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*Empirical Research*

# Planning and marketing the city for sustainability:

# The Madrid Nuevo Norte Project

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**Abstract:** Madrid Nuevo Norte (Madrid New North) is an urban redevelopment program applied in the city of Madrid in Spain. In relevance with this, the aim of this paper is twofold: firstly, the project examines if Nuevo Norte project is aligned with the principles of sustainability. Secondly, the paper investigates the impact of Nuevo Norte on the application of city marketing strategies in Madrid. For that purposes, questionnaires were distributed through Internet in 122 urban developers and planners located in the Spanish capital. The results indicated that overall, Nuevo Norte contributes in the sustainable development of Madrid; however, concerns were identified regarding the budget and the timeline of the project. In addition, NNMP provides significant opportunities to local authorities to implement sustainable city marketing strategies, aiming to improve the competitiveness and the quality of life in the city of Madrid. To this end, it seems that city marketing, through the construction of Mega projects, should sift to sustainability, ensuring a better life for local residents and communities in general. The research is expected to assist local authorities in Spain to harness the potential of mega projects, such as Nuevo Norte, in designing city marketing strategies and to promote Madrid in an international context as a city that gives emphasis in urban sustainability.

**Keywords:** city marketing; sustainability; mega project; Nuevo Norte Madrid; research

## 1. Introduction: City marketing as a Strategic Planning process for Urban Sustainable development

The relation between city/urban planning and 'winning strategies' such as place marketing and branding, or new forms of strategic planning, in the context of the competition oriented spatial economy, has been a popular research area the last two decades [1-6]. For many scholars, since 2000 urban planning has been expanded to incorporate place marketing, with city/urban planning no longer limited to spatial and infrastructure dimensions, with socio-economic factors becoming vital in urban programmes [7-10].

Starting with the concept of strategic planning has been widely studied by academics in the area of business, and strategic planning has been widely utilized both in the private and public sectors [11]. Strategic planning defined as the formulation of long-term organizational goals and objectives, including the selection of the appropriate strategies to achieve these goals and objectives [12]. In addition, it has identified as an important process especially in the area of local development and community economy, since public private partnerships based on the representation of common interests in order to define the development goals and motives, which in most cases have different characters [13,14].

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On the other hand, Place/ city marketing as a Strategic Planning process, can be understood as a "survival" reaction of cities to a new environment. Cities are now facing new challenges, including the increased mobility of capital, the easier relocation of economic activity, the radical development of knowledge-based society and increased global connectivity [15]. In a broader approach, city marketing may be better suited to the notion of a city's overall management [16]. However, city marketing should focus on people and create a worth living, visiting and/or investing place [17]. We now live in the era of city specialization [18]. City marketing is not only promotional actions for cities image [5], and it is much more than the campaigns and logos [19]. It should be considered as a strategic tool with achievable objectives to match the appropriate demand and supply in a well-defined target market [20].

In the post-industrial era, marketing technics were recruited to help towards the regeneration of industrial cities, especially in Europe [21]. It is no longer surprising that a successful implementation of a wider urban development plan or regeneration efforts is commonly connected with a city marketing plan [22]. Therefore, city marketing should not be detached from the city's actual development [23] and its sustainability [22]. In this particular point, the importance of mega infrastructure projects is crucial for urban sustainability achievement [24]. A mega project can be perceived either as a single infrastructure project such as a sport stadium or transportations facilities either as a more complex infrastructure as the land-use remodeling initiatives such as slum redevelopments [25]. In this study, the NUEVO NORTE Madrid Project (NNMR) is examined. More particularly, the aim of this paper is twofold: firstly, the study examines if Nuevo Norte project is aligned with the principles of sustainability. Secondly, the paper investigates the impact of Nuevo Norte on the application of city marketing strategies in Madrid. For that purposes, questionnaires were distributed through Internet in 122 urban developers and planners located in Madrid. The structure of the paper is the following: The second session presents the role of mega projects through the international experience, while the third present Madrid and the character of (NNMP). The fourth session present the methodology, the research questions while the fifth session the analysis of data.

