobs and new opportunities, helps local businesses grow, brings in more money for the city, and lowers operating costs and rents.
- ***Cultural features:*** Culturally, urban environments typically represent the entirety of civilization. A public space allows the manifestation of local culture and improves the quality of life within a community by nurturing both public and private values. Experiences as a family member, ethnic, social class, cultural, national, or lifestyle group strongly impact a person's beliefs, attitudes, preferences, and other qualities.

- ***Political issues:*** Local authorities, governments, and prominent leaders must provide a collaborative platform for all stakeholders to carry out adequate waterfront rehabilitation. In addition, it is vital to educate locals to increase their understanding of rising social concerns and trends. The most important thing that people in charge of redeveloping waterfront areas have to do is work with the community to solve problems in the area.

The primary principles of waterfront development appear in the figure below.

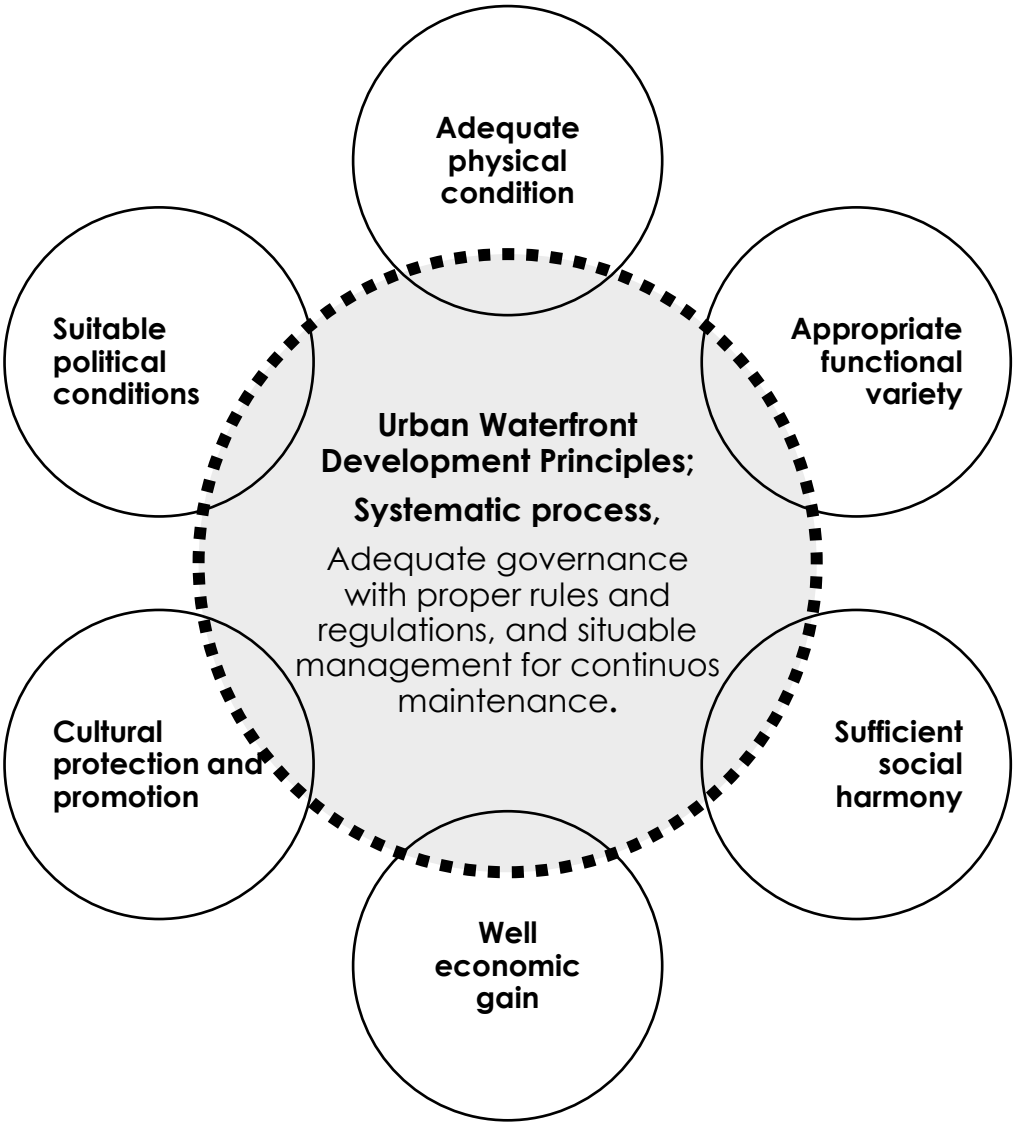


Figure 18: Principles of waterfront development

4.1.2.2 Creative Environment Principles

The following principles emerged during the investigation of creative environment theory in section 3.3.3:

- ***Promoting entrepreneurs:*** Creativity should be fostered, but only in conjunction with industrial, technological, and economic growth. Consequently, influential individuals are visionary political leaders, artists, innovators, and entrepreneurs.
- ***Creation of creative spaces:*** Creative spaces can act as magnets for creative courses, whose participation can boost the creative atmosphere of an area for both locals and tourists. In addition, their engagement can help establish a sense of local identity, generate new ideas, and enhance the tourist experience, thus giving the city a competitive advantage.
- ***Protection of culture:*** Culture and creativity can help revitalize products, industries, and places, and they can also speed up the growth of economic systems in cities and regions.
- ***Updated and renewed physical comfort:*** The city's physical features, such as its natural resources, were crucial to the city's policymaking. When nature and technology meet, industries stimulate the regional economy. The city's way of life also evolved.
- ***Provision of creative activities:*** A "creative city" incorporates urban culture, media, leisure activities, sports, and education. A solution to the current social and economic crisis lies in creative practices, as evidenced by urban renewal schemes and experiences resulting from the city's traditional heterogeneity, diversity, and interaction.
- ***Political support:*** A "creative city" makes it easier for people to take part in planning by promoting conversation. This conversation could (and even should)

start with individuals and grow into a tool for decision-makers, leaders, and politicians.

- ***Social cohesion:*** Creativity is essential for improving how people live together as a community and work together to solve issues of social cohesion, urban form, transportation, educational opportunities, and environmental stewardship.
- ***Quality of life:*** Creative industries make cities look more appealing, bring people together, keep talent, innovation, and businesses, and improve the overall quality of life and location of urban areas.
- ***Tolerance and openness:*** Social tolerance is an open-minded society capable of accepting a diversity of social groups and ideas. The "gay index" is a well-known tool to gauge openness, variety, and tolerance. The gay index compares the proportion of individuals in same-sex relationships to the national average.
- ***Innovation and technology:*** There is a correlation between a region's ingenuity and its technological development. Therefore, technology and innovation inspire creativity. Technology's growth has profoundly affected the arts, culture, and creative industries. It encourages people to make their art and provides a virtual cultural universe.
- ***Awareness of community:*** Creativity is being recognized both in design and in neighboring fields such as business and information technology, which are becoming increasingly aware of the necessity of creative behavior.

The primary principles of creative environment appear in the figure below.

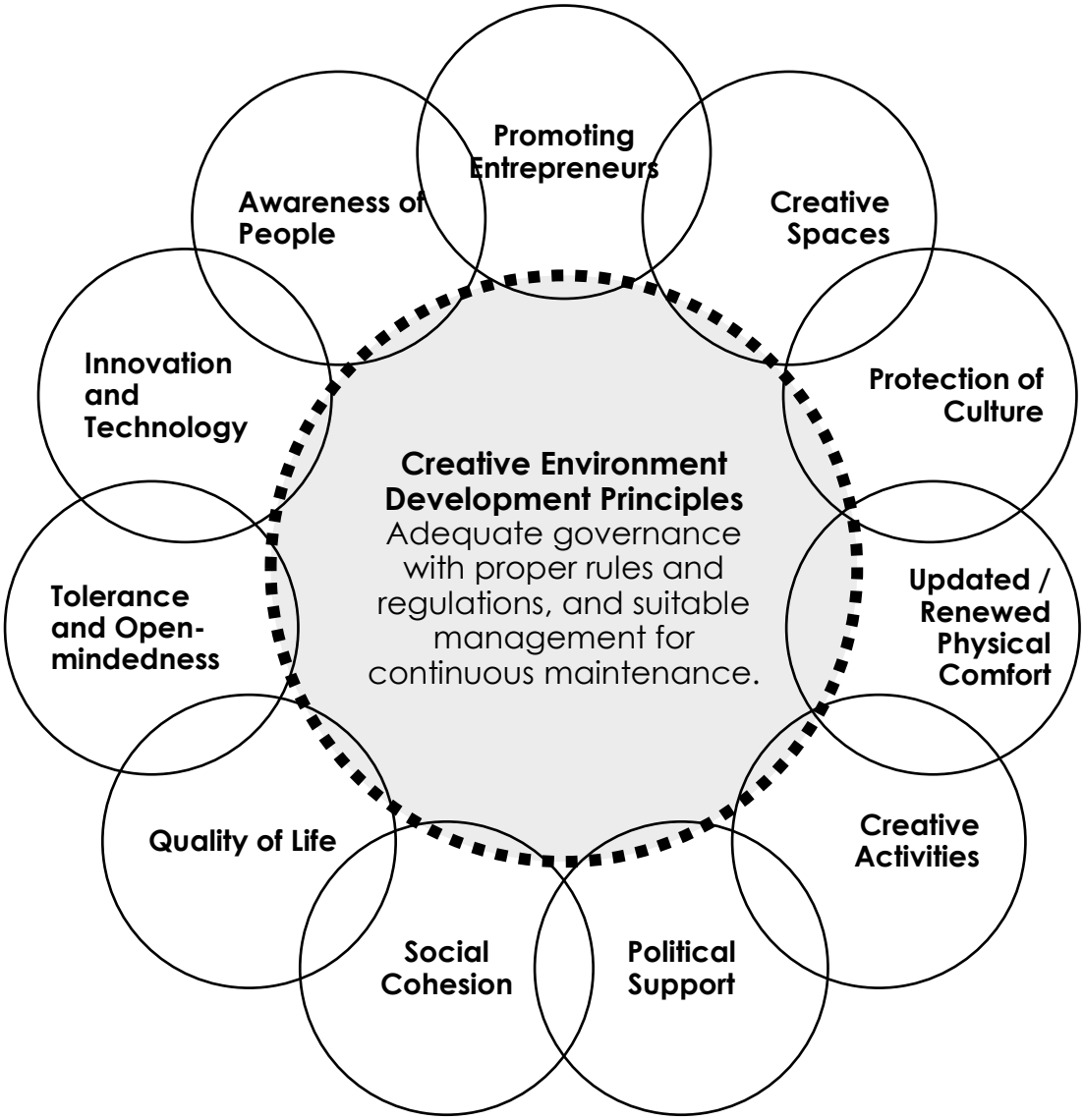


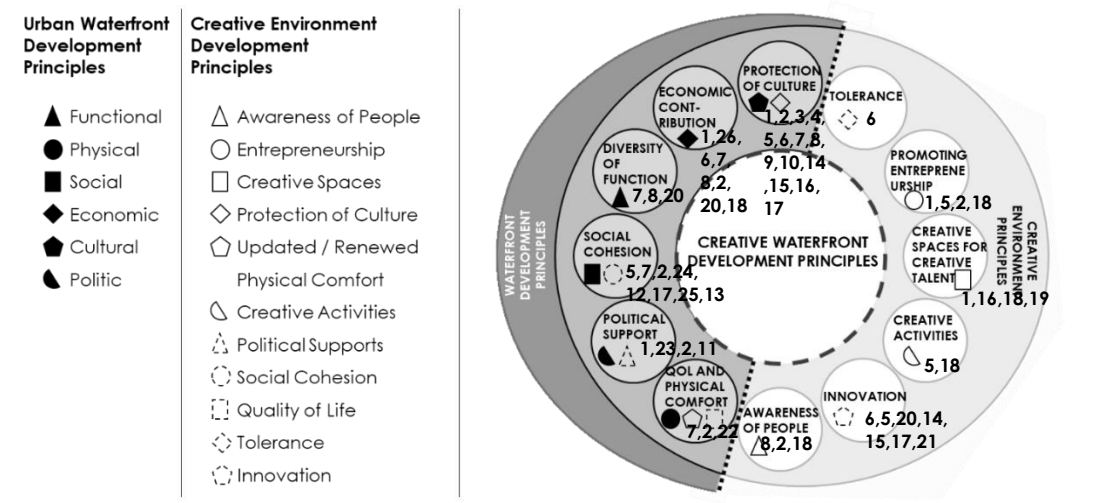
Figure 19: Principles of creative environment

4.1.2.3 Combination of the Principles of Waterfront Development and Creative Environment

It is imperative to identify the model components and order them systematically to create a "Creative Waterfront Model" built upon a well-defined plan.

Based on the information found in the literature review, the components fall into twelve categories: awareness, entrepreneurship, creative spaces, creative activities, innovation, tolerance, quality of life, physical comfort, social cohesion, diversity of

function, economic contribution, and protection of culture. The figure below depicts the categories found in the literature.



1	(London Development Agency, 2006)	14	(Kostis, Kafka, & Petrakis, 2018)
2	(Grodach, 2017)	15	(Ucar, 2018)
3	(Rein, Kotler, & Haider, 1993)	16	(UNESCO, n.d)
4	(Landry C. , 2000)	17	(Girard & Nukamp, 2009)
5	(Landry C. , 2008)	18	(Eglitis & Ezera, 2016)
6	(Florida, 2002)	19	(McCreery, 2001)
7	(Evans G. L., 2009)	20	(UNCTAD, 2008)
8	(Colomb, 2012)	21	(Cohendet & Zapata, 2009)
9	(Wyszomirski, 2000)	22	(Suciu, 2009)
10	(Spayde, 2012)	23	(Richards, 1996)
11	(Landry C. , 2006)	24	(Vranken, Decker, & Nieuwenhuyze, 2003)
12	(Kearns & Forrest, 2000)	25	(Scott, 2006)
13	(Thackara, 2006)	26	(Foord, 2008)

Figure 20: Combining urban waterfront development and creative environments components; the Creative Waterfront Model

The following principles emerged during the combination of waterfront development theory and creative environment theory "the creative waterfront model":

1. ***Awareness of people:*** At the creative waterfront, responsible individuals play a vital role in ensuring the ongoing health of the place; the reactive person to the environment is essential to preserving the cultural, artistic, musical, and literary values associated with a particular location and its historical significance. Consequently, social awareness is crucial to waterfront development. A policy was needed to make people aware of this issue, and everyone in society had to be educated and told what was happening.

2. ***Promoting entrepreneurship:*** Strategic developments in public investment provide long-term uses for waterfronts. Effective strategic planning and entrepreneurial leadership attract the public and private sectors. It is evident that urban waterfronts, as a creative milieu, attract creative tourists and businesses.
3. ***Creative space arrangements:*** This era is a time of creativity, and individuals with original ideas have an essential role in local economic growth. Creativity and flexibility are required for the waterfront project to manage conflicts between private and public interests, past and future, and new and old values. Physically well-constructed linkages have the potential to increase the number of pedestrians. As was mentioned, networked cultural audiences become practitioners, challenging people to use their creativity to assimilate and manipulate the city's opportunities. Passive perception of culture becomes active and widespread. Today, culture is an essential element of everyday life. It is one of the significant issues dealing with creativity; it has different approaches to creative people, products, processes, and environments.
4. ***Creative activities:*** Advertising, architecture, art and antique markets, crafts, design, designer fashion, film and video, interactive leisure and software, music, performing arts, publishing, software and computer services, television, and radio are some of the types of creative industries. Such activities can be conducted along creative waterfronts and may stimulate economic growth and productivity.
5. ***Innovation and technology:*** In addition to creative activities, innovation and technology have become crucial subjects for urbanization and waterfront development. In this competitive atmosphere between the cities, applied innovative and technological ideas are an essential tool for promoting the location as a product. In the waterfront areas, information stands, digital lighting elements,

development areas, R & D areas, research areas, simulation areas, energy consumption opportunities, and Internet access can be an example of technological achievements. The creative class is encouraged to believe that these accomplishments on the waterfront are good enough.

6. ***Tolerances and open-mindedness:*** Aside from cultural features, tolerance among users is also becoming a significant factor. Gentrification poses one of the biggest threats to waterfront development. Those living in waterfront neighborhoods that have undergone development feel disturbed by gentrification because of the sudden change in their environment, social situation, and economic conditions. To prevent creative waterfront developments, tolerance of all ages, genders, races, beliefs, attitudes, and ideas must prevail.
7. ***Quality of life and physical comfort:*** Waterfront development may benefit job creation, foreign direct investment, creative sector development, environmentally-friendly mobility, and sustainable land use. These are the main motivations of modern port cities to develop waterfronts. The culture and creativity of the city provide an attractive urban image. Attracting global tourists and investment to promote local development can help cities achieve success and create positive and compelling perceptions. Properly applied development plans that address all aspects of community well-being may enhance the quality of life.
8. ***Political sufficiency:*** For adequate "creative waterfront" development, there is a need for advice and funding, which can be provided by encouraging entrepreneurs to invest. In addition, the appropriate platform should be readily available to all relevant stakeholders to design the development process appropriately. Governments and decision-makers are the most influential bodies in motivating entrepreneurs and providing a healthy footing for stakeholders by providing

appropriate strategies and guidelines. Furthermore, the issues discussed so far are only possible with adequate political support. Proper rules and regulations are necessary for suitable river promenades for communities. The fund options needed to work through logical management. Political leaders and people in charge of making decisions must provide relevant stakeholders and investors with a good platform for a smooth development process and constant improvement.

9. ***Social cohesion:*** To achieve the necessary tolerance level between people in developed countries, it is therefore imperative to consider various political and economic factors. In light of its economic, physical, and environmental conditions, the area needs to provide a high level of hospitality. Also, to keep the space safe, people of different ages, sexual orientations, cultures, and beliefs, as well as LGBT (lesbian, gay, bisexual, and transgender) people, should be able to enjoy the space's opportunities freely and without fear. Besides toleration, other factors that contribute to adequate social cohesion include incorporation, cooperation, and socialization.
10. ***Diversity of function:*** The first element in most urban waterfront regeneration features is related to the range of uses. The updated recommendation for establishing creative waterfronts includes water-related activities and functional attributes that encourage creativity.
11. ***Creative economy and economic contribution:*** The promenade needed more attention to attract several visitors, particularly those from the creative class. Appropriate strategic and economic arrangements also had to be made with other relevant authorities. Tourist and investment activities involving creativity should be organized appropriately and accompanied by a comprehensive planning strategy. The waterfront promenade should also provide opportunities for

employment for artists and other creative individuals. Transportation costs between waterfront areas should be acceptable to add to the tourist attraction. By ensuring this sufficiency, creative waterfront areas can make a respectable economic contribution to the city.

12. ***Protection of culture:*** The literature related to waterfront development discusses cultural issues most frequently. The protection of culture is necessary to promote its values for tourism and leisure purposes. There should be an adequate number and quality of culturally significant locations. It is vital to preserving the historical and cultural heritage along the waterfront to preserve the city's distinctive identity. Additionally, to pass on the educational values of waterfronts to future generations, it was necessary to maintain the urban character of the waterfronts. Cultural and creative events that focus on local foods, local arts, and art activities are vital for promoting an area, especially when it comes to cultural and creative tourism.

4.2 Evaluation of Developed Waterfront Examples in the Creative Environment

This thesis includes an analysis of examples. There is an explanation of how the samples were collected.

As a first step, UNESCO Creative Cities are being considered. A limit has been set to ensure the number of samples for this study can be manageable because there are many creative cities. As a result, these cities are selected based on the following criteria:

- The settlements with waterfronts,
- Applied to waterfront development projects,
- The waterfront development applications have won numerous prestigious awards.

Thus, selected examples are as follows (Figure 21):

1. Sydney's Barangaroo Urban Development and
2. Tel Aviv Port Public Space Development.



Figure 21: Location of selected examples

At the second step of this selection, the variables of Creative Waterfront have been evaluated with the help of available resources.

4.2.1 Barangaroo in Sydney

Barangaroo lies in Sydney's historically significant waterfront area. The Barangaroo Harbour Project aims to reorganize part of the Sydney port area and its immediate surroundings. In October 2009, the Australian government embarked on an international search for the appropriate design. Landscape, architectural, and urban design firms are requested to submit proposals. Announcing the winners was done in February 2010. Those involved were Johnson Pilton Walker and his collaborator, Peter Walker and Associates, a landscape architecture firm. The following companies have agreed to work collaboratively with the Barangaroo Project Directorate, which constitutes the public aspect of the project. The team is working to prepare a project in which commercial, residential, and recreational functions will occur in the port area,

designing an in-port park, and improving the natural appearance of the port (Figure 22). The project has three development areas: Barangaroo South, Barangaroo Central, and Barangaroo Reserve (Headland Park). It appears in Figure 23.



Barangaroo in 09/2012 Barangaroo in 03/2021

Figure 22: Barangaroo then and now (URL1)

The Headland Park project aims to design a new and prestigious urban park on the existing waterfront that has not changed since 1836. This park aimed to ensure the continuity of the green character of Sydney Harbour. This project is also part of the NSW Government's project to open the port area to the public. The method chosen for the park's design included exhibitions for the public and receiving opinions from the citizens. The Barangaroo Center consists of academic, social, and recreational areas. This area provides a focal point for pedestrian routes connecting residential, commercial, and social structures. In South Barangaroo, a public dock with shops, supermarkets, dock restaurants, a museum, a library, international 500 residences, and a global financial center is planned (Pham, 2017).

Table 9: Overall information for Barangaroo Urban Development

Name	**Barangaroo Urban Development**
Location	Sydney, Australia
Size	220.000 m2
Completion Date	2012 – 2023 (estimated)
Awards	- 2015 AILA NSW Awards - President's Choice in Landscape Architecture - 2015 Banksia Sustainability in Design, - Build Award – Buildings, - Landscapes and Infrastructure Projects. - World Architecture News Awards – Waterfront 2015 Award - 2018 Property Council of Australia/Rider Levett Bucknall Innovation & Excellence Awards - Australian Development of the Year - Best Workplace Project - Best Sustainable Development – New Buildings - Best Mixed Use Development - People's Choice Award
Creative Field of the City	Film (UNESCO)



Plan (Green, 2014)

The project aims to bring people here and provide opportunities for waterfront activities. During the several discussions with the relevant authorities, the application process has undergone several changes, especially regarding proposed building heights and transportation access.



Barangaroo Reserve (Headland Park)



Barangaroo Central



Barangaroo South

Figure 23: The views from three parts of Barangaroo (URL2)

Table 10: "Creative Waterfront" variables at Barangaroo

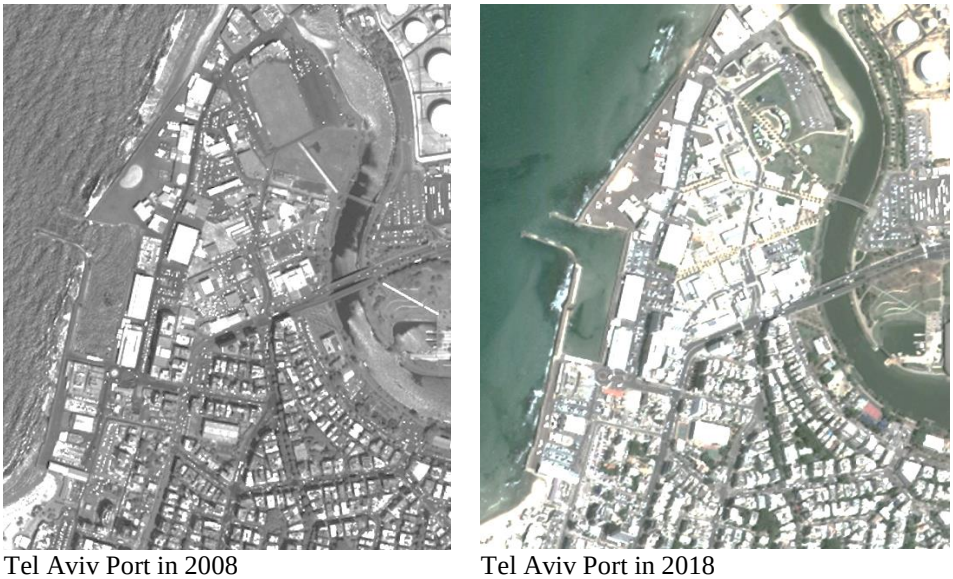
COMPONENTS	DIMENTIONS	CONDITION OF BARANGAROO WATERFRONT
AWARENESS OF PEOPLE	1. Education level; 2. Culture and creativity.	After the development of the Barangaroo Waterfront, the gentrification has occurred. Low income, long-standing users displaced with middle class or high-income locality (Morris, 2017). On the other hand, the development was aimed to bring an increased commercial, residential, tourist uses, retail uses, and commercial uses (Pham, 2017). The education level of the users could not be found but the culture, creativity level is obviously high, and users are well aware with the contemporary achievements.
PROMOTING TO ENTREPRENEURS	1. Rules and regulations sufficiency; 2. Consultancy and/or funds opportunities	During the development process, relevant stakeholders were found a proper ground to discuss and improve the project. The entrepreneurs were motivated for investment opportunities. The public is informed and involved in the design process (Pham, 2017).
CREATIVE SPACE FOR CREATIVE TALENT	1. Natural spaces; 2. Cultural spaces.	A social office and vehicle park is located underneath the headland. The spot is accommodating a scope of social uses, for example, a display, historical center, performing expressions space, specialists' studios and training and learning offices has created (URL2).
CREATIVE ACTIVITIES	1. Success level of creative work processes.	As it was mentioned, UNESCO marks the city of Sydney as creative city in film sector. Barangaroo is one of the location that motivate its users for filming and photography activity (URL2). Besides, several activities has occurred and will occurred at the area like; Including landscape-based, guide-led and digital installations and events in outdoor spaces, large-scale and nascent festivals, events, art installations in indoor spaces, and urban art installations that depict the natural world, and contemporary lifestyles (URL2).
INNOVATION	1. Success level of innovative idea realisations.	Barangaroo is water friendly area; water recycling has developed. Recycling and reusing has provided by prevention and minimisation of uses. The area is carbon neutral with renewable energy consumption (URL2).
TOLERANCES	1. Openness of the environment; 2. Publicity of the environment.	Social safety was one of the major instrument during the development process (URL2). Tolerance level of Sydney is high. The city is welcoming and hosting all of its users including LGBT individuals (Nash & Gorman-Murray, 2015).
QUALITY OF LIFE AND PHYSICAL COMFORT	1. Accessibility; 2. Attractivity.	The development has provide easy access by bus/coaches opportunities, car parking, pedestrian access, cycling access, and water based traffic. Besides, attractivity has provided by functional diversity, physical quality, and contemporary and historic significances (Pham, 2017).
POLITICAL SUPPORT	1. Funds opportunities; 2. Adequate space for collaborative discussion with related stakeholders.	From the beginning to the designing process, the government plays important roles to bring all relevant stakeholders and decision makers together and provide a collaborative discussion ground for comprehensive application process. The fund also founded by sufficient governing process by the support of government and relevant political departments (Pham, 2017).
SOCIAL COHESION	1. Different age groups; 2. Different ethnicity; 3. Different education levels; 4. Different genders.	The area brings user groups with different ages, ethnicity, education level, and genders. Different creative and productive activities has placed for children. Moreover, the area hosting high number of tourists from different countries with different ages. University students are also visiting the places highly. Besides, all genders including LGBT individuals are enjoying with the safety and opportunities of the place (URL2).
DIVERSITY OF FUNCTION	1. Recreational and/or historic and/or cultural, educational, environmental	**Barangaroo South** In the southern third of the site, Barangaroo South acts as an extension of Sydney's CBD, with office buildings, apartments, retail outlets, public spaces, and a hotel. There will also be a childcare center and community space (Pham, 2017). **Barangaroo Central** Low-rise residential, office, hotel, and casino buildings are planned for Barangaroo Central (Pham, 2017). **Barangaroo Reserve** Two new harbour coves, a tidal rock pool, and a grassy area are located in this parkland created with sandstone excavated directly from the Barangaroo site (Pham, 2017).
ECONOMIC CONTRIBUTION	1. Increased visitor number; 2. Network creation; 3. Increased tourism and investment activities.	It is obvious that, increased visitor numbers including tourists, locals, entrepreneurs, and employers effect the city economy positively. Increased investment activities are also having positive impacts on economic growth.
PROTECTION OF CULTURE	1. The context (historic and/or cultural heritage); 2. Protection level of existing unique culture.	Beside of contemporary urban characteristics, the area is also significant with historic values. 6000 years old stones, and 14500 years old settlements creates uniqueness. During the development process, existing stones and native plants were used. The old, historic and natural appearance has combined with the contemporary needs and reflected on the urban design.

4.2.2 Tel Aviv Port in Israel

Tel Aviv Port, with its stunning views of the country, seemed abandoned since 1965. After being unable to fulfil its port function for a long time, Mayslits Kassif Architects was developed the area and reopen to the public (Rosenberg, 2016; Etherington, 2008; Kassif, Mayslits, & Kassif Architects, 2008).

As stated by Mayslits Kassif Architects, the aim of the renovation is to "create a public space that is compatible with the historical nature of the port and open to various interpretations" (Rosenberg, 2016; Etherington, 2008; Kassif, Mayslits, & Kassif Architects, 2008; Landezine, 2010).

By renovating the port, the architects were able to solve the contradictions between the private and public spheres. Public spaces were created for everyone to enjoy (Rosenberg, 2016).



Tel Aviv Port in 2008 Tel Aviv Port in 2018

Figure 24: Tel Aviv Port then and now (URL3)

A competition held in 2003 gave this project first place, and construction began immediately. After this change, people began to come and spend time here even before the port had been built (Rosenberg, 2016).

Table 11: Overall information for Tel Aviv Port Public Space Regeneration

Name	**Tel Aviv Port Public Space Regeneration**
Location	Tel Aviv, Israel
Size	55,000 m2
Completion Date	2008
Awards	2003– First Prize in the Public Competition for the Renewal of the port's public areas. Proposal by Mayslits Kassif Architects in collaboration with architect Galila Yavin. 2007– Israeli Design Award for the best Urban Architectural Project in Israel. 2008–Rechter Award for an outstanding architectural achievement by the Israeli Ministry of Culture. 2010- Winner of The Rosa Barba European Landscape Prize and the Audience Choice award in The 6th European Biennial of Landscape Architecture.
Creative Field of the City	Media Arts (UNESCO)



Plan (Etherington, 2008)

Various public, political, and social events are taking place here today, which indicates that the port has gained importance in the eyes of those living here and that the transformation project has brought new life to the port (Kassif, Mayslits, & Kassif Architects, 2008).



Wavy deck surface and sitting elements (photo by Adi Branda)



Activities held in the area (photo by Galia Kronfeld)



Textured surface, sitting and lighting elements and sea view (photo by Adi Branda)

Figure 25: The views form Tel Aviv Port (Landezine, 2010)

2.5 million people visited Tel Aviv Port in 2007. Five hectares of the renovation area have seen significant changes. In the renovation of this area, it plans that a design strategy will create new public spaces (Kassif, Mayslits, & Kassif Architects, 2008).

Table 12: "Creative Waterfront" variables at Tel Aviv Port

COMPONENTS	DIMENTIONS	CONDITION OF TEL AVIV PORT
AWARENESS OF PEOPLE	1. Education level; 2. Culture and creativity.	There are vide range of user profile with different education level. Both local, tourists and students are visiting the site. The clean and safe atmosphere bring back respect from the public. The culture and creativity is well encouraged with the development of the area (Kassif, Mayslits, & Kassif Architects, 2008).
PROMOTING TO ENTREPRENEURS	1. Rules and regulations sufficiency; 2. Consultancy and/or funds opportunities	The competition has organised by the relevant authorities and the application was started quickly. This shows the sufficiency of the management. The investment activities and appropriate administration needed fund found to complete the regeneration project.
CREATIVE SPACE FOR CREATIVE TALENT	1. Natural spaces; 2. Cultural spaces.	The spot is accommodating a scope of social uses, for example, a display, historical center, performing expressions space, specialists' studios and training and learning offices has created (Rosenberg, 2016).
CREATIVE ACTIVITIES	1. Success level of creative work processes.	Its large, open, undulating surface has become a venue for many people who wish to be alone, with many, to run, bike, watch the sun set, to get married, to sunbathe, to perform, to sit, stand, eat, to practice yoga, to read a book, to go fishing, to still feel part of society, yet be individual and feel a part of it all (Kassif, Mayslits, & Kassif Architects, 2008).
INNOVATION	1. Success level of innovative idea realisations.	The area has free Wi-Fi system. Moreover, Social libraries (digital) has provided by the municipality. Besides, navigation applications also developed for all the visitors of Tel Aviv. Some other innovative achievements of municipality of Tel Aviv are solar roof projects, and environmental project for encouraging residents to pick up dog faces (URL4).
TOLERANCES	1. Openness of the environment; 2. Publicity of the environment.	Social safety was one of the major instrument during the development process. Tolerance level of Sydney is high. The city is welcoming and hosting all of its users including LGBT individuals (URL4).
QUALITY OF LIFE AND PHYSICAL COMFORT	1. Accessibility; 2. Attractivity.	The development has provide easy access by bus/coaches opportunities, car parking, pedestrian access, cycling access, and water based traffic. Besides, attractivity has provided by functional diversity, physical quality, and contemporary and historic significances (Kassif, Mayslits, & Kassif Architects, 2008)
POLITICAL SUPPORT	1. Funds opportunities; 2. Adequate space for collaborative discussion with related stakeholders.	Adequate management ability ensures that the regeneration project was realized in a short time (Landezine, 2010).
SOCIAL COHESION	1. Different age groups; 2. Different ethnicity; 3. Different education levels; 4. Different genders.	The area brings user groups with different ages, ethnicity, education level, and genders. Different creative and productive activities has placed for children. Moreover, the area hosting high number of tourists from different countries with different ages. University students are also visiting the places highly. Besides, all genders including LGBT individuals are enjoying with the safety and opportunities of the place (URL4).
DIVERSITY OF FUNCTION	1. Recreational and/or historic and/or cultural, educational, environmental	There are now cafes lining the enclosed basin and the historic hangar buildings have been transformed into shops, galleries, and performance venues, as well as a farmer's market. Along the seawall, a wooden deck has been built that has become a popular hangout for skateboarders and cyclists. Through the reuse of hangars as galleries, shops, and restaurants, Jaffa port has emulated Tel Aviv's extraordinary success (Rosenberg, 2016)
ECONOMIC CONTRIBUTION	1. Increased visitor number; 2. Network creation; 3. Increased tourism and investment activities.	It is obvious that, increased visitor numbers including tourists, locals, entrepreneurs, and employers effect the city economy positively. Increased investment activities are also having positive impacts on economic growth.
PROTECTION OF CULTURE	1. The context (historic and/or cultural heritage); 2. Protection level of existing unique culture.	Beside of contemporary urban characteristics, the area is also significant with historic values. The old abandoned industrial buildings were started to be reused with new functions (Rosenberg, 2016).

4.3 Links between Creative Waterfront Principles

A literature review and analysis of instances (in section 4.2.1 and 4.2.2) provided the basis to link the components. In the modified model, as presented in Figure 26, creative waterfronts incorporate all twelve elements of the creative environment. However, waterfront development only involves six of the twelve factors. Therefore, waterfronts can enhance more creatively by embracing all twelve principles and maximizing their potential.

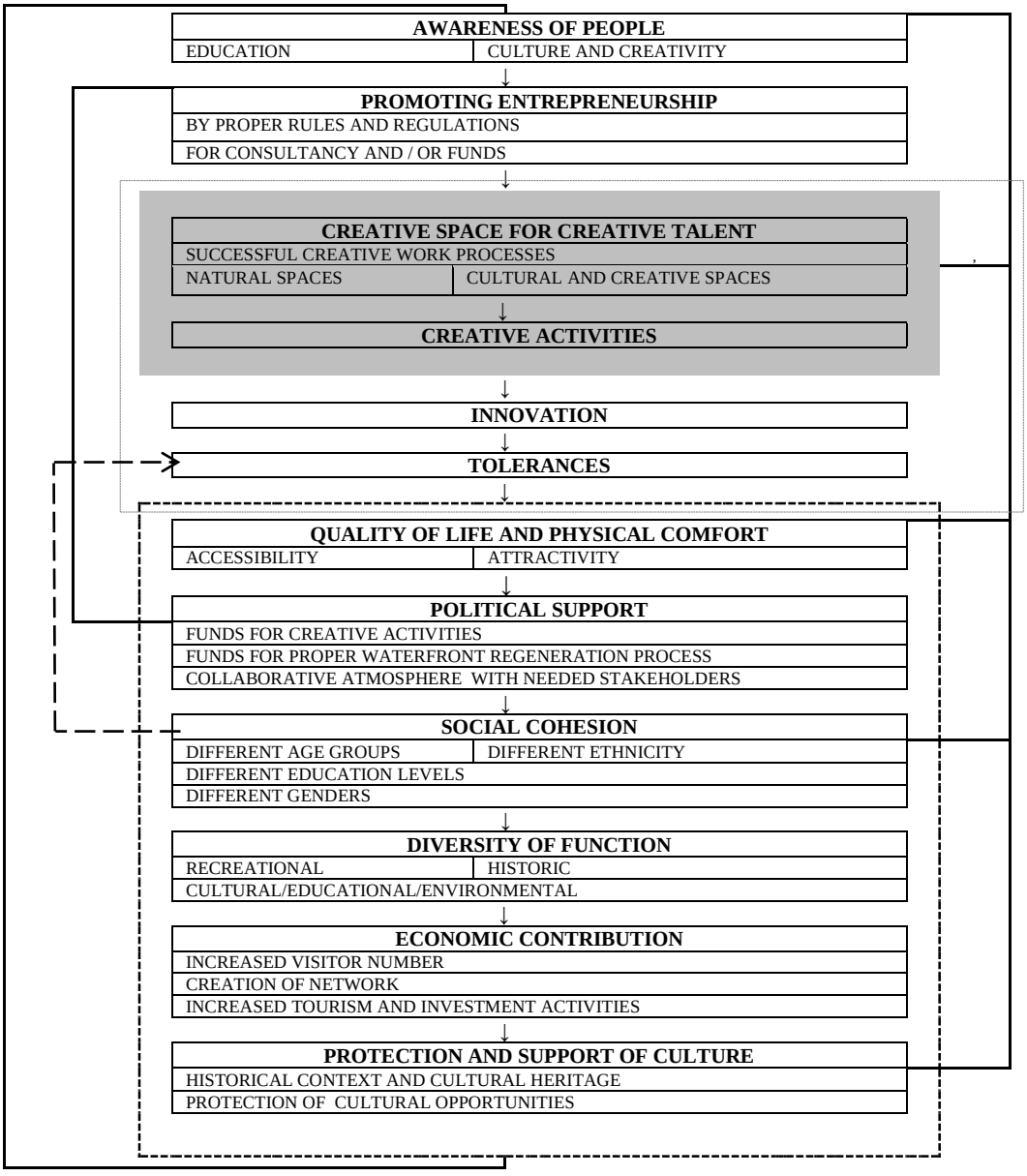


Figure 26: The Model of "Creative Waterfront" variables (Appendix B)

Chapter 5

EVALUATION OF THE CASE STUDY: KYRENIA WATERFRONT

This chapter discusses and evaluates the previously developed 'Creative Waterfront' principles in the selected case. In this instance, Kyrenia in Northern Cyprus is the case.

An examination of the ancient harbor of Kyrenia took place as part of this study. Kyrenia is located on the coast of Cyprus and is rich in historical, architectural, and cultural attributes. Kyrenia attracts a majority of locals and some foreigners. It is one of the most striking urban waterfronts worldwide because of its beautiful surroundings, historical importance, castle, and port.

In the early 2000s, urban sprawl was a concern in Kyrenia. In general, construction structures do not account for the three-dimensional characteristics of their surroundings or the outside activities. In reaction to these recent events and their negative consequences, the municipal council of Kyrenia has devised a plan to enhance the city. In 2005, the region of Kyrenia implemented a thorough redevelopment plan to improve access for both locals and foreign tourists. But for the creative classes, there was no adequate response. All circulation spaces, including urban equipment, walkways, crosswalks, and parking lots, have been upgraded. A significant portion of the urban waterfront has gotten expanded for pedestrian traffic. Additionally, a wide range of landscaping and cityscape elements have enhanced the waterfront experience,

allowing visitors to enjoy urban waterfronts safely and comfortably. Guvenbas & Polay (2020) listed the following site enhancements:

- Make accessible parking spaces and access aisles or give them to vehicles with other places to park.
- Display signs for automobiles to safeguard the safety of pedestrians.
- Installing signage for vehicles to enhance pedestrian safety.
- Establishing and increasing the frequency of routine maintenance.
- The installation of extra spot components.
- Renovations of public lavatories.
- Various parking regulations aim to improve pedestrian mobility.

In 2017, political and budgetary restrictions prevented the modified waterfront enhancement plan from being implemented. As part of its development, the council seeks to identify implementation methods for the program.

A wide range of stakeholders participated in the development of Kyrenia and the Ancient Harbor to realize a more comprehensive common practice approach. The actors and stakeholders for the improvement included: the municipal council (as a leader); municipal staff (leader); central government (strategic partner); Embassy of the Republic of Turkey (strategic partner); European Union Commission (strategic partner); Girne District Governorship (partner); universities in the region "GAU, Kyrenia" (strategic partner); Department of Antiquities (partner); Mukhtars (strategic partner); vocational high schools (partner and service recipient); primary and secondary schools (partner and service recipient); people of the region (strategic partner, supplier, service recipient); media organizations (partner); Cyprus Turkish

Chamber of Commerce (partner); Cyprus Turkish Chamber of Industry; sports clubs (partner and service recipient); citizens (partner and service recipient); regional tradesmen (partner); brother cities (partner); tourists (service); non-governmental organizations (partner); accountancy firms (partner); Department of Primary Health Services (partner); Department of Ports (strategic partner); neighboring municipalities (partner); and Ministry of Interior and Local Governments (partner). As part of the project planning process, non-governmental organizations (NGOs), relevant public institutions, employees, and representatives from the business world contributed. The focus group discussions took place in the presence of businesspeople and representatives of different sectors of great social and economic importance in the region. The relevant workshops include representatives from public units, the private sector, associations working in the area, and municipal employees (Kyrenia Municipality Council, 2018).

Regional strategic plans are developed and implemented through high-level administrative choices to enhance a particular geographical region through multi-layered strategies. Regional development plans take effect, and their resources become available accordingly. As part of the Kyrenia Municipality Regional Strategic Development Plan, strategic planning techniques and regional development plan elements took into account. Leadership and resource planning were developed at the local government level, incorporating socioeconomic development and emphasizing regional development (Kyrenia Municipality Council, 2018).

At present, the municipality is in the process of developing a concept and exploring methods of implementing it (Kyrenia Municipality Council, 2018). This study will analyze the awareness, entrepreneurship, creative spaces, creative activities,

innovation, tolerance, quality of life, physical comfort, and social cohesion, diversity of function, economic contribution, and protection of cultural features of Kyrenia's waterfront following the completion of several alterations. The study will assist in building the framework for the area's future growth.

The analysis took place before selecting sampling methods from the developed sector of the Kyrenia Waterfront. Ultimately, the prominent location between Kyrenia Castle and Atatürk Square, which had been judged suitable for evaluation, won. This section is Kyrenia's key activity corridor, so most visitors enter the city along this route. A diverse metropolitan environment surrounds the region. In line with the broad guidelines for waterfront development, Ataturk Square, Children's Park, and the land adjacent to the old port (Figure 27) all had merit.