## 2. The role of mega infrastructure projects: Reviewing the international experience

All megaprojects aim in urban development and competitiveness, thus they are located or built in cities or city-regions [26], and require the cooperation of the public and private sector [27]. According to Theurillat and Crevoisier (2013), there are four phases in the production of megaprojects [28]. The pre-project phase includes the resolution of all the territorial issues such as the land availability and the urban policy frameworks. The next phase is the project development phase, where it includes all the necessary actions from the initial design to the finalized concept of the project. Third is the project construction phase and ultimately is the operational phase of the project. As we can understand, the importance and the complexity of the development of such megaprojects requires a dynamic and ambidextrous way of thinking around the projects and the way they are completed [29].

The complexity and the size of the mega projects make them inherently tied to the logic of urban growth and development, which leads to wealth creation, prosperity, and urban qualitative transformation [26]. However, mega projects often are going along with negatives. According to Pitsis et al. (2018), in a period where resources are limited, and environmental concerns dominate, megaprojects are also seen as destructive forces of doom and massive failure that question their sustainability [29]. The international experience is rich in successful and failed examples of megaprojects. Sihlcity in Zurich is perceived as a successful megaproject example, especially for its financial sustainability and the public and private sector collaboration. The knowledge of territorial context and its characteristics helped establish territorial sustainability and the investment to go forward [28]. Furthermore, in several mega projects in New York, Paris, and Sao Paolo, the city was willing to finance the initial investment, which seems that improved the urban infra-

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structures [27]. On the other hand, in the Arab states of the Gulf region, some megaprojects are promoted as "green megaprojects". But several economic, environmental, and social threats question the effectiveness of changing their current unsustainable urban developing pattern [30]. Nevertheless, megaprojects can be seen as an opportunity for all the stakeholders to a border awareness on urban sustainability issues.

## 3. MADRID

According to Moreno-Jimenez et al., (2016), the way we understand social and physical development has evolved over time [31]. Today there is a community awareness that shares relevant social principles, such as quality of life, sustainability, social and territorial cohesion, competitiveness, social empowerment, participation and responsibility, etc

The city of Madrid faces one of its greatest challenges: to achieve a sustainable and efficient urban structure that is respectful with the environment. There is a long way to go, but Madrid´s Council led by José Luis Martínez-Almeida will focus all its efforts and a large part of its resources on meeting this challenge, because the sustainability of cities is no longer understood in any other way, not individually, not at the national level, much less at the international level [32].

## 4. NNMP

### 4.1. Definition of the project

NNMP can be considered as the largest urban transformation project on a European capital [33]. It will occupy an area of 3.3 million square meters and will modify a large part of the northern area of the city of Madrid. New spaces for public use, office buildings, commercial areas, homes, infrastructure and green areas will be created. It is expected that 76% of the total space will be designed for public use. The approval of the project has had the participation and consensus of all the public administrations involved and with the majority of the neighborhood associations. During the approval and urban design phase, citizen participation processes were opened, which served to modify some of the initial forecasts. The promotion of the project is assumed by the company Castellana Distrito Norte.

The central point of the project is the Chamartín train station, which will be remodeled and turned into the main axis of the Spanish high-speed network. In addition to this action, a business center will be built near the station and the areas of Malmea, San Roque and Tres Olivos will be transformed; and the western sector of Las Tablas. The Chamartín station will have a large transport interchange, which will include urban and interurban buses, commuter, long-distance and high-speed trains; and transportation to Madrid Barajas airport, which can be reached in 15 minutes.

The green areas will occupy 0.4 million square meters. A new park will be created close to Chamartín, which will cover the network of railway lines that arrive at the station. The rest of the green areas will be joined to form a south-north corridor that will reach Monte de El Pardo, one of the spaces with the greatest ecological value in the Community of Madrid. Ten thousands homes will be built, which 20% will be for public protection. As in the rest of the planned buildings, all the homes will have high-energy efficiency, both in construction and in their subsequent use. The new business center will employ approximately 130,000 people. The construction of three large office towers, more than 200 meters high, is expected to be integrated into the green spaces and commercial areas [34].

### 4.2 Issues of Sustainability

The commitment to sustainability is an essential and inherent value of NNMP, especially in environmental, economic and social terms [35]. Madrid Nuevo Norte has made sustainability one of the pillars of its planning and therefore has taken the 2030 Agenda, in which the UN established 17 Sustainable Development Goals (SDG), as a guide to materialize that purpose. The plan addresses 12 SDG objectives and provides proposals at all

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points of the international roadmap that are likely to be applied in the scope of the project [36].


**Figure 1**. Madrid Nuevo Norte, sustainable development goals applied into the project *Source: un.org. (2020)*

Within these 12 objectives, NNMP has placed special emphasis on four, mainly because they are considered critical and also for their greater capacity to act from urban design: water and sanitation management (SDG 6), the use of non-energy pollutants (SDG 7), the creation of a sustainable urban environment (SDG 11) and climate action (SDG 13). Below are the 12 objectives applied in the project:

Health and Well-being (SDG 3): Health, well-being and sustainable development are considered to be intrinsically connected; health is regarded as a precondition indicator, and as an outcome of successful sustainable development [37].

According to this approach, the project has a bioclimatic design, drawing comfortable streets and squares for citizens, with shaded spaces and protection against the wind. The objective is to promote the use of public spaces and active urban life, which encourages common activities and the socialization of the people who share them. The promotion of mobility on foot and by bicycle will encourage daily physical activity and will result in an improvement in air quality and a reduction in environmental noise. The commitment to public transport will also help improve air quality, reduce noise, and air pollution.

Gender equality (SDG 5): Inherent in sustainability is the notion of equity and social justice, which encapsulates gender equality [38].

NNMP has been a pioneer in gender equality applied to urban planning. It is the first major development in Spain that has incorporated a specific and planned gender study since its establishment. This study focuses on implementing measures to reduce gender gaps in mobility, safety and access to equipment. Inclusive coexistence has been taken into account in the design of the spaces, according to the surveys and previous studies carried out among citizens.

Efficient water management (SDG 6): According to Kayaga (2007), there is a need for water professionals to change the way of water management resources in urban areas to ensure economic and environmental sustainability [39]. The planning of NNMP has given special importance to the supply and management of water, implementing measures for its reuse and improving the efficiency of its use in buildings and infrastructures. The project incorporates large-scale water reuse systems, which includes the comprehensive management of its collection, retention and reuse. Likewise, it is planned to use gray water and rainwater for the irrigation of green areas. The recovered water network will also serve for street cleaning. On the other hand, thanks to Madrid Nuevo Norte, 13 kilometers of pre-existing facilities will be renovated, in a section that supplies 80% of the drinking water network of the city of Madrid.

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Clean Energy (SDG 7): The need for energy to satisfy social, economic development, welfare and health is growing over time. Returning to renewables can help to relieve climate change and is an excellent opportunity which needs to be sustainable in order to meet energy demand of future generations [40]. At this point, the project plans the incorporation of sustainable and electrified means of transport, eliminating transports with energy of fossil origin. Likewise, the construction of highly demanding buildings in terms of energy efficiency is expected. The levels of demand will be higher than those applied in buildings with zero consumption. In fact, up to twice as much renewable energy will be generated in private buildings and up to four times in public ones.

Economic growth and quality employment (SDG 8): Is clear that there is a new generation of policy-aware smart cities geared towards socially inclusive economic growth and employment for sustainability [41]. The urban model of NNMP promotes sustainable and long-term economic growth. The modern Business Center that will promote innovation and the knowledge economy will be one of the key pieces of this objective. It is also committed to local commerce, with the implantation of commercial basements in 90% of the project's buildings. NNMP is expected to generate 118,000 jobs during the urbanization and building works, to which another 130,000 will be added later because of the service activity in the new neighborhood.

Smart infrastructures (SDG 9): The SMART infrastructures are those using ICT (Information Communication Technologies) technologies for the monitoring and control and for providing information to users [42]. NNMP has projected smart and innovative infrastructures, which will be supported by digital technology to apply the smart city concept, which aims to optimize urban management and improve the quality of life of all citizens.

Reduction of inequalities (SDG 10): The existing inequalities and vulnerabilities in our societies are related to the socio-economic implications of climate change, thus ethics demands social models which soften market forces and protects the most vulnerable [43]. Following this goal, NNMP incorporates this concept through inclusive urban planning. This means incorporating protected housing and residential land destined to public policies to support housing.