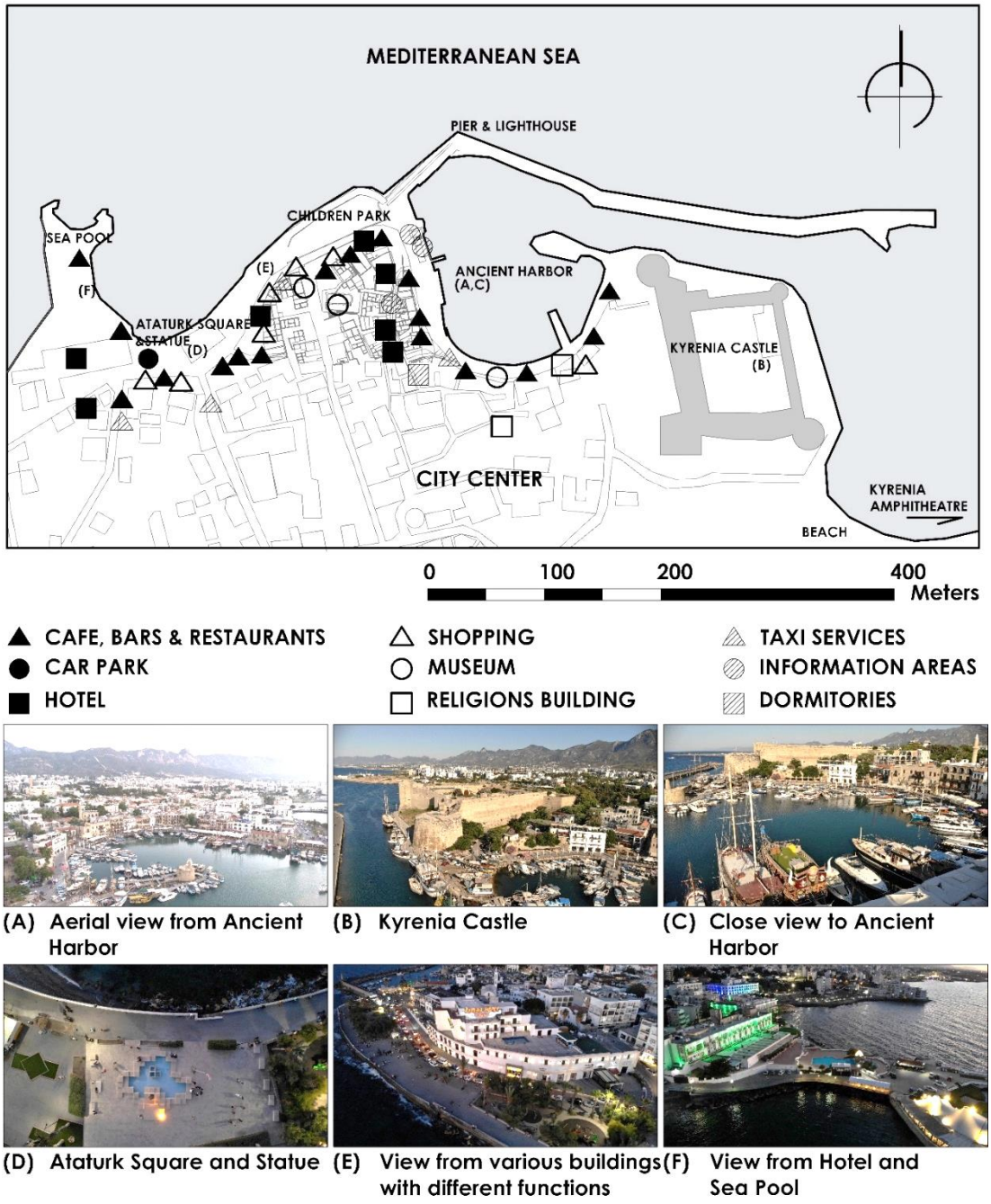


Figure 27: Kyrenia Waterfront

Kyrenia's location on the north coast of Cyprus makes it one of the most affected populations on the island with various visit types, which is one of the reasons to choose Kyrenia for this study. In addition, despite the demand for tourism, retail, recreational, and residential developments, new buildings accounted for a small portion of urban

growth in the 1980s, while renovation and redevelopment work rose amid political unpredictability.

Additionally, Kyrenia is notable for being the island's most beautiful and populous city. This town boasts a significant medieval castle built around the old harbor and framed by a gorgeous landscape at the base of the northern mountain range that drops precipitously into the sea (Figure 28).

In general, results obtained during the study show that most visitors prefer to spend time at the Kyrenia Waterfront. In addition, they are recommending this location to others. On the other hand, they are not content with the site's urban space amenities. Also, they are unhappy with the accessibility of car, people with disabilities, cyclists, and pedestrians.



Figure 28: After regeneration of Kyrenia Waterfront (photo: Alaa Albarazi, June 2021)

The Kyrenia Waterfront is among the most picturesque locations in Cyprus. Consequently, locals, tourists, and residents can all enjoy the waterfront. Due to this,

the location's contribution to the economy is commendable. In contrast, political support does not satisfy its users. Its physical condition is inconsistent and unstable. With this in mind, the right people had to set up the right conditions for investment and maintenance work.

Based on the density of users observed, most visitors prefer to spend time in the waterfront area over the city center, as indicated by the research. In addition, users choose to visit regions immediately adjacent to the ancient harbor (Figure 29).

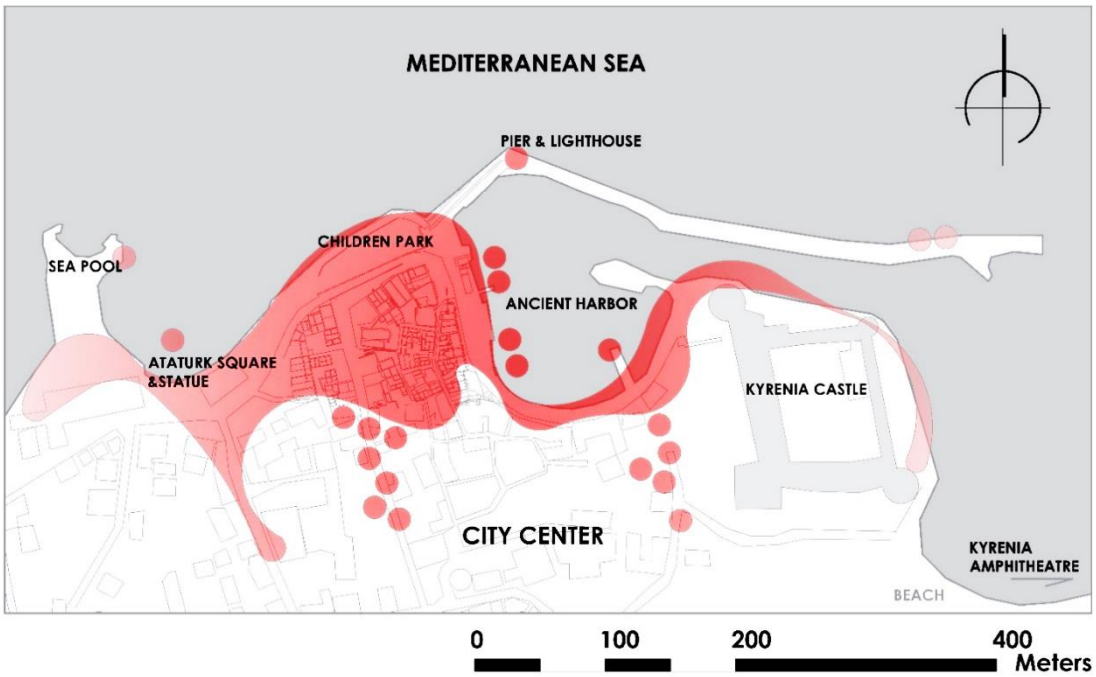


Figure 29: A map showing the density of users.

Kyrenia is a city of education and tourism in general terms. Kyrenia also has several universities. The ancient port area of Kyrenia, chosen for evaluation, is a welcoming place for users with various user profiles. Since the unique structure of the region reflects many historical pasts and has the identity of being the city's showcase, it is a frequent destination for locals, tourists, students, and employees. The existence of

historical castles and cultural venues has also increased cultural tourism. Besides, the coastal area is close to many hotels, so the place welcomes many visitors seeking casino tourism.

Based on observations made during the survey, it became apparent that the usage hours vary. While students prefer to visit more in the evening, tourists visiting the casino use the location primarily in the evening. Since the survey takes place between 16:00 and 20:00, student participants are in large numbers. In the observation process, it was also apparent that different user profiles share various spaces. While students and high-and middle-income people prefer to spend time in cafes and restaurants in the port area, those with lower incomes prefer the surrounding area of Atatürk Square. At certain times, the working class consumes various snacks near the pier. On the other hand, children spend time with their parents in the part of the parks.

Several factors led to the selection of this location, including its diversity of users, the shared use of its existing spaces, and its historic values and unique characteristics.

5.1 Methodology for Case Selection and Evaluation

The exact topic of this study is to clarify a suitable strategy for the creative waterfront and test it in the chosen case, the city of Kyrenia. The chosen methodology combines quantitative and qualitative analysis with a case study approach, which is three-folded; setting up a theoretical framework, conducting a questionnaire survey (Appendix A), and applying it to the case.

To memorize what has been explained, deliberated, and proposed, it is valuable to summarize the trail that has led to establishing a basis for the case area. The study began with a literature review of relevant studies about waterfront regeneration

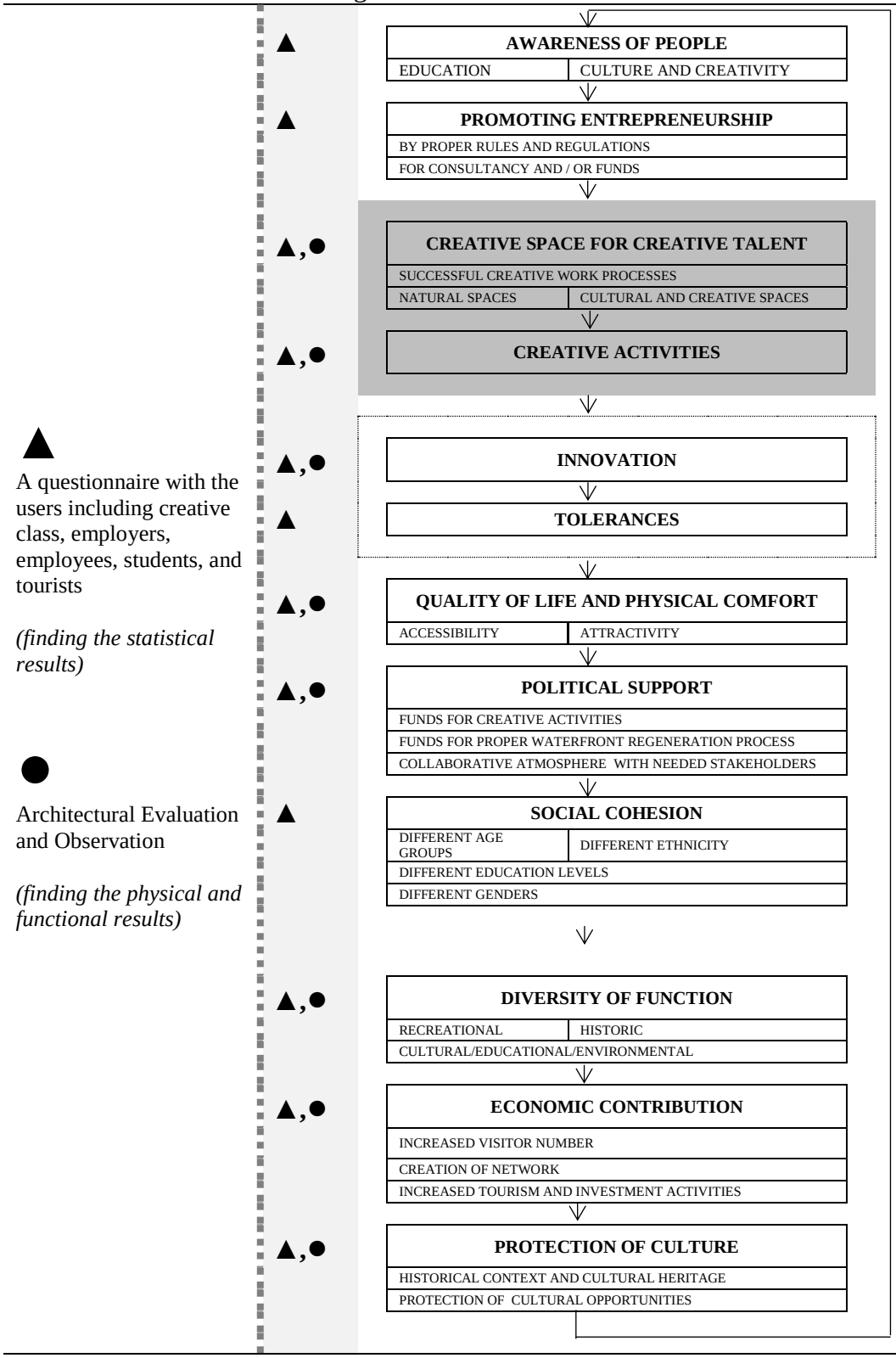
features and then continued with additional environmental aspects, primarily focused on creative placemaking features for waterfront areas. The search for an appropriate creative waterfront strategy for the city of Kyrenia was the beginning of the motivation for this study. In this sense, the purpose of the literature review was simultaneous to provide an overview and associate existing features with opportunities to suggest an appropriate creative waterfront strategy, which already exists in developing countries.

Thus, the existing literature clarifies several gaps in the theory of novel environmental features for waterfront development. In this sense, as a contribution to the literature, the literature review led to the development of two analytical frameworks:

1. A striking combination of creative waterfront components
2. A linked principal framework model of creative waterfronts.

The selected case will be analyzed and evaluated according to the twelve criteria of features of the created model for the "Creative waterfront." (Table 13).

Table 13: Methods for evaluating the Creative Waterfronts



5.2 Questionnaire Analysis

A survey took place to investigate the creative appearance of the Kyrenia waterfront through an image questionnaire developed by the author. This questionnaire relies on the components of the Creative Waterfront Model (Appendix A).

5.2.1 Sampling Strategy

The study was limited to the user population within walking distance of the waterfront area (i.e., a radius of 800m, or approximately 10 minutes of walking time). This limitation ensured that respondents were directly involved in modifying their everyday environment and neighborhood. There were several districts within an 800 m radius of the center. This limitation assured that respondents were directly involved in shaping their immediate environment and surroundings.

According to the 2011 census, Kyrenia city (excluding the outskirts) has a population of 33207 (DPO, 2013). Of this total, 4471 live in Aşağı Girne and 16380 in Yukarı Girne (DPO, 2013). Thus, 20.851 inhabitants. However, since less than half of these districts' areas are within the prescribed ten-minute walking distance, this total was halved for this study. Accordingly, the population came out to be 10.425. There was an assumption that using the method developed by Daniel and Terrell (1995) for applications with finite populations would be the most effective technique to determine the appropriate sample size for this investigation (Equation 1).

Equation 1: Daniel and Terrell formula (Daniel & Terrell, 1995)

$$n \geq \frac{Z^2 \times N \times p \times q}{N \times D^2 + Z^2 \times p \times q}$$

n = sample size, Z = confidence coefficient (z = 1.96 for 95% confidence level), N = population size, p = proportion of the sample in the population (as the proportion of the sample in the population was unknown initially and due to the lack of a preliminary investigation, values p and q were taken equal to each other and 50%), q = 1-p = 0.5, D = sampling error (% 10)

$$n \geq \frac{(1.96)^2 \, x \, 10425 \, x \, (0.5) \, x \, (0.5)}{10425 \, x \, (0.10)^2 + (1.96)^2 x \, (0.5) \, x \, (0.5)}$$

$$n \geq 95$$

According to this formula, the calculated value of "n" was 95. Direct interviews took place with residents and all visitors between September and November 2020. A study was conducted with 250 randomly selected people to ensure a more reliable and accurate survey.

5.2.2 Data Collection

The questionnaires take place face-to-face. Responses were requested to complete the questionnaire with deep focus and then ask if they needed clarification.

The thesis data collection lasted from September to November. The questionnaires went out to 250 individuals, and 247 were usable for the final analysis. The three respondents (i.e., cases numbers 54, 181, and 200) no longer exist due to not being engaged (since they answered somewhat agree to every Likert scale item).

The survey instrument is both in English and Turkish. All the items got rated using a five-point Likert scale, ranging from 5 = completely agree to 1 = strongly disagree.

5.2.3 Data Analysis

The respondents' profile, including gender, age, employment, education, type of visitor, visit frequency, like to spend time, suggest to others, well satisfied, and easily accessible, was reported through the frequency analysis. Moreover, the frequency and ratios of each question in the survey took place through expressive analysis. In the analysis, the data were screened and verified to check the missing data and normality of the data. There are missing values in the questions, which are related to: *"I strive to reflect my culture to foreign visitors; historical references preserved and reflected in*

the waterfront; adequacy of open and closed spaces, which are motivating for creative productivity; competence of consultancy and funding opportunities; and sufficiency of rules and regulations, which adapt to the place." We looked at the surrounding values of the other indicators for the latent factor, and we used the mode value for that respondent to impute the missing values. Testing the exploratory factor analysis (EFA) with sampling adequacy measurement, convergence validity, discriminant validity, and reliability of the variables was conducted. Also, a confirmatory factor analysis (CFA) took place using several measurement models. In this study, the one-way ANOVA test and the Tukey HSD post hoc tests aim to explore differences in variables between the subgroups of related variables and other demographic variables. A statistical analysis based on a 95% confidence level went through using SPSS V.25 and AMOS V.24.

5.3 Results

This section will explain the results of the demographic information, descriptive statistics, exploratory factor analysis, and confirmatory factor analysis for the respondents.

5.3.1 Descriptive Statistics

This section displays the results of the profile analysis performed on the responders. In addition, the descriptive statistics for the questionnaire variables appear in this section of the report.

5.3.1.1 Demographic Variables

The results of the descriptive statistics performed on the demographic variables that influenced the research appear in Table 14 through Table 25.

Table 14: Descriptive analysis of variable: gender

Items	Frequency	Percentage (%)
Female	69	27.9
Male	167	67.6
LGBT	11	4.5
Total	**247**	**100**

The consequence of the expressive analysis for the gender variable is presented in Table 14. It is shown that the bulk of the respondents were male (67.6%).

The fact that LGBT individuals can boldly choose the LGBT option on the survey shows their confidence that they do not feel pressured. However, there may be users who are LGBT individuals but do not choose this option. In addition, it appears that female users are fewer than male users. It is a situation that requires consideration.

Table 15: Descriptive analysis: age

Items	Frequency	Percentage (%)
18-24	61	24.7
25-34	77	31.2
35-44	62	25.1
45-54	27	10.9
55-64	12	4.9
65 & above	8	3.2
Total	**247**	**100**

The result of the descriptive analysis for the age variable is presented in Table 15. It is shown that the majority of the respondents were 18-44 ages (81.0%).

In general, it appears that mostly young people use the place. It is believed that the hours of the survey were effective in obtaining this result. The fact that students were using it predominantly at the time of the questionnaire revealed that the young population was in the majority.

Table 16: Descriptive analysis: nationality

Items	Frequency	Percentage (%)
Cypriot	121	49.0
Turkish	81	32.8
Others	45	18.2
Total	**247**	**100**

The result of the expressive analysis for the nationality is presented in Table 16. It is shown that the bulk of the respondents were from North Cyprus (49.0%) and Turkey (32.8%).

The region hosts many user profiles. Although most locals were at the time of the survey, tourists and student users were also present in significant numbers. The region, which has the potential to accommodate a diverse population, has been accepted as a valuable resource.

Table 17: Descriptive analysis: user group

Items	Frequency	Percentage (%)
Creative Class	95	38.5
Employees & Employers	49	19.8
Students	67	27.1
Others	36	14.6
Total	**247**	**100**

The result of the descriptive analysis for the user group variable is presented in Table 17. It is shown that the majority of the respondents were from creative class (38.5%) and students (27.1%).

The region also has the potential to host different disciplines and social classes. Based on information obtained from various sources, the users who belong to the creative class are associated with the creative fields. If we include students in the creative class,

as some sources classify students as prospective knowledge workers, we can identify 65.6% of the participants as the creative class.

Table 18: Descriptive analysis: education

Items	Frequency	Percentage (%)
Primary / Secondary	14	5.7
High School	52	21.1
University	138	55.9
Master / PhD. / …	43	17.4
Total	**247**	**100**

The result of the descriptive analysis for the education variable is presented in Table 18. It is shown that the majority of the respondents were educated at the university level (55.9%).

It is possible to find many universities in the region. It is a natural result that most survey participants are university students since the survey took place between noon and midnight when students mostly visit.

Table 19: Descriptive analysis: employment

Items	Frequency	Percentage (%)
Working	142	57.5
University Student	79	32.0
Retired	11	4.5
Unemployed	9	3.6
Housewife	6	2.4
Total	**247**	**100**

The result of the descriptive analysis for the respondents' employment variable is presented in Table 19. It is shown that the majority of the respondents were employed (57.7%) and students (32.0%).

Generally, where young people are predominant; university students and employees, working-class people, and creative field workers are frequently observed.

Table 20: Descriptive analysis: visitor type

Items	Frequency	Percentage (%)
Tourist	9	3.6
Local	90	36.4
Resident of Kyrenia	111	44.9
Others	37	15.0
Total	**247**	**100**

The result of descriptive analysis for the visitor type variable is presented in Table 20. It is shown that the majority of the respondents were residents of Kyrenia (44.9%) and local people (36.4%).

Again, depending on the times when the survey took place, it appears that the residents of Kyrenia are predominant. Summer is the season when most locals and tourists are in the majority.

Table 21: Descriptive analysis: visit frequency

Items	Frequency	Percentage (%)
Everyday	39	15.8
Weakly	88	35.6
Monthly	77	31.2
Seasonal	43	17.4
Total	**247**	**100**

The result of descriptive analysis for the frequency of visit variable are presented in Table 21. It is shown that the majority of the respondents were weekly and monthly visitors (66.8%).

The main reason why visitors prefer to visit this place frequently is that it has a unique historical texture, various activities. Therefore, it can host many diverse human profiles. In addition, it has become a refreshment place for those who come for casino tourism. It was observed that around 22:00, casino users visiting the area.

Table 22: Descriptive analysis: like to spend time

Items	**Frequency**	**Percentage (%)**
Yes	222	89.9
No	25	10.1
Total	**247**	**100**

The result of descriptive analysis for the like to spend time variable are presented in Table 22. It is shown that the majority of the respondents were interested to spend their time there (89.9%).

Table 23: Descriptive analysis: suggesting to others

Items	**Frequency**	**Percentage (%)**
Yes	183	74.1
No	64	25.9
Total	**247**	**100**

The result of descriptive analysis for the suggestion to others variable is presented in Table 23. It is shown that the majority of the respondents were confident to suggest the place to others (74.1%).

Table 24: Descriptive analysis: well satisfied

Items	**Frequency**	**Percentage (%)**
Yes	117	47.4
No	130	52.6
Total	**247**	**100**

The result of descriptive analysis for the well-satisfied variable is presented Table 24. It is shown that almost half of the respondents were well satisfied or feel pleased through the environment (47.4%).

Despite all its positive nature, it has come to light that cleaning problems, lighting problems, and scarcity of outdoor activities are among the reasons why the majority of users are not fully satisfied. In addition, there was concern about the unsafe user profile that increases in dark areas at night.

Table 25: Descriptive analysis: easily accessible

Items	**Frequency**	**Percentage (%)**
Yes	93	37.7
No	154	62.3
Total	**247**	**100**

The result of descriptive analysis for the easily accessible variable is presented in Table 25. It is shown that the majority of the respondents perceived that the place was not easily accessible (62.3%).

According to the description provided by the users, the location is difficult to reach. While cyclists and pedestrians talk about the deterioration of the physical quality of the sidewalks, car users complain about the scarcity of parking spaces. Observations indicate that disabled people can't use the place without assistance.

5.3.1.2 Questionnaire Variables

The results of the descriptive statistics including mean, mode, standard deviance, skewness, kurtosis, minimum, and maximum for the survey questions are presented in

Table 26 to 28 for each of the creative environment, waterfront development, and creative waterfront.

Table 26: Descriptive statistics of questionnaire variables: creative environment

Variables	Questions	Mean	Mode	Std. Dev.	Skewness	Kurtosis	Min	Max
Awareness of People	Q1	3.05	3	1.132	0.006	-0.728	1	5
	Q2	4.53	5	0.987	-2.209	3.935	1	5
	Q3	2.69	2	1.257	0.508	-0.900	1	5
Promoting Entr.	Q4	3.07	2a	1.260	-0.028	-1.155	1	5
	Q5	2.79	2	1.173	0.210	-0.805	1	5
Protection of Culture	Q6	3.49	5	1.331	-0.286	-1.243	1	5
	Q7	2.58	2	1.288	0.494	-0.761	1	5
	Q8	2.42	2	1.158	0.560	-0.475	1	5
	Q9	2.66	2	1.311	0.445	-0.961	1	5
Physical Quality	Q10.	2.40	2	1.150	0.663	-0.210	1	5
	Q11	2.40	2	1.139	0.646	-0.261	1	5
Creative Activities	Q12	2.23	2	1.109	0.643	-0.417	1	5
	Q13	2.21	2	1.074	0.794	0.229	1	5
	Q14	2.28	2	1.133	0.753	-0.045	1	5
	Q15	2.50	2	1.196	0.501	-0.547	1	5
Social Cohesion	Q16	3.15	2	1.385	0.017	-1.305	1	5
	Q17	2.78	2	1.264	0.427	-0.849	1	5
Quality of Life	Q18	2.77	2	1.418	0.258	-1.259	1	5
	Q19	3.04	2	1.290	0.096	-1.087	1	5
	Q20	2.51	2	1.186	0.605	-0.356	1	5
Tolerances	Q21	3.25	2a	1.431	-0.132	-1.434	1	5
	Q22	3.07	3	1.394	-0.087	-1.234	1	5
Innovation	Q23	2.38	2	1.204	0.901	0.099	1	5
	Q24	2.34	2	1.118	0.847	0.267	1	5
	Q25	2.05	1	1.134	1.043	0.393	1	5

Note: a. Multiple modes exist. The smallest value is shown; Std. Dev. = Standardized Deviation; Min. = Minimum; Max. = Maximum.

The results of the descriptive analysis for the creative environment variables of the questionnaire in Table 26 showed that all the variables had a fairly normal distribution. That is the skewness and kurtosis values for all the variables except for "*awareness of people* (in creative environment variables)" were between the cut-off range values of ±3.3 (Sposito, Hand, & Skarpness, 1983).

In light of the consistent results obtained by users, it is possible to assert that there is a neutral approach to the questions posed by the creative environment concept. It would be beneficial to conduct studies to improve user satisfaction in this location, which has the potential to accommodate a variety of user profiles.

There is a need to prepare the ground for artistic activities in this region, which has enormous potential for the creative class.

Table 27: Descriptive statistics of questionnaire variables: waterfront development

Variables	Questions	Mean	Mode	Std. Dev.	Skewness	Kurtosis	Min	Max
Functional	Q1	2.992	2	1.272	0.039	-1.066	1	5
	Q2	2.563	2	1.201	0.625	-0.434	1	5
	Q3	2.211	2	1.139	0.877	0.119	1	5
Physical	Q4	2.178	2	1.048	0.877	0.454	1	5
	Q5	2.231	2	1.032	1.003	0.899	1	5
	Q6	2.162	2	1.070	0.938	0.405	1	5
	Q7	2.069	1	1.189	1.022	0.104	1	5
	Q8	2.243	1	1.235	0.819	-0.336	1	5
	Q9	1.947	1	1.079	1.084	0.481	1	5
	Q10	2.150	1	1.178	0.909	0.049	1	5
	Q11	1.915	1	1.088	1.354	1.365	1	5
Social	Q12	2.834	2	1.307	0.212	-1.132	1	5
	Q13	3.126	2a	1.410	-0.023	-1.331	1	5
	Q14	3.138	3	1.327	-0.150	-1.099	1	5
Economic	Q15	2.417	1	1.230	0.577	-0.540	1	5
	Q16	2.846	2	1.275	0.161	-1.067	1	5
	Q17	2.899	2	1.295	0.178	-1.034	1	5
Cultural	Q18	2.344	2	1.182	0.749	-0.252	1	5
	Q19	2.166	2	1.134	1.019	0.488	1	5
	Q20	2.215	2	1.107	0.834	0.199	1	5
Politic support	Q21	2.211	2	1.076	0.656	-0.159	1	5
	Q22	2.186	2	1.066	0.678	-0.143	1	5
	Q23	2.040	1	1.055	0.820	0.052	1	5

Note: a. Multiple manners exist. The minimum value is shown; Std. Dev. = Standardized Deviation; Min. = Minimum; Max. =Maximum.

The results of the descriptive analysis for the waterfront development variables of the questionnaire in Table 27 showed that all the variables had a normal distribution. That is the skewness and kurtosis values for all the variables were between the cut-off range values of ±3.3 (Sposito, Hand, & Skarpness, 1983).

Similarly, based on the consistent results obtained by users, it can be asserted that there is a generally neutral approach to the questions posed by the concept of coastal development. It is necessary to increase user satisfaction and social interaction opportunities in this area, which can accommodate a variety of user profiles.

Table 28: Descriptive statistics of questionnaire variables: creative waterfront

Variables	Questions	Mean	Mode	Std. Dev.	Skewness	Kurtosis	Min	Max
Protection of Culture	Q1	2.113	1	1.142	0.865	-0.126	1	5
	Q2	2.206	2	1.134	0.766	-0.207	1	5
	Q3	2.162	1	1.168	0.854	-0.130	1	5
	Q4	2.117	2	1.070	0.828	0.058	1	5
	Q5	2.130	2	1.028	1.029	0.863	1	5
	Q6	2.486	2	1.265	0.627	-0.580	1	5
	Q7	2.089	2	1.059	1.145	1.100	1	5
	Q8	2.036	2	1.045	1.241	1.365	1	5
Tolerances	Q9	2.895	3	1.333	0.091	-1.137	1	5
	Q10	2.486	3	1.216	0.409	-0.727	1	5
	Q11	3.166	5	1.528	-0.090	-1.507	1	5
Promoting Entrepreneurship	Q12	2.300	2	1.078	0.774	0.297	1	5
	Q13	2.283	2	1.008	0.654	0.291	1	5
	Q14	2.186	2	0.982	0.682	0.266	1	5
Creative Environment	Q15	2.032	1	1.004	0.908	0.616	1	5
	Q16	2.000	1	1.044	1.103	0.978	1	5
	Q17	2.134	1	1.049	0.732	0.034	1	5
Creative Activities	Q18	2.121	1	1.068	0.827	0.221	1	5
	Q19	2.024	1	0.979	0.789	0.233	1	5
	Q20	1.988	2	0.998	1.113	1.071	1	5
Innovation and Technology	Q21	1.955	2	0.968	1.120	1.216	1	5
	Q22	1.996	2	1.034	1.187	1.133	1	5
	Q23	1.879	1	0.951	1.047	0.761	1	5
	Q24	1.968	1	0.995	1.062	0.984	1	5
	Q25	1.919	1	1.041	1.101	0.741	1	5
	Q26	1.887	1	0.969	1.014	0.682	1	5
	Q27	1.915	1	1.042	1.062	0.639	1	5
	Q28	1.814	1	0.931	1.079	0.880	1	5
	Q29	1.814	1	0.962	1.211	1.057	1	5
	Q30	2.040	1	1.077	0.981	0.359	1	5
Awareness	Q31	2.004	1	1.160	1.158	0.524	1	5
	Q32	2.016	1	1.097	1.105	0.683	1	5
	Q33	2.032	1	1.151	1.098	0.458	1	5
Quality of Life and Physical Comfort	Q34	2.170	2	1.080	1.043	0.756	1	5
	Q35	2.308	2	1.152	0.727	-0.323	1	5
	Q36	2.150	2	1.019	0.997	0.765	1	5
	Q37	2.146	2	1.098	0.840	0.048	1	5
	Q38	2.117	2	1.011	0.975	0.828	1	5
	Q39	1.911	1	0.992	1.213	1.246	1	5
	Q40	1.980	1	1.022	1.031	0.638	1	5
	Q41	2.538	2	1.287	0.520	-0.784	1	5
	Q42	1.947	1	1.040	1.045	0.627	1	5
	Q43	2.077	1	1.129	0.907	0.014	1	5
	Q44	2.304	1	1.237	0.653	-0.617	1	5
	Q45	2.340	2	1.202	0.693	-0.382	1	5
	Q46	2.174	2	1.107	0.991	0.494	1	5
	Q47	2.138	2	1.019	0.814	0.425	1	5
	Q48	2.130	2	1.078	1.015	0.641	1	5
Politic Support to Relevant Authorities	Q49	2.304	2	1.094	0.689	0.052	1	5
	Q50	2.182	2	1.030	0.822	0.599	1	5
	Q51	2.162	2	1.114	1.008	0.612	1	5
Social Cohesion	Q52	3.105	4	1.345	-0.092	-1.194	1	5
	Q53	3.206	2	1.341	-0.006	-1.283	1	5
	Q54	3.235	5	1.377	-0.109	-1.277	1	5
	Q55	3.170	5	1.413	-0.026	-1.362	1	5
	Q56	3.215	5	1.451	-0.170	-1.330	1	5
Diversity of Function	Q57	3.194	3	1.332	-0.091	-1.161	1	5
	Q58	2.190	2	1.137	0.891	0.228	1	5
	Q59	2.275	2	1.035	0.782	0.411	1	5
	Q60	2.247	2	1.004	0.630	0.136	1	5
	Q61	2.749	2	1.282	0.386	-0.877	1	5
	Q62	2.822	2	1.325	0.300	-1.111	1	5
	Q63	2.028	2	1.026	1.037	0.888	1	5

Variables	Questions	Mean	Mode	Std. Dev.	Skewness	Kurtosis	Min	Max
Economic Contribution	Q64	2.656	2	1.300	0.314	-1.033	1	5
	Q65	2.591	3	1.182	0.361	-0.666	1	5
	Q66	2.247	2	1.000	0.718	0.352	1	5
	Q67	2.077	2	0.991	0.906	0.801	1	5
	Q68	2.263	2	1.059	0.575	-0.249	1	5
	Q69	1.899	2	0.929	1.122	1.402	1	5
	Q70	2.267	1	1.374	0.845	-0.556	1	5

Note: Std. Dev. = Standardized Deviation; Min. = Minimum; Max. =Maximum.

The results of the descriptive analysis for the creative waterfront variables of the questionnaire in Table 28 showed that all the variables had a normal distribution. That is the skewness and kurtosis values for all the variables were between the cut-off range values of ±3.3 (Sposito, Hand, & Skarpness, 1983).

Additionally, it appears that the questions posed in the concept of the creative waterfront model have a generally neutral stance based on the users' consistent results. It is imperative to take steps to increase the satisfaction of the users in this location, which has the potential to host a variety of user profiles. In addition to providing a safe environment, an artistic, contemporary, and physically suitable environment should exist, which will increase the interaction between water and people and provide a foundation for the collaboration of various classes in this region, which has enormous potential for all visitors.

5.3.2 Reliability of Measurement Scales

The reliability of the measurement scales was tested through the alpha Cronbach (Cronbach, 1951). The Cronbach alpha generally should be above 0.7; however, 0.6 is also acceptable (Hair, Black, Babin, Anderson, & Tatham, 2006). To increase the Cronbach alpha, one approach is to delete the items based on item-to-total correlation (ITC), which can be above 0.2 to indicate the good discrimination (Tanaka, 1993). The results of that are presented in Tables 29 to 31. The items with the item-total correlation less than 0.4 were deleted.

In general, it has emerged in the reliability tests that the results are reliable and reflect the majority's opinion. It shows that the evaluations made in the study are safe and should take into account.

Table 29: Reliability of the variables: creative environment

Items	Item-Total Correlation	alpha Cronbach
AWARENESS OF PEOPLE		0.643
I am satisfied with the basic life amenities.	0.476	
I am feeling motivated to keep the environment clean.	-	
An environment is an attractive place with events and activities.	0.476	
ENTREPRENEURSHIP		0.781
I am feeling that the place has provided economic gain for many people.	0.643	
The place has inviting entrepreneurs to invest.	0.643	
PROTECTION OF CULTURE		0.845
The place is welcoming users from different cultures and languages.	-	
The environment is protecting its historic context, cultural heritages, and unique values.	0.801	
The environment has a contemporary appearance.	0.767	
I am feeling the culture of the city in the place.	0.788	
PHYS. QUALITY		0.822
The physical quality is adequate.	0.698	
The place has an adequate physical appearance with a contemporary image.	0.698	
CREATIVE ACTIVITIES		0.838
There are various art activities in the environment.	0.672	
Public amenities are sufficient and appropriate in the environment.	0.663	
The place has to provide an alternate space for the creative class.	0.694	
I am inspired to reflect my culture to foreign visitors.	0.652	
SOCIAL		0.661
Different age groups, ethnicity, education levels, and/or genders can enjoy the environment.	0.496	
I am finding comfortable places for socializing.	0.496	
QUALITY OF LIFE		0.775
The place is accessible.	0.615	
I am feeling safe in the place.	0.606	
The place is clean.	0.619	
TOLERANCES		0.780
All user groups with different genders, beliefs, etc. can enjoy the environment.	0.639	
I don’t feel annoyed and/or oppressed in the place.	0.639	
INNOVATION		0.821
The place has given me opportunities to construct my innovative ideas.	0.681	
I can find applied creative ideas in the place.	0.772	
Contemporary technological tools like energy consumption via water, digital lighting systems, development areas, and/or simulation areas have been placed.	0.582	0.643

The results of Table 29 showed that all of the creative environment variables had good reliability as the evidence of alpha Cronbach between 0.845 for *'protection of culture'* and 0.643 for *'awareness of people'* and *'innovation'*.

Table 30: Reliability of the variables: waterfront development

Items	**Item-Total Correlation**	**alpha Cronbach**
FUNCTIONAL		0.701
The waterfront has various functional opportunities.	0.414	
The waterfront is providing joyful areas with music, food, literature, dance, and/or maritime heritage.	0.612	
Different types of water-based activities can be seen.	0.541	
PHYSICAL		0.909
The waterfront is well-maintained.	0.673	
The place has presented various art objects in good physical condition.	0.651	
Urban furniture is in good physical condition.	0.736	
The waterfront is accessible for able and disabled people.	0.800	
The area has access to other public environments.	0.716	
It is easy to reach the waterfront via pedestrian access, bicycle lanes, and/or public transportation.	0.767	
Traffic and parking condition is proper.	0.754	
	0.559	
SOCIAL		0.831
The environment is attractive.	0.661	
People with different education levels, age groups, ethnicities, and income levels can enjoy the place.	0.725	
I am proud to have such a place in my city.	0.687	
ECONOMIC		0.717
The economic and nature-friendly design approach was considered during the regeneration process.	0.521	
The area provides good economic income.	0.603	
I like to visit here frequently.	0.489	
CULTURAL		0.862
Historical references are protected and/or reflected in the waterfront.	0.672	
There are cultural and art activities in the place.	0.781	
The unique image has been protected and the image has developed.	0.764	
POLITIC		0.899
The regeneration process has been done with a successful cooperation process with related stakeholders.	0.795	
Creativity, innovation, and/or social well-being policies are well-considered during the regeneration process.	0.840	
I am feeling that proper regulations have been created by politicians to provide continuous maintenance.	0.768	

The results of Table 30 showed that all of the waterfront development variables had good reliability as the evidence of alpha Cronbach between 0.701 for *'functional'* and 0.909 for *'physical'*.

Table 31: Reliability of the variables: creativity waterfront

Items	Item-Total Correlation	alpha Cronbach
PROTECTION OF CULTURE		0.932
Adequacy of cultural promotion.	0.798	
Competence of cultural spaces.	0.826	
The capability of contextual protection (historic and/or cultural heritage).	0.849	
Protection level of an existing unique culture.	0.841	
Festival opportunities in the place.	0.788	
Access to local foods.	0.575	
Access to local arts.	0.764	
Adequacy of art activities.	0.704	
TOLERANCES		0.843
Welcoming level of the place.	0.793	
Sufficiency level of open-minded people.	0.617	
Freedom level.	0.741	
ENTREPRENEURSHIP		0.884
Competence in consultancy and/or funds opportunities.	0.766	
Competence of collaborative discussion spaces for stakeholders.	0.798	
Adequacy of investment activities.	0.760	
CREATIVE ENVIRONMENT		0.870
The capability of exhibition spaces.	0.725	
Suitability of performance areas.	0.772	
Adequacy of open and/or close spaces, which motivating for creative productivity.	0.757	
CREATIVE ACT.		0.894
Sufficiency of creative ideas, which comes true.	0.780	
Competence in creative work activities.	0.809	
The capability of creative actions.	0.789	
INNOVATION AND TECHNOLOGY		0.934
Sufficiency of innovative ideas, which comes true.	0.780	
Sufficiency of technological ideas, which comes true.	0.744	
Adequacy of information tools for visitors.	0.705	
Existence of digital lighting systems.	0.719	
Existence of development areas.	0.827	
Existence of R&D areas.	0.790	
Existence of Research areas.	0.759	
Existence of Simulation areas.	0.736	
Existence of energy consumption via water.	0.764	
Access to the internet.	0.558	
AWARENESS		0.888
Adequacy of motivated people to keep the place clean.	0.784	
Adequacy of motivated people to promote their art, music, and literature in the place.	0.741	
Adequacy of responsive people for their environment and society.	0.823	
The efficiency of protection of natural spaces.	0.670	
Suitability of accessibility.	0.684	
Appropriateness of functional variety.	0.795	
Adequacy of architecture quality.	0.701	
Adequacy of urban design quality.	0.749	
Sufficiency of traffic, and access to the car park.	0.720	
Sufficiency of transportation.	0.680	
Possibility of relaxation.	0.623	
Adequacy of access for disabled.	0.734	
Access to cycling.	0.757	
Access for pedestrians.	0.690	
Adequacy of safety.	0.697	
Suitability of urban furniture, and harmony between each other.	0.704	
Adequacy of cleanliness.	0.738	
Access to urban balconies (viewpoints).	0.703	
POLITICAL SUP.		0.877
Sufficiency of rules and regulations, which adapted into the place.	0.723	
Competence of funds opportunities for the development of the place.	0.824	
Adequacy of political support for the arrangement of a platform for stakeholders.	0.743	
SOCIAL COHESION		0.955
Sufficiency of attractiveness.	0.768	
Existence of different age groups.	0.893	
Existence of different ethnicity.	0.930	
Existence of different education levels.	0.910	
Existence of different genders.	0.881	
DIVERSITY OF FUNCTION		0.869
Adequacy of accommodation opportunities.	0.627	
Existence of water-based activities.	0.640	
Variety of activities.	0.726	
Access to the other functions.	0.697	
Access to recreational facilities.	0.733	
Sufficiency of shopping opportunities.	0.608	
Eligibility for sports activities.	0.527	
ECONOMIC CONTRIBUTION		0.868
Sufficiency of publicity of the environment.	0.675	
The efficiency level of increased visitor numbers.	0.719	
Adequacy of strategic and/or economic agreements with other cities.	0.524	
The efficiency level of increased tourism and investment activities.	0.618	
Competence of employment opportunities.	0.721	
Acceptable cost of transportation.	0.629	
The efficiency level of increased tourist attraction.	0.648	

The results of Table 31 showed that all of the creativity waterfront variables had good reliability as the evidence of alpha Cronbach between 0.843 for *'tolerances'* and 0.955 for *'social cohesion'*.