Sustainable city and community (SDG 11): Economic growth needs to emphasize creativity and innovation to reinforce the environmental, social and cultural amenities of the city. Is an urgent priority in the global sustainability that places the nexus between urban design and a community that participate and support the future of the city [44]. Within this framework the project proposes a dense and compact urban model, with mixed urban uses. The great role of public transport, the extensive network of green areas and public free spaces have been planned for the well-being of people, making more efficient use of available resources to create a more sustainable city in all its aspects. The participation of the neighborhood community has been encouraged to involve the inhabitants in the design and responsible use of the spaces.

Responsible consumption (SDG 12): Consumers are increasingly demanding a more sustainable development from the different stakeholders, taking advantage of this green conscience it is essential that governments take decisions towards more sustainable offers, with adequate communication activities to motivate consumers to participate in a more responsible consumption. [45]. Under this objective, the project planning includes measures to reduce the consumption of resources. It is intended to minimize the consumption of water and energy; and efficiently use the materials used in construction. In this sense, both the responsible selection of materials necessary for urbanization and building works, as well as the reuse and recycling of existing materials are planned.

Fight against climate change (SDG 13): The present Global Climate Emergency demands a transformation of our societies, which entails an important performance role in the adaptation and mitigation of climate change [46,47]. Madrid Nuevo Norte's measures to deal with the climate emergency cover various areas, including the following:

- the naturalization of the urban environment to absorb carbon dioxide
- techniques for reducing the heat island effect with special vegetation

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- inclusion of elements to provide shade in public spaces, improving thermal comfort
- public transport powered by renewable energies
- buildings that generate more energy than they consume

Ecosystems and biodiversity (SDG 15): According to Pecl et al., (2017) climate change is causing geographical redistribution of plant and animal species globally [48]. These distributional shifts are leading to new ecosystems and ecological communities, changes that will affect human society.

For this specific issue NNMP has planned the creation of quality and lasting green spaces, such as the Central Park or the green axis, which will connect the north with the Monte del Pardo. It has also adopted measures to promote plant biodiversity with the use of species adapted to the climate and rainfall of Madrid. The project will serve as a green corridor between ecosystems, to link existing urban parks in the north of Madrid. The objective is twofold: preserve and respect the already consolidated environmental values; and create a new ecosystem that fosters biodiversity.

Partnerships to achieve sustainable goals (SDG 17): Nowadays, in the process of sustainable development, forming partnerships and overall cooperation makes it easier to achieve the SDG [49]. For this reason, the urban regeneration project in the north of Madrid aims to be an example of public-private collaboration to achieve a responsible urban model. Several public administrations and private companies participate in the planning and execution of the project. Civil society has also mobilized in favor of the project, with the participation of more than 80 associations and groups from Madrid and more than 170,000 citizens.

### 4.3 Madrid: a benchmark for 2021 urban planning

In NNMP, a new way of doing responsible urban planning has been promoted, integrating citizen participation to turn Madrid into an international benchmark [35]. The Madrid Nuevo Norte project is planned around the regeneration of the Chamartín railway station. The use and modification of railway infrastructures is a common element to other similar projects, such as those recently carried out in Paris, London, Frankfurt or Milan. The planning of the Madrid urban project has been developed around five basic axes: sustainability, social participation, integration of mixed urban uses, creation of state-of-the-art business centers and the prominence of public spaces through the integration and improvement of existing infrastructures and spaces [34].

Sustainability, as already mentioned in the previous section, focuses on four fundamental areas: water and sanitation management, use of non-polluting energy, creation of a sustainable urban environment, and climate action. However, apart from these four, the project applies another eight of the seventeen sustainable development goals set by the UN.

Social participation is another essential feature of project planning. During the design phase, numerous consultations were made with residents of the affected areas to include their opinions in the final design. According to the promoters, people have been the center of the project, a trend shared by the most avant-garde projects in the world. In the case of NNMP, it is the first time that the gender perspective has been included in the design of a large urban project.