5.3.3 Validity of Measurement Scales

In this part, both the exploratory factor analysis, also known as EFA, and the confirmatory factor analysis, usually known as CFA, appear. Both of these analyses are referred to by their abbreviations.

5.3.3.1 Exploratory Factor Analysis

Exploratory factor analysis, often known as EFA, was conducted on the newly introduced component of the measurement instrument, called the creativity waterfront.

Table 32: Initial EFA for creativity waterfront

		1	2	3	4	5	6	7	8	9	10	11	12
AWARENESS	Q31				0.765								
	Q32				0.499								
	Q33				0.798								
CREATIVE ACT.	Q18	0.823											
	Q19	0.866											
	Q20	0.880											
CREATIVE ENV.	Q15	0.707											
	Q16	0.945											
	Q17	0.934											
PROTECTION OF CULTURE	Q1				0.856								
	Q2				0.816								
	Q3				0.889								
	Q4				0.720								
	Q5				0.491								
ECONOMIC CONT.	Q66					0.414				0.403			
	Q67					0.788							
	Q68					0.755							
	Q69					0.751							
	Q70					0.447							
ENTR.	Q12									0.752			
	Q13									0.697			
	Q14									0.554			
DIVERSITY OF FUNCTION	Q57							0.880					
	Q58											0.692	
	Q59											0.551	
	Q61							0.781					
	Q62							0.928					
	Q63											0.649	
INNOVATION AND TECHNOLOGY	Q21	0.666											
	Q22	0.599											
	Q23	0.614											
	Q24	0.508											
	Q25								0.424				
	Q26								0.832				
	Q27								0.718				
	Q28								0.814				
	Q29								0.580				
POLITICAL SUP.	Q49										0.545		
	Q50										0.814		
	Q51										0.798		
QUALITY OF LIFE AND	Q34						0.484						
	Q35						0.722						

		1	2	3	4	5	6	7	8	9	10	11	12
PHYSICAL COMFORT	Q36						0.608						
	Q37						0.670						
	Q38						0.458						
	Q39			0.762									
	Q40			0.865									
	Q41			0.584									0.587
	Q42			0.625									
	Q43			0.692									
	Q44			0.731									
	Q45												0.657
	Q46												0.406
	Q47												0.510
	Q48			0.479									
SOCIAL COHESION	Q52		0.761										
	Q53		0.948										
	Q54		0.974										
	Q55		0.944										
	Q56		0.946										
TOLERANCE AND OPENNESS	Q9		0.634										
	Q10		0.428										
	Q11		0.723										

Notes: Extraction Method: Principal Component Analysis.

Table 32 contains the findings of the preliminary (EFA) for the *"creative waterfront."* Twelve of the factors had eigenvalues of more than 1.00 when they were extracted. The investigation revealed that the variable *"Q66"* contained a cross-loading, which was subsequently disregarded for the remaining research. Both of the distinct factors have had the items for functionality, which range from *"Q57"* to *"Q63,"* inserted into them. However, since they are related to one another and do not have any cross-loading among other components, we opted to combine them to arrive at the final EFA result. The answers to questions *"Q34"* through *"Q48"* were analyzed using the same methodology.

Based on the findings of the EFA, it was determined that three items from the awareness category, three items from the environment category, and the first items from the innovative technology category should be integrated since they load into the same factor. Because they are both loaded into the same factor, these results also showed that the five items that measure *"social cohesion"* and the three items that measure *"tolerance"* need to be put together.

Table 33: Final EFA for creativity waterfront

Factors	Items	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
CREATIVE ENVIRONMENT AND ACTIVITIES	Q18	0.823								
	Q19	0.866								
	Q20	0.880								
	Q15	0.707								
	Q16	0.945								
	Q17	0.934								
	Q21	0.666								
	Q22	0.599								
	Q23	0.614								
	Q24	0.508								
SOCIAL COHESION AND TOLERANCE	Q52		0.761							
	Q53		0.948							
	Q54		0.974							
	Q55		0.944							
	Q56		0.946							
	Q9		0.634							
	Q10		0.428							
	Q11		0.723							
QUALITY OF LIFE AND PHYSICAL COMFORT	Q34			0.484						
	Q35			0.722						
	Q36			0.608						
	Q37			0.670						
	Q38			0.458						
	Q39			0.762						
	Q40			0.865						
	Q41			0.587						
	Q42			0.625						
	Q43			0.692						
	Q44			0.731						
	Q45			0.657						
	Q46			0.406						
	Q47			0.510						
	Q48			0.479						
PROTECTION OF CULTURE AND SOCIAL AWARENESS	Q31				0.765					
	Q32				0.499					
	Q33				0.798					
	Q1				0.856					
	Q2				0.816					
	Q3				0.889					
	Q4				0.720					
	Q5				0.491					
CREATIVE ECONOMY AND ECONMIC CONTRUBITION	Q66					0.414				
	Q67					0.788				
	Q68					0.755				
	Q69					0.751				
	Q70					0.447				
FUNCTIONAL OPPORTUNITIES	Q57						0.880			
	Q58						0.692			
	Q59						0.551			
	Q61						0.781			
	Q62						0.928			
	Q63						0.649			
INNOVATION AND TECHNOLOGY	Q25							0.424		
	Q26							0.832		
	Q27							0.718		
	Q28							0.814		
	Q29							0.580		
MOTIVATING ENTREPRENEURS TO INVEST	Q12								0.752	
	Q13								0.697	
	Q14								0.554	
POLITICAL SUFFICIENCY	Q49									0.545
	Q50									0.814
	Q51									0.798

Notes: Extraction Method: Principal Component Analysis.

The after combing the items suggested from the initial EFA results in Table 32, the result of the final EFA are presented in Table 33.

These results showed that in total nine factors can be extracted from all the items in the creativity waterfront measurement. Therefore, two factors are the result of the combination of other factors were named as *"Creative Environment and Activities,"* and *"Social Cohesion and Tolerance."* Their name was assigned based their relevancy to their subject of measurement questions related to each other. The final factors' name is presented in the first column of Table 33 in bold.

Table 34: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.937
Bartlett's Test of Sphericity	Approx. Chi-Square	15319.18
	df	1953
	Sig.	000

The results of Kaiser-Mayer Olkin's measure of sampling adequacy (MSA) test and Bartlett's Test of Sphericity (BTS) for assessing the suitability of the data for factor analysis are presented in Table 34, which indicates the impressive level of prediction (i.e., MSA of above 0.9, and significance of BTS) in this study (Hair, Black, Babin, Anderson, & Tatham, 2006).

5.3.3.2 Confirmatory Factor Analysis

A confirmatory factor analysis (CFA) was carried out using the AMOS 24.0 to determine whether or not the scales are reliable.

Tables 35 through 43 contain the results of the (CFA), correlation, and the Heterotrait-Monotrait ratio of correlations (HTMT). Following the recommendation of Voorhees et al., the HTMT may serve as an alternative to the average variance (Voorhees, Brady, Calantone, & E., 2016).

Table 35: CFA for creative environment

Construct	Measurement Items	B	Beta	t-Value	CR
Awareness of People	*Q1*	0.695	0.606	9.247***	0.656
	Q2	-	-	-	
	Q3	1.000	0.785	n/a	
Promoting Entrepreneurship	*Q4*	1.000	0.941	n/a	0.803
	Q5	0.676	0.683	9.817***	
Protection of Culture	*Q6*	-	-	-	0.846
	Q7	0.868	0.740	12.63***	
	Q8	0.880	0.833	14.688***	
	Q9	1.000	0.836	n/a	
Physical Quality	*Q10*	1.000	0.869	n/a	0.823
	Q11	0.915	0.803	15.326***	
Creative Activities	*Q12*	0.969	0.784	11.639***	0.800
	Q13	-	-	-	
	Q14	0.924	0.732	10.893***	
	Q15	1.000	0.750	n/a	
Social Cohesion	*Q16*	-	-	-	-
	Q17	-	-	-	
Quality of Life	*Q18*	1.000	0.730	n/a	0.778
	Q19	0.881	0.707	10.513***	
	Q20	0.874	0.763	11.349***	
Tolerances	*Q21*	0.912	0.754	10.49***	0.783
	Q22	1.000	0.848	n/a	
Innovation	*Q23*	1.000	0.838	n/a	0.844
	Q24	0.965	0.871	15.581***	

*Note: - dropped during CFA; * Fixed parameter; *** p < 0.001; Model fit statistics; x^2 [124] = 399.439, x^2/df = 3.221; IFI = 0.903; CFI = 0.902; SRMR = 0.055; B = Unstandardized loading; Beta = Standardized loading; CR = composite reliability; IFI = incremental fit index; CFI = comparative fit index; SRMR = standardized root mean square residual; and CI =confidence interval.*

As demonstrated in Table 35, all the indicators settle down on their latent factors of the creative city. They sign with a t-value of greater than 3.30 at a 0.001 level (df > 100), which indicates the evidence for convergent validity (Anderson & Gerbing, 1984). The standardized loadings for the constructs ranged between 0.606 and 0.941, demonstrating comparatively high loadings and indicating the importance of perceived variables as indicators of each construct. Moreover, the results revealed that all measurements for the creative city were reliable, where the composite reliability scores were higher than 0.60 (Bagozzi & Yi, 1988). The "*social cohesion* (in creative environment indicators)" construct is no longer relevant because "*tolerance* (in creative environment indicators)" has a problem with discriminant validity, which shows that they are not two different constructs. So, the decision is to get the model to fit the "*social cohesion* (in creative environment indicators)" by having a lower level of convergent validity, standardized loading, and R-square (R2 values in AMOS are

called Squared Multiple Correlations) than the "*tolerance* (in creative environment indicators)." As the goal of this research is to evaluate a proposed scale for creative waterfront, which is a combination of creative environment and waterfront development, these results suggest that "*social cohesion* (in creative environment indicators)" and "*tolerance* (in creative environment indicators)" should be combined because they cannot exist separately. One can verify this suggestion by reviewing the results of EFA for the creative waterfront construct provided in Table 33 and later in the results of CFA in Table 41.

Table 36: Correlation: creative environment

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Awareness of People	1							
Promoting Entrepreneurship	0.715***	1						
Protection of Culture	0.823***	0.577***	1					
Physical Quality	0.842***	0.530***	0.816***	1				
Creative Activities	0.773***	0.394***	0.680***	0.881***	1			
Quality of Life	0.794***	0.589***	0.741***	0.851***	0.711***	1		
Social Cohesion and Tolerances	0.500***	0.608***	0.531***	0.552***	0.427***	0.624***	1	
Innovation	0.692***	0.548***	0.685***	0.776***	0.667***	0.886***	0.694***	1

*Notes: *** $p < 0.001$.*

The result of Table 36 demonstrates that all the variables for the creative environment are relatively correlated to each other ($p < 0.001$). All the correlation coefficients were positive and significant at 99% confident interval ranged between 0.394 ["*creative activities* (in creative environment variables)," and "*promoting entrepreneurship* (in creative environment variables)"] and 0.886 ["*innovation* (in creative environment variables)," and "*quality of life* (in creative environment variables)"].

Table 37: HTMT ratios: creative environment

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Awareness of People	-							
Promoting Entrepreneurship	0.745	-						
Protection of Culture	0.754	0.611	-					
Physical Quality	0.860	0.553	0.804	-				
Creative Activities	0.797	0.422	0.659	0.877	-			
Quality of Life	0.801	0.653	0.734	0.856	0.717	-		
Social Cohesion and Tolerances	0.557	0.641	0.532	0.544	0.433	0.644	-	
Innovation	0.678	0.561	0.670	0.772	0.667	0.888	0.692	-

Notes: HTMT = Heterotrait-Monotrait Ratio of Correlations.

The result of assessing the HTMT ratio in Table 37 for creative environment variables is shown that discriminant validity does not appear to be a concern since all the HTMT rations are less than 0.90 and most of them are less than 0.85 as ideal cut-off point (Henseler, Ringle, & Sarstedt, 2015; Voorhees, Brady, Calantone, & E., 2016).

Table 38: CFA for waterfront development

Construct	Measurement Items	B	Beta	t-Value	CR
Functional	Q1	-	-	-	0.746
	Q2	0.976	0.741	12.003***	
	Q3	1.000	0.801	n/a	
Physical	Q4	-	-	-	0.898
	Q5	-	-	-	
	Q6	0.766	0.741	13.725***	
	Q7	1.000	0.870	n/a	
	Q8	0.950	0.795	15.335***	
	Q9	0.838	0.803	15.488***	
	Q10	0.890	0.781	14.793***	
	Q11	-	-	-	
Social	Q12	0.894	0.775	11.817***	0.832
	Q13	1.000	0.803	n/a	
	Q14	0.924	0.789	11.976***	
Economic	Q15	1.000	0.732	n/a	0.562
	Q16	-	-	-	
	Q17	0.735	0.511	8.061***	
Cultural	Q18	-	-	-	0.869
	Q19	0.987	0.860	18.069***	
	Q20	1.000	0.893	n/a	
Politic support	Q21	-	-	-	0.863
	Q22	1.000	0.905	n/a	
	Q23	0.914	0.836	17.211***	

*Note: - dropped during CFA; * Fixed parameter; *** p < 0.001; Model fit statistics; x^2 [88] = 315.869, x^2/df = 3.589; IFI = 0.917; CFI = 0.9162; SRMR = 0.068; B = Unstandardized loading; Beta = Standardized loading; CR = composite reliability; IFI = incremental fit index; CFI = comparative fit index; SRMR = standardized root mean square residual; and CI =confidence interval.*

As demonstrated in Table 38, all the indicators settle down on their located latent factors of waterfront development. They are signed with a t-value of greater than 3.30 at 0.001 level (df > 100), which indicates the evidence for convergent validity (Anderson & Gerbing, 1984). The standardized loadings for the constructs were ranged between 0.511 and 0.905, demonstrating comparatively high loadings, which point out the significance of the perceived variables as indicators of each construct. Moreover, the results revealed that all measurements for waterfront regeneration were reliable where the composite reliability scores were higher than 0.60 except for *"economic"* (Bagozzi & Yi, 1988). The reason for keeping *"economic"* construct in

the model despite its low composite reliability was because of first achieving the model fit, and second to express that the current items for *"economic"* construct are not suitable as we later suggested better items in creative waterfront's economic construct.

Table 39: Correlation: waterfront development

	(1)	(2)	(3)	(4)	(5)	(6)
Functional	1					
Physical	0.859***	1				
Social	0.412***	0.379***	1			
Economic	0.855***	0.839***	0.769***	1		
Cultural	0.881***	0.813***	0.358***	0.888***	1	
Politic Support	0.860***	0.803***	0.415***	0.891***	0.896***	1

*Notes: *** $p < 0.001$.*

The result of Table 39 demonstrates that all the variables for the waterfront development are relatively correlated to each other ($p < 0.001$). All the correlation coefficients were positive and significant at 99% confident interval ranged between 0.385 (cultural and social) and 0.896 (politic support and cultural).

Table 40: HTMT ratios: waterfront development

	(1)	(2)	(3)	(4)	(5)	(6)
Functional	-					
Physical	0.857	-				
Social	0.447	0.394	-			
Economic	0.868	0.797	0.887	-		
Cultural	0.885	0.817	0.367	0.864	-	
Politic Support	0.859	0.802	0.417	0.849	0.892	-

Notes: HTMT = Heterotrait-Monotrait Ratio of Correlations.

The result of assessing the HTMT ratio in Table 40 for waterfront regeneration variables is shown that discriminant validity does not appear to be a concern since all the HTMT rations are less than 0.90 (Henseler, Ringle, & Sarstedt, 2015; Voorhees, Brady, Calantone, & E., 2016).

Table 41: CFA for creative waterfront

Construct	Measurement Items	B	Beta	t-Value	CR
CREATIVE ENVIRONMENT AND ACTIVITIES	Q18	1.000	0.816	n/a	0.940
	Q19	0.962	0.856	16.3***	
	Q20	0.976	0.853	16.246***	
	Q15	0.926	0.804	14.876***	
	Q16	-	-	-	
	Q17	0.974	0.810	17.227***	
	Q21	0.952	0.857	16.367***	
	Q22	0.924	0.779	14.146***	
	Q23	0.791	0.725	12.89***	
	Q24	-	-	-	
SOCIAL COHESION AND TOLERANCE	Q52	0.792	0.782	17.557***	0.949
	Q53	0.935	0.926	27.922***	
	Q54	0.991	0.955	31.767***	
	Q55	1.000	0.940	n/a	
	Q56	0.987	0.904	25.638***	
	Q9	-	-	-	
	Q10	-	-	-	
	Q11	0.791	0.688	13.804***	
QUALITY OF LIFE AND PHYSICAL COMFORT	Q34	-	-	-	0.921
	Q35	-	-	-	
	Q36	1.024	0.789	13.396***	
	Q37	-	-	-	
	Q38	1.000	0.776	n/a	
	Q39	0.938	0.743	12.429***	
	Q40	0.883	0.678	11.148***	
	Q41	-	-	-	
	Q42	1.029	0.777	13.119***	
	Q43	1.090	0.758	12.733***	
	Q44	-	-	-	
	Q45	-	-	-	
	Q46	1.053	0.750	11.237***	
	Q47	0.966	0.745	12.451***	
	Q48	1.024	0.746	12.495***	
PROTECTION OF CULTURE AND SOCIAL AWARENESS	Q31	0.779	0.717	14.116***	0.940
	Q32	-	-	-	
	Q33	0.798	0.741	14.926***	
	Q1	0.941	0.880	20.894***	
	Q2	0.953	0.898	21.994***	
	Q3	1.000	0.915	n/a	
	Q4	0.889	0.888	25.805***	
	Q5	0.734	0.763	15.751***	
CREATIVE ECONOMY AND ECONMIC CONTRUBITION	Q66	-	-	-	0.853
	Q67	1.004	0.800	11.745***	
	Q68	1.000	0.745	n/a	
	Q69	0.916	0.778	12.373***	
	Q70	1.308	0.752	10.965***	
FUNCTIONAL OPPORTUNITIES	Q57	-	-	-	0.876
	Q58	1.000	0.812	n/a	
	Q59	1.064	0.950	15.315***	
	Q61	-	-	-	
	Q62	-	-	-	
	Q63	-	-	-	
INNOVATION AND TECHNOLOGY	Q25	1.000	0.812	n/a	0.924
	Q26	1.011	0.882	16.577***	
	Q27	1.019	0.827	15.265***	
	Q28	0.948	0.860	14.135***	
	Q29	0.937	0.824	14.948***	
MOTIVATING ENTREPRENEURS TO INVEST	Q12	1.000	0.842	n/a	0.885
	Q13	0.952	0.857	16.026***	
	Q14	0.915	0.845	15.74***	
POLITICAL SUFFICIENCY	Q49	1.000	0.901	n/a	0.875
	Q50	0.847	0.811	15.337***	
	Q51	0.899	0.795	12.961***	

*Note: - dropped during CFA; * Fixed parameter; *** p < 0.001; Model fit statistics; x^2 [984] = 2051.849, x^2/df = 2.085; IFI = 0.902; CFI = 0.901; SRMR = 0.053; B = Unstandardized loading; Beta = Standardized loading; CR = composite reliability; IFI = incremental fit index; CFI = comparative fit index; SRMR = standardized root mean square residual; and CI =confidence interval.*

As demonstrated in Table 41, all the indicators settle down on their located latent factors of creative waterfront. They are signed with a t-value of greater than 3.30 at 0.001 level (df > 100), which indicates the evidence for convergent validity (Anderson & Gerbing, 1984). The standardized loading for the constructs was ranged between 0.678 and 0.955, demonstrating comparatively high loadings, which point out the

significance of the perceived variables as indicators of each construct. Moreover, the results revealed that all measurements for creative waterfront were reliable where the composite reliability scores were higher than 0.60 (Bagozzi & Yi, 1988).

Table 42: Correlation: creative waterfront

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
CREATIVE ENV. AND ACTIVITIES	1								
SOCIAL COHESION AND TOL.	0.272***	1							
Q. OF LIFE AND PHYSICAL COM.	0.779***	0.395***	1						
PROT. OF CULT. AND SOC. AWAR.	0.759***	0.415***	0.744***	1					
CR. ECON. AND ECON. CONT.	0.554***	0.473***	0.634***	0.563***	1				
FUNCTIONAL OPPORTUNITIES	0.528***	0.433***	0.761***	0.526***	0.535***	1			
INNOVATION AND TECHNOLOGY	0.843***	0.234***	0.740***	0.726***	0.483***	0.419***	1		
MOTIVATING ENTR. TO INVEST	0.741***	0.386***	0.667***	0.725***	0.557***	0.413***	0.664***	1	
POLITICAL SUFFICIENCY	0.720***	0.455***	0.838***	0.685***	0.650***	0.661***	0.650***	0.633***	1

*Notes: *** $p < 0.001$.*

The result of Table 42 demonstrates that all the variables for the creative waterfront are relatively correlated to each other ($p < 0.001$). All the correlation coefficients were positive and significant at a 99% confident interval ranged between 0.234 ["*innovation and technology* (in creative waterfront variables)," and "*social cohesion and tolerance* (in creative waterfront variables)"] and 0.843 ["*innovation and technology* (in creative waterfront variables)," and "*creative environment and activities* (in creative waterfront variables)"].

Table 43: HTMT ratios: creative waterfront

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
CREATIVE ENV. AND ACTIVITIES	-								
SOCIAL COHESION AND TOL.	0.291	-							
Q. OF LIFE AND PHYSICAL COM.	0.774	0.381	-						
PROT. OF CULT. AND SOC. AWAR.	0.784	0.442	0.741	-					
CR. ECON. AND ECON. CONT.	0.577	0.522	0.641	0.591	-				
FUNCTIONAL OPPORTUNITIES	0.543	0.443	0.773	0.574	0.561	-			
INNOVATION AND TECHNOLOGY	0.872	0.258	0.747	0.769	0.507	0.469	-		
MOTIVATING ENTR. TO INVEST	0.745	0.407	0.648	0.74	0.588	0.435	0.674	-	
POLITICAL SUFFICIENCY	0.728	0.425	0.818	0.693	0.705	0.663	0.66	0.635	-

Notes: HTMT = Heterotrait-Monotrait Ratio of Correlations.

The result of assessing the HTMT ratio in Table 43 for creative waterfront variables is shown that discriminant validity does not appear to be a concern since all the HTMT rations are less than 0.90 and most of them are less than 0.85 as ideal cut-off point (Henseler, Ringle, & Sarstedt, 2015; Voorhees, Brady, Calantone, & E., 2016).

5.3.4 Comparison of Means

The mean comparison of the variables through the one-way ANOVA analysis are conducted since all the data were had relatively normal distribution.

Table 44: Comparing the means of all creative waterfront variables and user groups

		Sum of Squares	df	Mean Square	F	Sig.
CREATIVE ENV. AND ACTIVITIES	Between Groups	2.405	3	0.802	1.131	0.337
	Within Groups	172.187	243	0.709		
SOCIAL COHESION AND TOLERANCE	Between Groups	18.629	3	6.210	4.131	0.007*
	Within Groups	365.250	243	1.503		
QUALITY OF LIFE AND PHYSICAL COMFORT	Between Groups	0.252	3	0.084	0.122	0.947
	Within Groups	167.748	243	0.690		
PROT. OF CULTURE AND SOCIAL AWARENESS	Between Groups	4.969	3	1.656	1.790	0.150
	Within Groups	224.834	243	0.925		
CREATIVE ECON. AND ECON.CONTRUBITION	Between Groups	3.349	3	1.116	1.449	0.229
	Within Groups	187.260	243	0.771		
FUNCTIONAL OPPORTUNITIES	Between Groups	0.852	3	0.284	0.270	0.847
	Within Groups	256.012	243	1.054		
INNOVATION AND TECHNOLOGY	Between Groups	1.825	3	0.608	0.831	0.478
	Within Groups	177.937	243	0.732		
MOTIVATING ENTR. TO INVEST	Between Groups	1.277	3	0.426	0.498	0.684
	Within Groups	207.817	243	0.855		
POLITICAL SUFFICIENCY	Between Groups	0.971	3	0.324	0.343	0.794
	Within Groups	229.069	243	0.943		

*Notes: * p < 0.050, df = degree of freedom.*

The result of the one-way ANOVA check in Table 44 displays there is an important difference among the different user groups of respondents in only means of "*social cohesion and tolerance*" variable. This result indicates that there is a significant difference between the respondents' perception of "*social cohesion and tolerance*" for different user groups ($F(3, 243) = 4.131$, $p < 0.05$).

Table 45: Tukey HSD post hoc test for user groups and important variables

Dependent Variable			Mean Difference	Std. Error	Sig.	90% CI	
						LB	UB
Social cohesion and tolerance (in creative waterfront variables)	**Creative Class**	*Employees & Employers*	-0.149	0.216	0.901	-0.645	0.348
		Students	-0.186	0.196	0.777	-0.637	0.265
		Others	-0.839	0.240	0.003**	-1.392	-0.286
	Employees & Employers	*Creative Class*	0.149	0.216	0.901	-0.348	0.645
		Students	-0.037	0.230	0.998	-0.568	0.493
		Others	-0.690	0.269	0.053*	-1.310	-0.070
	Students	*Creative Class*	0.186	0.196	0.777	-0.265	0.637
		Employees & Employers	0.037	0.230	0.998	-0.493	0.568
		Others	-0.653	0.253	0.051*	-1.236	-0.069
	Others	*Creative Class*	0.839	0.240	0.003**	0.286	1.392
		Employees & Employers	0.690	0.269	0.053*	0.070	1.310
		Students	0.653	0.253	0.051*	0.069	1.236

*Notes: * p < 0.100, ** p < 0.050; CI = Confidence Interval; LB = Lower Bound; UB = Upper Bound.*

Moreover to the consequence of Table 44, to understand between which groups of users there is a significant difference for the "*social cohesion and tolerance*" variable the result of the post hoc test of Tukey HSD test are presented in Table 45. These results demonstrated that between creative class ($p < 0.05$), employees and employers ($p < 0.10$), as well as between students ($p < 0.10$) and others groups of users there are significant differences for "*social cohesion and tolerance* (in creative waterfront variables)" variable.

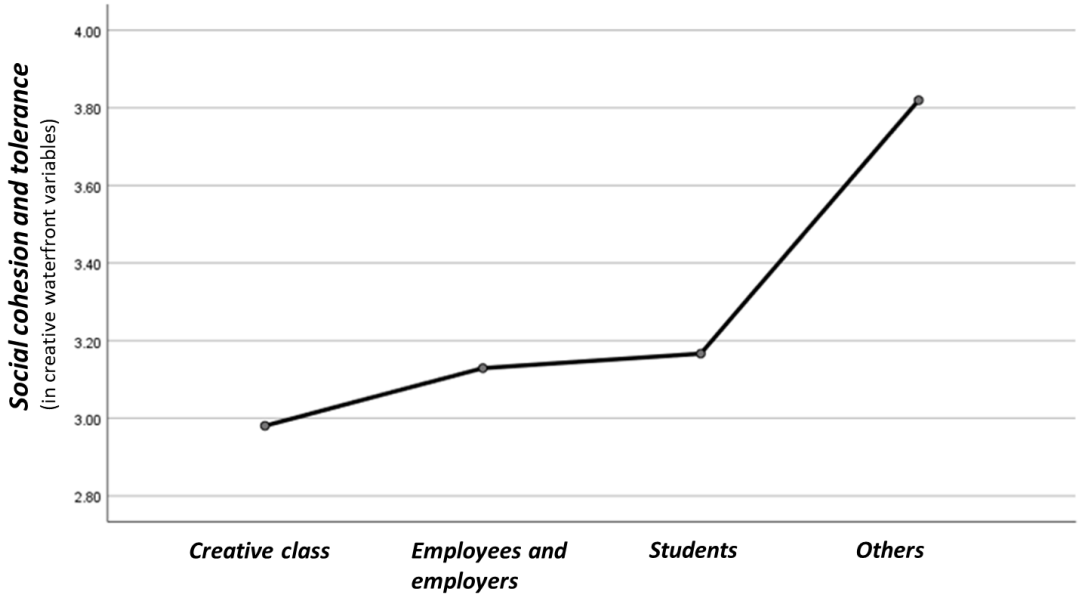


Figure 29: Means plot of "social cohesion and tolerance," and user groups

According to the result of Table 44 and 45, Figure 30 shows the significant differences between students and other user groups for the "*social cohesion and tolerance* (in creative waterfront variables)" variable. These results revealed that Creative Class are the most agreed groups of users about "*social cohesion and tolerance* (in creative waterfront variables)," (mean = 2.981), however, others are the most disagreed groups of users (mean = 3.819). That is the mean differences between these two groups are the largest and the most significant differences between groups of users (mean difference = 0.839). This difference for the Employees & Employers (mean = 3.129)

and Students (mean = 3.167) groups in comparison to the others group of users is also significant (mean differences = 0.690 and 0.653, respectively).

As shown in Figure 30, the creative class has a much lower degree of social cohesion and tolerance than other user groups. It may indicate that the creative class feels oppressed and is judged based on their ideas, gender, and thoughts. It is a finding that merits further investigation in future research.

Table 46: Comparing means of all creative waterfront variables and gender

		Sum of Squares	df	Mean Square	F	Sig.
CREATIVE ENV. AND ACTIVITIES	*Between Groups*	4.681	2	2.340	3.361	0.036**
	Within Groups	169.911	244	0.696		
SOCIAL COHESION AND TOLERANCE	*Between Groups*	12.216	2	6.108	4.010	0.019**
	Within Groups	371.664	244	1.523		
QUALITY OF LIFE AND PHYSICAL COMFORT	*Between Groups*	2.712	2	1.356	2.002	0.137
	Within Groups	165.288	244	0.677		
PROT. OF CULTURE AND SOCIAL AWARENESS	*Between Groups*	4.038	2	2.019	2.182	0.115
	Within Groups	225.766	244	0.925		
CREATIVE ECON. AND ECON.CONTRUBITION	*Between Groups*	5.828	2	2.914	3.848	0.023**
	Within Groups	184.780	244	0.757		
FUNCTIONAL OPPORTUNITIES	*Between Groups*	4.897	2	2.449	2.371	0.096*
	Within Groups	251.967	244	1.033		
INNOVATION AND TECHNOLOGY	*Between Groups*	1.723	2	0.862	1.181	0.309
	Within Groups	178.039	244	0.730		
MOTIVATING ENTR. TO INVEST	*Between Groups*	7.155	2	3.577	4.323	0.014**
	Within Groups	201.939	244	0.828		
POLITICAL SUFFICIENCY	*Between Groups*	4.808	2	2.404	2.604	0.076*
	Within Groups	225.231	244	0.923		

*Notes: * p < 0.100, ** p < 0.050, df = degree of freedom.*

The result of one-way ANOVA test in Table 46 shows there are important variances among the genders of respondents in the means of *"creative environments and activities, social cohesion and tolerance, creative economy and economic contribution, functional opportunities, motivating entrepreneurs to invest, and political sufficiency"* variables. These result indicate that there are significant differences between the respondents' perception of *creative environments and activities* ($F(2, 244) = 3.361$, $p < 0.05$), *social cohesion and tolerance* ($F(2, 244) = 4.010$, $p < 0.05$), *creative economy and economic contribution* ($F(2, 244) = 3.848$, $p < 0.05$), *functional opportunities* ($F(2, 244) = 2.371$, $p < 0.10$), *motivating entrepreneurs*

to invest (F(2, 244) = 4.323, p < 0.05), and *political sufficiency* (F(2, 244) = 2.604, p < 0.10) for different genders.

Table 47: Tukey HSD post hoc test for gender and significant variable

Dependent Variable			Mean Difference	Std. Error	Sig.	90% CI	
						LB	UB
CREATIVE ENV. AND ACTIVITIES	*Male*	*Female*	-0.310	0.119	0.027**	-0.556	-0.063
		LGBT	-0.085	0.260	0.942	-0.621	0.450
	Female	*Male*	0.310	0.119	0.027**	0.063	0.556
		LGBT	0.224	0.271	0.686	-0.334	0.783
	LGBT	*Male*	0.085	0.260	0.942	-0.450	0.621
		Female	-0.224	0.271	0.686	-0.783	0.334
SOCIAL COHESION AND TOLERANCE	*Male*	*Female*	-0.488	0.177	0.017**	-0.852	-0.124
		LGBT	0.096	0.384	0.966	-0.696	0.889
	Female	*Male*	0.488	0.177	0.017**	0.124	0.852
		LGBT	0.584	0.401	0.313	-0.242	1.410
	LGBT	*Male*	-0.096	0.384	0.966	-0.889	0.696
		Female	-0.584	0.401	0.313	-1.410	0.242
CREATIVE ECON. AND ECON. CONTRIBUTION	*Male*	*Female*	-0.343	0.125	0.017**	-0.600	-0.086
		LGBT	-0.016	0.271	0.998	-0.574	0.543
	Female	*Male*	0.343	0.125	0.017**	0.086	0.600
		LGBT	0.328	0.283	0.478	-0.255	0.910
	LGBT	*Male*	0.016	0.271	0.998	-0.543	0.574
		Female	-0.328	0.283	0.478	-0.910	0.255
MOTIVATING ENTR. TO INVEST	*Male*	*Female*	-0.327	0.130	0.034**	-0.595	-0.058
		LGBT	-0.525	0.283	0.155	-1.109	0.059
	Female	*Male*	0.327	0.130	0.034**	0.058	0.595
		LGBT	-0.198	0.295	0.781	-0.807	0.411
	LGBT	*Male*	0.525	0.283	0.155	-0.059	1.109
		Female	0.198	0.295	0.781	-0.411	0.807
POLITICAL SUFFICIENCY	*Male*	*Female*	-0.308	0.137	0.067*	-0.591	-0.024
		LGBT	0.041	0.299	0.990	-0.576	0.658
	Female	*Male*	0.308	0.137	0.067*	0.024	0.591
		LGBT	0.349	0.312	0.504	-0.294	0.992
	LGBT	*Male*	-0.041	0.299	0.990	-0.658	0.576
		Female	-0.349	0.312	0.504	-0.992	0.294

*Notes: * p < 0.100, ** p < 0.050; CI = Confidence Interval; LB = Lower Bound; UB = Upper Bound.*

Table 46 also includes the following results: to understand between which groups of users there is a significant difference for the *"creative environment and activities, social cohesion and tolerance, creative economy and economic contribution, functional opportunities, motivating entrepreneurs to invest, and political sufficiency"* variables an analysis of the Tukey HSD test post hoc result is presented in Table 47. The results showed that for the "*functional opportunities"* only we had differences between the groups not within the groups. The results also demonstrated that between male and female groups of participants there are significant differences for the *creative environment and activities* ($p < 0.05$), *social cohesion and tolerance* ($p < 0.05$),

creative economy and economic contribution ($p < 0.05$), *functional opportunities* ($p < 0.05$), *motivating entrepreneurs to invest* ($p < 0.05$), and *political sufficiency* ($p < 0.10$) variables.

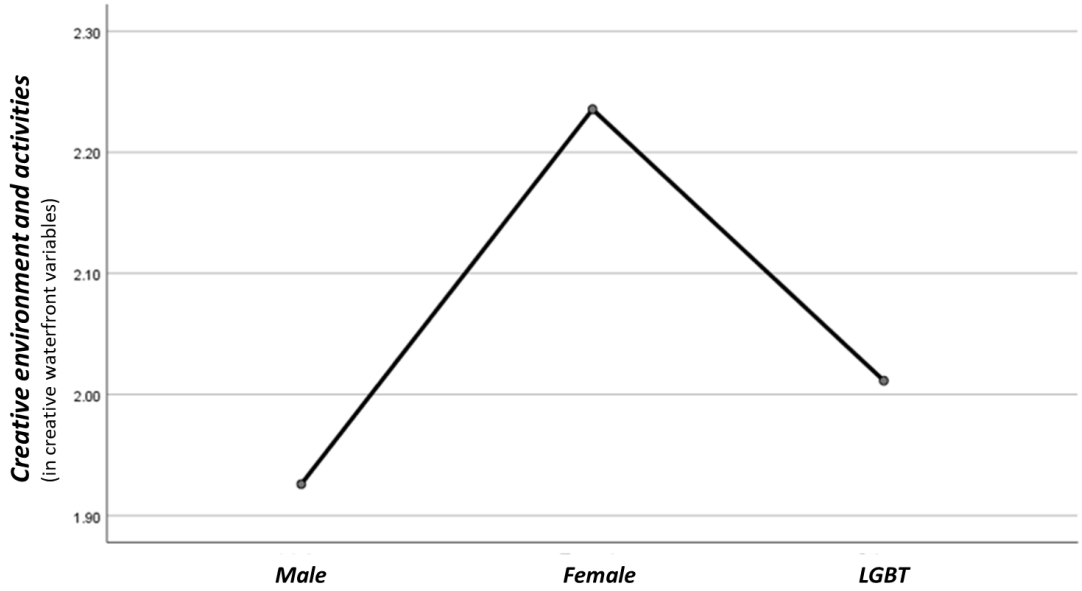


Figure 30: Means plot of "creative environment and activities," and gender

According to the result of Table 46 and 47, Figure 31 shows the significant differences between male and female participants for the *creative environment and activities* variable. These results revealed that males are more agreed about *creative environment and activities* (mean = 1.926) than females (mean = 2.236). That is the mean differences between these two groups are the largest and the most significant differences between genders of participants (mean difference = 0.310).

The result in Figure 31 shows that male individuals find the creative environment and activities at the lowest level compared to other genders. It displays the necessity of laying the groundwork for the realization of creative activities such as urban exploration trips, sea related sports activities, and photography trips that will increase the interests of these individuals and others.

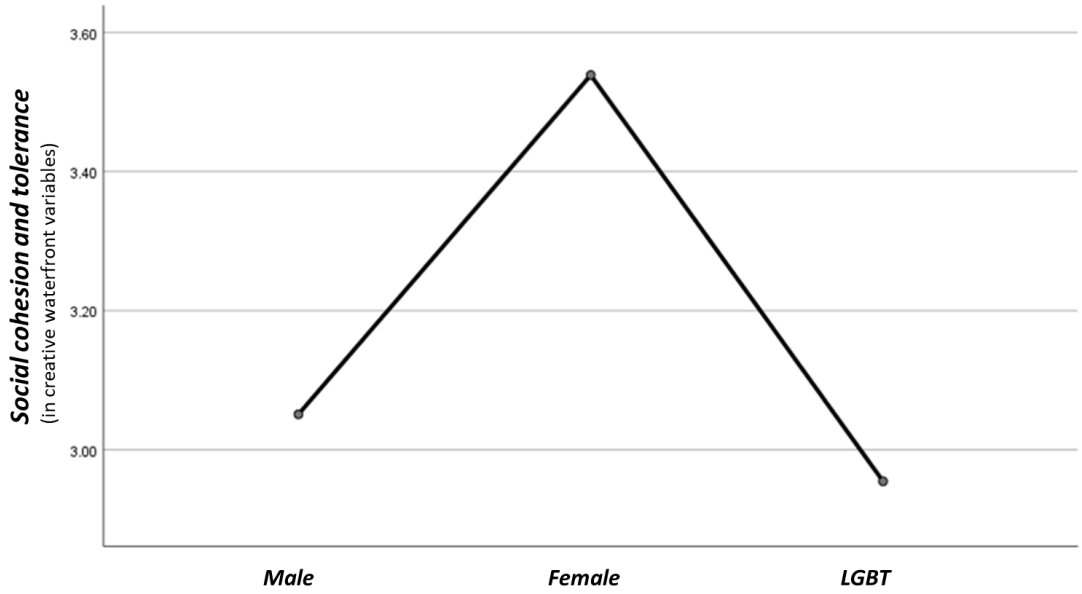


Figure 31: Means plot of "social cohesion and tolerance," and gender

According to the result of Table 46 and 47, Figure 32 shows the significant differences between male and female participants for the "*social cohesion and tolerance"* variable. These results revealed that males are more agreed or neutral about "*social cohesion and tolerance"* (mean = 3.051) than females (mean = 3.539). That is the mean differences between these two groups are the largest and the most significant differences between genders of participants (mean difference = 0.488).

According to Figure 32, LGBT individuals find the degree of social cohesion and tolerance at the lowest level compared to other genders. It shows us that these individuals may feel under pressure. Studies are necessary to increase awareness and tolerance levels to resolve these issues.

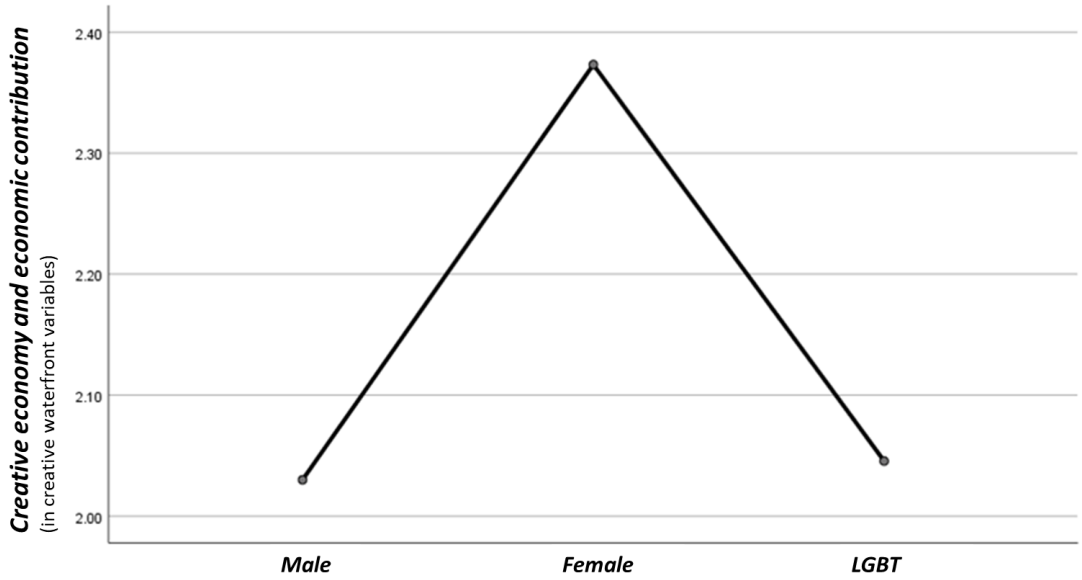


Figure 32: Means plot of "creative economy and economic contribution," and gender

According to the result of Table 46 and 47, Figure 33 shows the significant differences between male and female participants for the of "*creative economy and economic contribution"* variable. These results revealed that males are more agreed about of "*creative economy and economic contribution"* (mean = 2.030) than females (mean = 2.373). That is the mean differences between these two groups are the largest and the most significant differences between genders of participants (mean difference = 0.343).

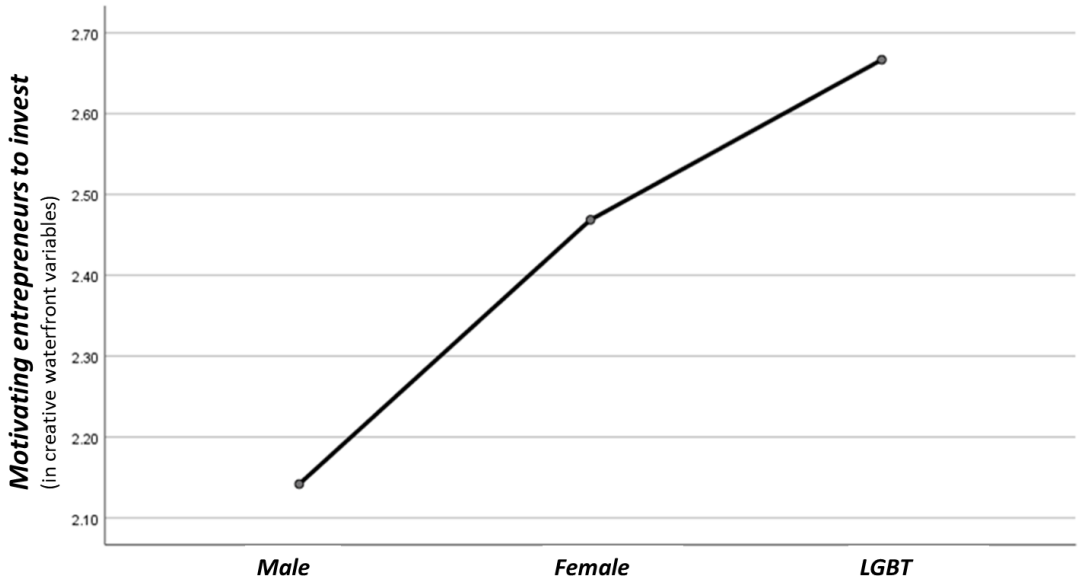


Figure 33: Means plot of "motivating entrepreneurs to invest," and gender

According to the result of Table 46 and 47, Figure 34 shows the significant differences between male and female participants for the *"motivating entrepreneurs to invest"* variable. These results revealed that males are more agreed about *"motivating entrepreneurs to invest"* (mean = 2.142) than females (mean = 2.469). That is the mean differences between these two groups are the largest and the most significant differences between genders of participants (mean difference = 0.327).

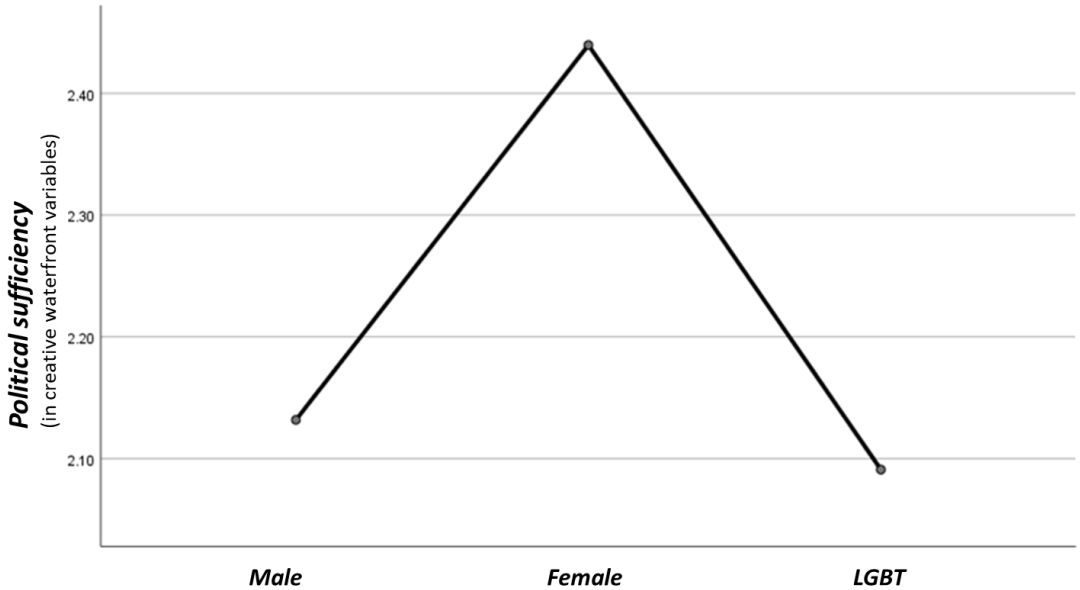


Figure 34: Means plot of "political sufficiency," and gender

According to the result of Table 46 and 47, Figure 35 shows the significant differences between male and female participants for the *"political sufficiency"* variable. These results revealed that males are more agreed about *"political sufficiency"* (mean = 2.132) than females (mean = 2.440). That is the mean differences between these two groups are the largest and the most significant differences between genders of participants (mean difference = 0.308).

Table 48: Comparing means of all creative waterfront variables and age

		Sum of Squares	df	Mean Square	F	Sig.
CREATIVE ENV. AND ACTIVITIES	*Between Groups*	5.679	5	1.136	1.621	0.155
	Within Groups	168.912	241	0.701		
SOCIAL COHESION AND TOLERANCE	*Between Groups*	9.938	5	1.988	1.281	0.273
	Within Groups	373.942	241	1.552		
QUALITY OF LIFE AND PHYSICAL COMFORT	*Between Groups*	9.194	5	1.839	2.791	0.018**
	Within Groups	158.806	241	0.659		
PROT. OF CULTURE AND SOCIAL AWARENESS	*Between Groups*	7.533	5	1.507	1.634	0.152
	Within Groups	222.270	241	0.922		
CREATIVE ECON. AND ECON.CONTRUBITION	*Between Groups*	3.245	5	0.649	0.835	0.526
	Within Groups	187.364	241	0.777		
FUNCTIONAL OPPORTUNITIES	*Between Groups*	11.936	5	2.387	2.349	0.042**
	Within Groups	244.929	241	1.016		
INNOVATION AND TECHNOLOGY	*Between Groups*	12.656	5	2.531	3.651	0.003**
	Within Groups	167.106	241	0.693		
MOTIVATING ENTR. TO INVEST	*Between Groups*	9.121	5	1.824	2.198	0.055*
	Within Groups	199.973	241	0.830		
POLITICAL SUFFICIENCY	*Between Groups*	10.278	5	2.056	2.254	0.050*
	Within Groups	219.761	241	0.912		

*Notes: * p < 0.100, ** p < 0.050, df = degree of freedom.*

Table 48 also includes the following one-way ANOVA test results: shows there is important difference between the different user groups of respondents in only means of *"quality of life and physical comfort, functional opportunities, innovation and technology, motivating entrepreneurs to invest, and political sufficiency"* variables. This result indicates that there are significant differences between the respondents' perception of *quality of life and physical comfort* ($F(5, 241) = 2.791$, $p < 0.05$), *functional opportunities* ($F(5, 241) = 2.349$, p 0.05), *innovation and technology* ($F(5, 241) = 3.651$, $p < 0.05$), *motivating entrepreneurs to invest* ($F(5, 241) = 2.198$, $p < 0.10$), and *political sufficiency* ($F(5, 241) = 2.254$, $p < 0.10$) for different groups of age.

Table 49: Tukey HSD post hoc test for age and significant variables

Dependent Variable			Mean Difference	Std. Error	Sig.	90% CI	
						LB	UB
FUNCTIONAL OPPORTUNITIES	*18-24*	*25-34*	-0.464	0.173	0.082*	-0.914	-0.014
		35-44	-0.258	0.182	0.716	-0.731	0.216
		45-54	-0.206	0.233	0.950	-0.813	0.401
		55-64	0.016	0.318	1.000	-0.813	0.846
		65 & above	0.454	0.379	0.838	-0.534	1.441
	25-34	*18-24*	0.464	0.173	0.082*	0.014	0.914
		35-44	0.206	0.172	0.837	-0.242	0.654
		45-54	0.258	0.225	0.862	-0.329	0.846
		55-64	0.481	0.313	0.641	-0.334	1.296
		65 & above	0.918	0.374	0.143	-0.057	1.894
	35-44	*18-24*	0.258	0.182	0.716	-0.216	0.731
		25-34	-0.206	0.172	0.837	-0.654	0.242
		45-54	0.052	0.232	1.000	-0.554	0.657
		55-64	0.274	0.318	0.955	-0.554	1.102
		65 & above	0.712	0.379	0.417	-0.275	1.698
	45-54	*18-24*	0.206	0.233	0.950	-0.401	0.813
		25-34	-0.258	0.225	0.862	-0.846	0.329
		35-44	-0.052	0.232	1.000	-0.657	0.554
		55-64	0.222	0.350	0.988	-0.689	1.133
		65 & above	0.660	0.406	0.582	-0.397	1.717
	55-64	*18-24*	-0.016	0.318	1.000	-0.846	0.813
		25-34	-0.481	0.313	0.641	-1.296	0.334
		35-44	-0.274	0.318	0.955	-1.102	0.554
		45-54	-0.222	0.350	0.988	-1.133	0.689
		65 & above	0.438	0.460	0.933	-0.761	1.636
	65 & above	*18-24*	-0.454	0.379	0.838	-1.441	0.534
		25-34	-0.918	0.374	0.143	-1.894	0.057
		35-44	-0.712	0.379	0.417	-1.698	0.275
		45-54	-0.660	0.406	0.582	-1.717	0.397
		55-64	-0.438	0.460	0.933	-1.636	0.761
INNOVATION AND TECHNOLOGY	*18-24*	*25-34*	-0.257	0.143	0.468	-0.629	0.115
		35-44	0.105	0.150	0.982	-0.287	0.496
		45-54	0.340	0.192	0.488	-0.161	0.842
		55-64	0.422	0.263	0.597	-0.263	1.107
		65 & above	0.464	0.313	0.677	-0.352	1.279
	25-34	*18-24*	0.257	0.143	0.468	-0.115	0.629
		35-44	0.362	0.142	0.115	-0.009	0.732
		45-54	0.597	0.186	0.019**	0.112	1.082
		55-64	0.679	0.258	0.095*	0.006	1.352
		65 & above	0.720	0.309	0.186	-0.085	1.526
	35-44	*18-24*	-0.105	0.150	0.982	-0.496	0.287
		25-34	-0.362	0.142	0.115	-0.732	0.009
		45-54	0.236	0.192	0.823	-0.264	0.736
		55-64	0.317	0.263	0.833	-0.367	1.001
		65 & above	0.359	0.313	0.861	-0.456	1.174
	45-54	*18-24*	-0.340	0.192	0.488	-0.842	0.161
		25-34	-0.597	0.186	0.019**	-1.082	-0.112
		35-44	-0.236	0.192	0.823	-0.736	0.264
		55-64	0.081	0.289	1.000	-0.671	0.834
		65 & above	0.123	0.335	0.999	-0.750	0.996
	55-64	*18-24*	-0.422	0.263	0.597	-1.107	0.263
		25-34	-0.679	0.258	0.095*	-1.352	-0.006
		35-44	-0.317	0.263	0.833	-1.001	0.367
		45-54	-0.081	0.289	1.000	-0.834	0.671
		65 & above	0.042	0.380	1.000	-0.948	1.032
	65 & above	*18-24*	-0.464	0.313	0.677	-1.279	0.352
		25-34	-0.720	0.309	0.186	-1.526	0.085
		35-44	-0.359	0.313	0.861	-1.174	0.456
		45-54	-0.123	0.335	0.999	-0.996	0.750
		55-64	-0.042	0.380	1.000	-1.032	0.948

*Notes: * p < 0.100, ** p < 0.050; CI = Confidence Interval; LB = Lower Bound; UB = Upper Bound.*

Besides the results of Table 48, to understand among which groups of age there are significant differences for the *functional opportunities* and *innovation and technology* variables Table 49 presents the post hoc test of Tukey HSD. The results showed that for the *quality of life and physical comfort*, *motivating entrepreneurs to invest*, and

political sufficiency only we had differences between the groups not within the groups. The results also demonstrated that between groups of participants in the age of 18-24 and 25-34 there is a significant difference for the *functional opportunities* variable ($p < 0.10$). Moreover, between groups of participants in the age of 25-34 and 45-54 as well as 55-64 there are significant differences for the *innovation and technology* variable ($p < 0.05$ and $p < 0.10$, respectively).

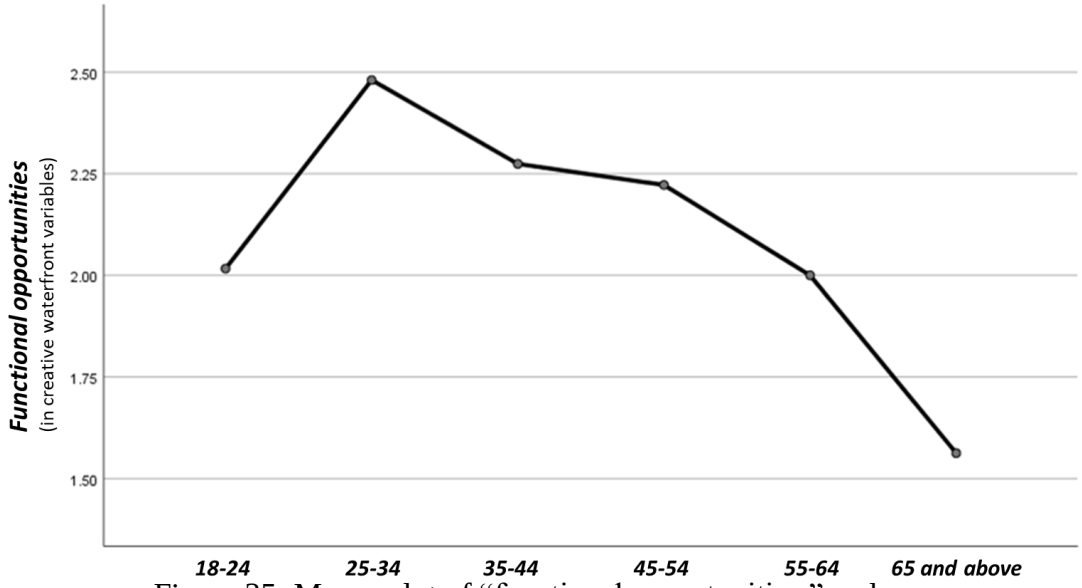


Figure 35: Means plot of "functional opportunities," and age

As said by the result of Table 48 and 49, Figure 36 shows the significant changes among participants in the age of 18-24 and 25-34 for the *"functional opportunities"* variable. These results revealed that participants in the age of 18-24 are more agreed about *"functional opportunities"* (mean = 2.016) than participants in the age of 25-34 (mean = 2.481). That is the mean differences between these two groups are the largest and the most significant differences between groups of age (mean difference = 0.464).

As shown in Figure 36, for those aged; 65 and older, there are fewer functional options compared to other age groups. It demonstrates the need to provide functional choices

that will pique the interests of these individuals. Participants over age 65, who are typically intellectual individuals, primarily lament the region's lack of arts and crafts activities.

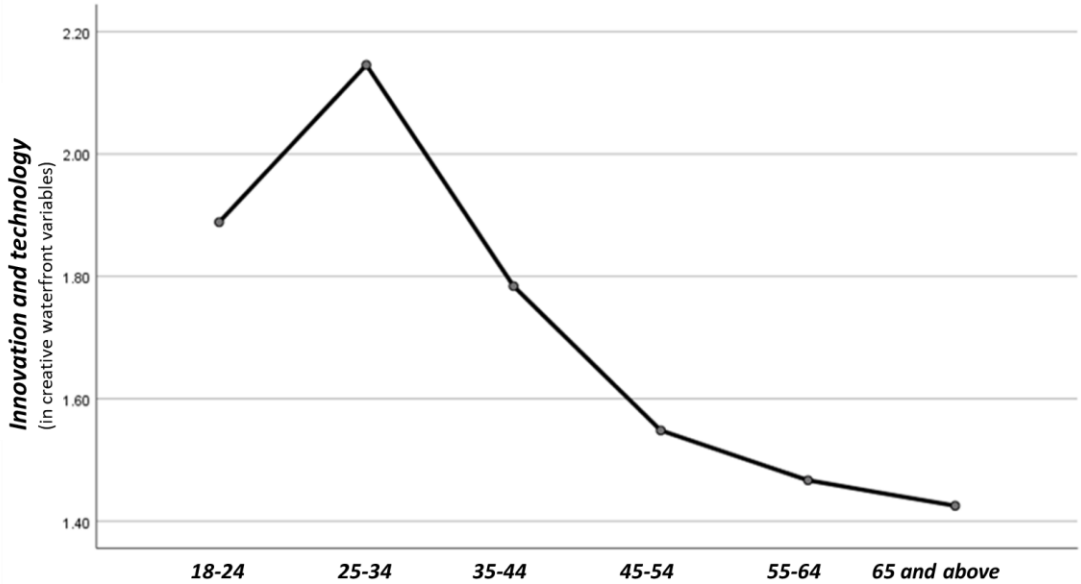


Figure 36: Means plot of “innovation and technology,” and Age

Along with the result of Table 48 and 49, Figure 37 shows the significant variances between participants in the age of 25-34 and 45-54 and between participants in the age of 25-34 and 55-64 for the *“innovation and technology”* variable. These results revealed that participants in the age of 45-54 and 55-64 are more agreed about *“innovation and technology”* (mean = 1.548 and 1.467, respectively) than participants in the age of 25-34 (mean = 2.145). That is the mean differences between these two groups are the largest and the most significant differences between groups of age (mean difference = 0.549 and 0.679, respectively).

Interestingly, the result that emerged in the 37th figure showed that individuals aged 65 and over find the level of innovation and technological competence at the lowest level compared to other younger age groups. While it is expected that innovation and

technology will be evaluated more strongly by young participants, the older group has brought a more intellectual point of view. Innovation and technological opportunities such as information acquisition areas, simulation spaces, and environmentally friendly and sustainable design approaches should be increased.

Chapter 6

CONCLUSION AND RECOMMENDATIONS

The primary purpose of this research is to investigate the concepts and definitions of waterfront development, the creative environment, and their associated principles. To gain a thorough understanding of the potential applications of the proposed framework for enhancing waterfront development practices.

The intention is that this chapter presents the study's findings in two primary sections. The first section is a summary of the main theoretical and case-based findings. The second section contains recommendations for further research.

6.1 A Summary of the Principal Findings

There are numerous hurdles and difficulties in the urban environment today. People should continue to have fair access to housing, work opportunities, education, technology, and innovative achievements, several of which are significant challenges associated with urbanization. Comprehensive development must also address user needs besides those of the creative class. Consequently, this study aims to produce a standard for implementing creative class-oriented waterfront development projects. This standard will protect the environment and create universal design standards at the urban and building scales. The author sought to build a framework applicable to urban waterfront development as a creative environment. The suggested framework for urban waterfront development gives ideas to several people, including urban designers, city governments, entrepreneurs, and the creative class.

In this study, a literature review aims to explain the development of waterfront design and the processes involved. Based on the results of this review, one critical conclusion is that each principle is essential and that a multidisciplinary approach is necessary to achieve suitable results. One can still apply the founded principles to local conditions using the same analysis, evaluation, and recommendations made throughout the world. Whenever any action takes place, it must consider both the community's basic needs and the economic, cultural, and social structure of the area where the project will occur.

Developing waterfronts will be far more successful when they address such issues as environmental protection, social cohesion, economic development, innovation and creativity, and defending residents' rights. If urban waterfronts wish to achieve long-term sustainability and creative development, it is essential to address several factors, including political, social, economic, technological, innovative, cultural, and environmental concerns. As a result, it is imperative to consider such issues as participatory planning, income equality, and increasing the use of technological resources.

Within the thesis framework, the author attempts to define urban waterfront development as a creative environment for identifying areas where urban transformation is necessary. It is impossible to transform the waterfront suitably without considering today's social, economic, environmental, technological, and physical factors. Moreover, visitors' needs, including creative classes, employers, employees, and students at the waterfront, need to be implemented to reach comprehensive practices.

This study proposes a theoretical structure for guiding urban waterfront development practices toward environmentally sustainable and creative places. Some fundamental principles establish the conditions for implementing the proposed appropriate urban waterfront development framework. As depicted in Figure 26, the guiding principles for waterfront development mirror the overarching ideals of a creative environment. Each task and subtask have a detailed outline, and their transitions are interconnected to make up a complete structure.

Following the principles of urban waterfront development as a creative environment, a set of principles arose. The linkage principles begin with the initial step, which leads to the second step, and culminates in the "combination of all principles." Furthermore, any stage of the proposed framework may require feedback from the promoted experience. This study demonstrates the importance of combining physical, social, cultural, economic, technological, and environmental issues with creative environmental principles in waterfront development. The study provides a framework for creating and tracking such guidelines.

It caters to professionals from various levels of governmental agencies, institutions, and experts. As a result of the literature review and analysis, key elements from the planning challenges found their way into the framework. In this way, the framework encompasses all the principles involved in waterfront development. It will affect the long-term success of waterfront development projects as a creative environment.

The investigation took place on the waterfront of Kyrenia, a world-renowned tourist destination. Participants in the study were creatives, employers and employees, students, and tourists. Then, SPSS and AMOS were used to analyze the data using

descriptive statistics, exploratory and confirmatory factor analysis, and structural equation modeling.

For the goal of this study, a detailed questionnaire was constructed, including characteristics connected to the creative environment concept and waterfront development. Based on exploratory factor analysis, twelve factors comprising the attributes of a creative waterfront were identified, including awareness of people; entrepreneurship; creative spaces for talent; creative activities; innovation; tolerance; quality of life and comfort; political support; social cohesion; diversity of functions; and economic contribution.

A framework exists to address the relationship between creative environmental growth and waterfront development. There is a good fit between the framework and several metrics, suggesting that "creative" environmental characteristics influence waterfront development positively. Therefore, creative environment variables can be a tool for comprehensive waterfront development.

Environmental barriers have caused some exclusion despite existing upgrading schemes and project implementation, as evidenced by the case study. Both the physical and social environments contain elements that are not conducive to the needs of the creative class. Nonetheless, these characteristics are generally beneficial. As indicated by the research, there are insufficient creative spaces and creative activities. It reduces the location's appeal to the creative class and other visitors. Inadequate support from government authorities, decision-makers, and essential stakeholders led to the absence of necessary norms and regulations for continued maintenance. Consequently, this decreases the location's attractiveness to entrepreneurs and other investors. Existing

cultural, historical, and individual values usually continue to exist but are not sufficiently promoted. It diminishes the awareness of distinctive values. Despite offering a variety of functions, the location's physical quality is poor. Generally, street furniture is not maintained adequately. The area lacks the necessary access to assist people with disabilities, so disabled individuals cannot use the treads safely. It is unsafe for pedestrians, cyclists, and people with disabilities to use the area. The shoreline and its amenities are neither secure nor comfortable for them. Additionally, tolerance levels in society need to rise so that people of all ages, philosophies, ethnicities, and beliefs can find a safe and accepting atmosphere. Multiple issues impede urban environments from becoming inclusive. Therefore, here are a few suggestions to enhance Waterfront's readability:

- Increasing public awareness of creativity, creative spaces, and creative activities (i.e., development centers, R & D, research areas, simulation areas, workshops, and conferences) can serve to enhance the dignity of the creative class as productive individuals by allowing them to belong to those whose territories have weakened by the policies of society.
- Following the framework, an inclusive policy must result, and the process of policy formulation and planning must incorporate a more robust collaboration of efforts among varied user groups. For instance, government policies must include vulnerable individuals in decision-making, as frequent discussions can help create effective design solutions. For proper maintenance, it is essential to consult residents throughout the planning phase of any upcoming design or construction project. Through training programs, waterfront experts may better understand integrated universal design strategies. Departments must incorporate a

comprehensive design course into their curricula (i.e., architecture, regional planning, and urban design).

- First, authorities have implemented upgrading strategies that balance efficiency and traditional values; second, they have created new developments while preserving traditional values; third, they have developed modern marketing techniques that are culturally sensitive; and fourth, they have forged connections between the new and the old. If they properly balance the requirement to preserve and modernize essential processes in the relevant value chain, tradition- or culture-related stakeholders have a greater chance of effectively renewing their competitive advantage in the construction or open environment value chain.
- As part of a more holistic planning strategy, pedestrian access must take precedence. For pedestrian safety and comfort, urban design plans must incorporate pedestrian-oriented elements and design considerations, such as buffer zones and enlarged walkways. The adaptability and ergonomics of disabled individuals must work while constructing street furniture. Parking spaces must increase in both quantity and quality. It is desirable to reduce parking requirements by enhancing public transportation. If the Kyrenia Waterfront wants to remain clean, it is necessary to design master plans for pedestrians and public transport. Additionally, cycling lanes should function with proper tactics.
- A complete development process should examine and reinvent design procedures in light of performance benchmarks. It is necessary to build critical assessment methodologies to evaluate the effectiveness of implemented design initiatives after considering comprehensive or universal design considerations. Future work should adopt an effective resolution based on a complete evaluation to ensure future success.

6.2 Final Remarks for Future Studies

Based on its findings, this study indicates the need for a better understanding of maintaining regular contact with residents, consumers, and the creative class. Moreover, more effective and specialized techniques are available for organizing and implementing urban waterfront development. This thesis proposes a framework for designing, implementing, and evaluating waterfront projects that provide a link between creative environments. The thesis also presents a framework for future research within the proposed framework. In addition, this study provides an essential background for evaluating the data generated during the evaluation and documentation of future research. Several of the research recommendations presented in this work extend traditional research methods to offer a comprehensive approach to collecting, analyzing and interpreting data quickly for upcoming projects. This framework will need to be built upon and tested in other projects before it can serve as a basis for future waterfront development projects in other cities.

In most circumstances, conducting a systematic review is beneficial in understanding why individuals experience exclusion. The results of this study will be valuable to Kyrenia Municipality as the project continues. In addition, the municipality should conduct periodic reviews of other projects to determine the impact of the newly designed or rebuilt environment on all users. This research benefits more than just Kyrenia. A comprehensive review similar to the one undertaken at the Kyrenia Waterfront can aid other interested authorities in developing more pleasant and reliable urban landscapes. Never discontinue a quality system for the sake of long-term success. It is necessary to repeat these steps to receive valuable input on waterfront development rules. Therefore, the technique of this study can apply in other urban

settings with comparable characteristics. But more research could help develop a more integrated way to evaluate the inclusion of various socioeconomic groups that did not appear in this study.

Certain limitations existed in this investigation. The research was limited to a single city. Generalizing the study needs testing in multiple locations with diverse creative environments and waterfront development histories. The study's design was both qualitative and quantitative. More qualitative research would increase the relevance of the results.

Future studies may find it beneficial to explore the relationship between the elements that determine creative settings and waterfront development. It is possible to study this relationship in other cities across the globe, which may have different physical, functional, cultural, social, political, and economic aspects.

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APPENDICES

Appendix A: Research Questionnaire for Users

Doğa Üzümcüoğlu is a Ph.D. candidate in the Architecture program at Eastern Mediterranean University, Faculty of Architecture, Department of Architecture, in Famagusta, North Cyprus. He is doing this investigation in the Kyrenia Ancient Harbor and its environs. The purpose of this study was to establish the social context, as well as to determine the level of satisfaction of its users in terms of the creative environment concept and the waterfront development concept. Prof.Dr. Mukaddes Polay is supervising his Ph.D. research. In this regard, Doğa Üzümcüoğlu will examine all data acquired under the supervision of Prof.Dr. Mukaddes Polay.

You will not be required to write your name; it is just for scientific purposes. Thank you in advance for taking the time to participate.

Direction

Tick the box (√) next to your suitable and sufficient assessment. (Please specify if you have over than single option.)

Consent

Do you trust well with remarks below? Please refer the attached level and sign the appropriate area with "√".

5. Completely agree	4. Agree	3. Neither agree nor disagree	2. Disagree	1. Completely Disagree

I am not in any pressure to complete this survey questionnaires.	5	4	3	2	1
I am free to answer all questions.	5	4	3	2	1
I am aware that the results of this questionnaire will not include my name.	5	4	3	2	1
I am aware that I have the option to discontinue filling out this form at any moment.	5	4	3	2	1

* If you have signed 1 or 2 of the above statements, please do not continue answer the questionnaire.

1. Facts of Individuals

Where is your nationality?

Turkish Cypriot	Yes ☐	No ☐
Turkish	Yes ☐	No ☐
Other 'Please Mention'		

What is your Profession?	

Gender			Age						Employment					Education				
Male	Female	Other	18 - 24	25 - 34	35 - 44	45 - 54	54 - 64	65 - …	Employed	University Student	Retired	Unemployed	Housewife	Never Attended School	Primary / Secondary	High School	University	Master / Ph.D. / …

You are;

Tourist	Yes ☐	No ☐
Local	Yes ☐	No ☐
Residents	Yes ☐	No ☐
Other 'Please Mention'		

2. Visitors' Rates of Satisfaction in terms of Creative Environment Concept

How often do you visit this place?

Daily	Yes ☐	No ☐
Once a week	Yes ☐	No ☐
Once a month	Yes ☐	No ☐
Seasonal	Yes ☐	No ☐

Do you enjoy spending your time here?	Yes ☐	No ☐
Are you recommending this location to others?	Yes ☐	No ☐
Are you satisfied with your surroundings?	Yes ☐	No ☐
Do you find location accessible?	Yes ☐	No ☐

5. Completely agree 4. Agree 3. Neither agree nor disagree 2. Disagree 1. Completely Disagree

Please respond to the below items concerning the environment as a destination of a creative environment.							
1	AWARENESS OF PEOPLE	I am satisfied with the basic life amenities.	5	4	3	2	1
2		I keep the environment clean.	5	4	3	2	1
3		This environment is an attractive place with events and activities.	5	4	3	2	1
4	ENTREP.	The place provides economic gain for many people.	5	4	3	2	1
5		The place invites entrepreneurs to invest.	5	4	3	2	1
6	PROTECTION OF CULTURE	The place is welcoming users in different cultures and languages.	5	4	3	2	1
7		The environment protects its historic context, cultural heritages, and unique values.	5	4	3	2	1
8		The environment has a contemporary appearance.	5	4	3	2	1
9		I am feeling the culture of the city in the place.	5	4	3	2	1
10	PHYS. QUALIT	The physical quality is adequate.	5	4	3	2	1
11		The place has contemporary image.	5	4	3	2	1
12	CREATIVE ACTIVITIES	There are various art activities in the environment.	5	4	3	2	1
13		Public amenities are sufficient and appropriate in the environment.	5	4	3	2	1
14		The place has adequate alternate space for the creative class.	5	4	3	2	1
15		Cypriot culture is reflected to the place.	5	4	3	2	1
16	SOCIAL COHES.	Different age groups, ethnicity, education levels, and/or genders can enjoy the environment.	5	4	3	2	1
17		There are comfortable places for socializing.	5	4	3	2	1
18	QUALITY OF LIFE	The place is accessible.	5	4	3	2	1
19		I am feeling safe in the place.	5	4	3	2	1
20		The place is clean.	5	4	3	2	1
21	TOLERA NCES	All user groups with different genders, beliefs, etc. can enjoy the environment.	5	4	3	2	1
22		I don't feel annoyed and/or oppressed in the place.	5	4	3	2	1
23	INNOVATION	The place has given me opportunities to construct my innovative ideas.	5	4	3	2	1
24		Creative ideas and/or arts existed in the place.	5	4	3	2	1
25		Contemporary technological tools like energy consumption via water, digital lighting systems, development areas, and/or simulation areas are placed.	5	4	3	2	1

3. Satisfaction level of the users in terms of waterfront development concept

5. Completely agree 4. Agree 3. Neither agree nor disagree 2. Disagree 1. Completely Disagree

Please respond to the below items concerning the environment as a destination of developed waterfront.							
1	FUNCTIONAL	The waterfront has various functional opportunities.	5	4	3	2	1
2		The waterfront provides joyful areas with music, food, literature, dance, and/or maritime heritage.	5	4	3	2	1
3		Different types of water-based activities can be seen.	5	4	3	2	1
4	PHYSICAL	The waterfront is well-maintained.	5	4	3	2	1
5		The place possess various art objects in good physical condition.	5	4	3	2	1
6		Urban furniture is in good physical condition.	5	4	3	2	1
7		The waterfront is accessible for able and disabled people.	5	4	3	2	1
8		The area has easy access to the other public environments.	5	4	3	2	1
9		It is easy to reach the waterfront via pedestrian access, bicycle lanes, and/or public transportation.	5	4	3	2	1
10		Traffic condition is proper.	5	4	3	2	1
11		Parking conditions is adequate	5	4	3	2	1
12	SOCIAL	The environment is attractive.	5	4	3	2	1
13		People with different education levels, age groups, ethnicities, and income levels can enjoy the place.	5	4	3	2	1
14		It is a good experience to spend time in the place.	5	4	3	2	1
15	ECONOMIC	The economic and nature-friendly design approach was considered during the regeneration process.	5	4	3	2	1
16		The area provides good economic income.	5	4	3	2	1
17		I like to visit here frequently.	5	4	3	2	1
18	CULTURAL	Historical references are protected and/or reflected in the waterfront.	5	4	3	2	1
19		There are cultural and art activities in the place.	5	4	3	2	1
20		The unique image has protected and the image has developed.	5	4	3	2	1
21	POLITIC	The regeneration process has done with a successful cooperation process with related stakeholders.	5	4	3	2	1
22		Creativity, innovation, and/or social well-being policies are well-considered during the regeneration process.	5	4	3	2	1
23		Proper regulations adapted by politicians to provide continuous maintenance.	5	4	3	2	1

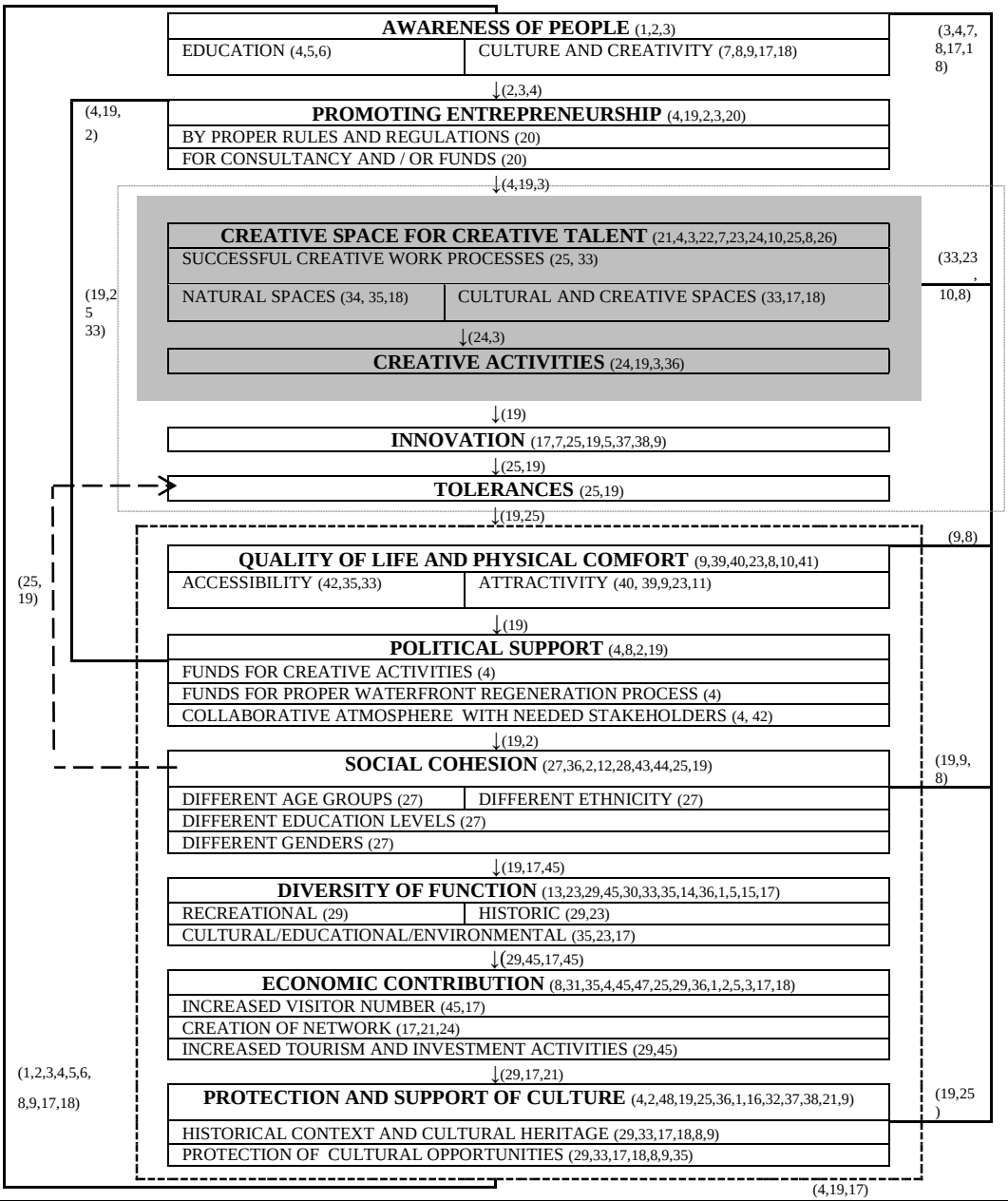
4. Satisfaction level of the users in terms of Creative Waterfront Model

			5. Very Favorable	4. Favorable	3. Neutral	2. Unfavorable	1. Very Unfavorable
1	PROTECTION OF CULTURE	Adequacy of cultural promotion.	5	4	3	2	1
2		Competence of cultural spaces.	5	4	3	2	1
3		The capability of contextual protection (historic and/or cultural heritage).	5	4	3	2	1
4		Protection level of an existing unique culture.	5	4	3	2	1
5		Festival opportunities in the place.	5	4	3	2	1
6		Access to local foods.	5	4	3	2	1
7		Access to local arts.	5	4	3	2	1
8		Adequacy of art activities.	5	4	3	2	1
9	TOLERANCES	Welcoming level of the place.	5	4	3	2	1
10		Sufficiency level of open-minded people.	5	4	3	2	1
11		Freedom level.	5	4	3	2	1
12	ENTREP.	Competence of consultancy and/or funds opportunities.	5	4	3	2	1
13		Competence of collaborative discussion spaces for stakeholders.	5	4	3	2	1
14		Adequacy of investment activities.	5	4	3	2	1
15	CREATIVE ENV.	The capability of exhibition spaces.	5	4	3	2	1
16		Suitability of performance areas.	5	4	3	2	1
17		Adequacy of open and/or close spaces, which motivating for creative productivity.	5	4	3	2	1
18	CREATIVE ACT.	Sufficiency of creative ideas, which comes true.	5	4	3	2	1
19		Competence of creative work activities.	5	4	3	2	1
20		The capability of creative actions.	5	4	3	2	1

21	INNOVATION AND TECHNOLOGY	Sufficiency of innovative ideas, which comes true.	5	4	3	2	1
22		Sufficiency of technological ideas, which comes true.	5	4	3	2	1
23		Adequacy of information tools for visitors.	5	4	3	2	1
24		Existence of digital lighting systems.	5	4	3	2	1
25		Existence of development areas.	5	4	3	2	1
26		Existence of R&D areas.	5	4	3	2	1
27		Existence of Research areas.	5	4	3	2	1
28		Existence of Simulation areas.	5	4	3	2	1
29		Existence of energy consumption via water.	5	4	3	2	1
30		Access to the internet.	5	4	3	2	1
31	AWARENESS	Adequacy of motivated people to keep the place clean.	5	4	3	2	1
32		Adequacy of motivated people to promote their art, music, and literature in the place.	5	4	3	2	1
33		Adequacy of responsive people for their environment and society.	5	4	3	2	1
34	QUALITY OF LIFE AND PHYSICAL COMFORT	The efficiency of protection of natural spaces.	5	4	3	2	1
35		Suitability of accessibility.	5	4	3	2	1
36		Appropriateness of functional variety.	5	4	3	2	1
37		Adequacy of architecture quality.	5	4	3	2	1
38		Adequacy of urban design quality.	5	4	3	2	1
39		Sufficiency of traffic, and access to the car park.	5	4	3	2	1
40		Sufficiency of transportation.	5	4	3	2	1
41		Possibility of relaxation.	5	4	3	2	1
42		Adequacy of access for disables.	5	4	3	2	1
43		Access to cycling.	5	4	3	2	1
44		Access for pedestrians.	5	4	3	2	1
45		Adequacy of safety.	5	4	3	2	1
46		Suitability of urban furniture (sitting, lighting, shading, planting, etc.) and harmony between each other.	5	4	3	2	1

47		Adequacy of cleanliness.	5	4	3	2	1
48		Access to urban balconies (view terraces).	5	4	3	2	1
49	POLITICAL SUP	Sufficiency of rules and regulations, which adapted into the place.	5	4	3	2	1
50		Competence of funds opportunities for the development of the place.	5	4	3	2	1
51		Adequacy of political support for the arrangement of a platform for stakeholders and/or investors.	5	4	3	2	1
52	SOCIAL COHESION	Sufficiency of attractiveness.	5	4	3	2	1
53		Existence of different age groups.	5	4	3	2	1
54		Existence of different ethnicity.	5	4	3	2	1
55		Existence of different education levels.	5	4	3	2	1
56		Existence of different genders.	5	4	3	2	1
57	DIVERSITY OF FUNCTION	Adequacy of accommodation opportunities.	5	4	3	2	1
58		Existence of water-based activities.	5	4	3	2	1
59		Variety of activities.	5	4	3	2	1
60		Access to the other functions.	5	4	3	2	1
61		Access to recreational facilities.	5	4	3	2	1
62		Sufficiency of shopping opportunities.	5	4	3	2	1
63		Eligibility for sports activities.	5	4	3	2	1
64	ECONOMIC CONTRIBUTION	Welcoming level to the environment.	5	4	3	2	1
65		The efficiency level of increased visitor numbers.	5	4	3	2	1
66		Adequacy of strategic and/or economic agreements with other cities.	5	4	3	2	1
67		Sufficiency of investment.	5	4	3	2	1
68		Competence of employment opportunities.	5	4	3	2	1
69		Acceptable cost of transportation.	5	4	3	2	1
70		The sufficiency of tourist attraction level.	5	4	3	2	1

Appendix B: A Principal Framework for the Creative Waterfront Development Model Variables



1	(Colomb, 2012)	**17**	(Jones, 2017)	**33**	(Timur, 2013)
2	(Grodach, 2017)	**18**	(Sairinen & Kumpulainen, 2006)	**34**	(Akköse, 2007)
3	(Eglitis & Ezera, 2016)	**19**	(Landry C. , 2000)	**35**	(Giovinazzi & Moretti, 2010)
4	(London Development Agency, 2006)	**20**	(Pratt A. C., 2011)	**36**	(Evans G. , 2007)
5	(UNCTAD, 2008)	**21**	(UNESCO, 2006)	**37**	(Kostis, Kafka, & Petrakis, 2018)
6	(Memişoğlu & Kalağan, 2017)	**22**	(McCreery, 2001)	**38**	(Ucar, 2018)
7	(Sepe M. , 2010)	**23**	(Kostopoulou, 2013)	**39**	(Vanolo, 2008)
8	(Richards & Wilson, 2007)	**24**	(DCMS, 2001)	**40**	(Gold & Ward, 1994)
9	(Girard & Nukamp, 2009)	**25**	(Florida, 2002)	**41**	(Wrenn, 1983)
10	(Carta M. , 2012b)	**26**	(Hoyle, 2002)	**42**	(Yassin, Bond, & McDonagh, 2012)
11	(Benson, 2002)	**27**	(Vivant & Charmes, 2008)	**43**	(Scott, 2006)
12	(Vranken, Decker, & Nieuwenhuyze, 2003)	**28**	(Kearns & Forrest, 2000)	**44**	(Thackara, 2006)
13	(The Waterfront Center, 1999)	**29**	(Desfor, Goldrick, & Merrens, 1988)	**45**	(Breen & Rigby, 1994)
14	(Popovic, Vlahovic, & Vatin, 2015)	**30**	(Morena, 2011)	**46**	(Evans G. , 2007)
15	(Harvey D. , 1989)	**31**	(Seçmen, 2018)	**47**	(Foord, 2008)
16	(Wyszomirski, 2000)	**32**	(Spayde, 2012)	**48**	(Landry C. , 2006)