The integration and complementation of mixed urban uses refers to the combination and integration of homes, local shops, offices, and public facilities, mixing their uses and rationalizing mobility between them. It is the urban trend that is committed to creating dense and compact cities, which improve the efficiency of available resources. The challenge is to combine accessibility, mobility and sustainability, applying the new Smart City concept. On the other hand, NNMP will create a state-of-the-art business center, which takes advantage of the proximity of a large city and the pre-existing infrastructures, among which the Chamartín Station and the Madrid Barajas Airport stand out.

Finally, the prominence of public spaces has also been a critical aspect in the final design, since a large part of the surface will be allocated to spaces for public use, designed

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for social interaction and integrated with green and new surfaces. urban transport routes. The new public spaces will be created from the existing infrastructures and empty spaces, generating a large, cohesive and functional urban territory. It is a project with an inclusive will, which seeks the active coexistence of citizens, in which all people share quality public spaces. The concomitance of these 5 areas of action: sustainability, social participation, integration of mixed urban uses, creation of state-of-the-art business centers and prominence of public spaces; makes Madrid Nuevo Norte a benchmark of avant-garde urbanism [50].

## 5. **Methodology, Sample and data collection**

For addressing the research objectives of the study, the quantitative approach was used. Questionnaires were handed out through Internet in 122 professionals relevant with the urban development of Madrid. In particular, the sample included urban planners, architects, engineers, academics, project managers, sustainability consultants, real estate managers, etc. All participants were located in Madrid. Questionnaires were distributed mainly through social media along with a letter that was explaining the aims and the nature of the study. Initially, 200 questionnaires were sent; 122 valid responses were gathered, achieving a response rate of 61 %. The questionnaire was designed after the exploration of the relevant academic literature. All variables that were used in the research instrument were mentioned in previous studies (see table in Appendix A). The questionnaire included three sections. The first section concerned the demographic features of the participants in terms of gender, age, educational background and degree of involvement in the construction of NNMP and in Mega projects in general. The second section measured the alignment of NNMP with the principles of sustainability. In this context, three sub-sections were included, which measured the economic, environmental and social impact of the NNMP respectively. The third section of the instrument measured the effect of NNMP in applying city marketing strategies. A seven-point Likert scale was used as a response format for all questions, with 1 signifying "strongly disagree" and 7 representing "strongly agree". In relevance with the design of the questionnaire, two were the main research questions of the current study:

**Research Question 1**: "Is NNMP aligned with the criteria of sustainability (economic, environmental and social)?"

**Research Question** 2: "Does NNMP contributes in the implementation of sustainable city marketing strategies in the region of Madrid?

Firstly, descriptive measures were used since they consist the fundamental building blocks of data analysis. They provide insights into the data and assist the interpretation of the results [51,52]. Secondly, four Exploratory Factor Analyses (EFA) were employed using the varimax rotation and the principal component approach. EFAs concerned the measurement of the economic, environmental and social impact of NNMP, aiming to detect the key determinants of the association between NNMP and sustainability. The fourth EFA concerned the grouping of city marketing strategies, facilitating the final step of the analysis. Thirdly, regression analysis was employed with the key constructs that were identified through the EFAs. Multiple regression with ordinary least squares was used. Several models were employed in which variables were entered gradually for obtaining the most satisfactory results. The dependent variables in the regression analyses were three: 1) NNMP success, 2) Implementation of city marketing strategies that contribute in economic development and 3) city marketing strategies that concern local governance. The mathematical form of the models is illustrated below:

$$Y = \beta o + \beta 1X + \beta 2X + \beta 3X + \beta 4X + e1$$

Where:

Y = the dependent variables: a) NNMP success, b) Implementation of city marketing strategies that contribute in economic development, and c) city marketing strategies that concern local governance

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βo = constant
β1X= Economic benefits of the construction on NNMP
β2X = Social benefits of the construction on NNMP
β3X = Environmental benefits of the construction on NNMP

Model 1

And

βo = constant
β1X= Economic fairness through the construction of NNMP
β2X = Risk and costs of NNMP
β3X = Safety & Social acceptance of NNMP
β4X= Negative Environmental impact of NNMP

Model 2

Additionally, a third model was employed where the dependent variable was NNMP success and the independent variables were: Implementation of city marketing strategies that contribute in economic development, and city marketing strategies that concern local governance.

## 6. DATA ANALYSIS

### 6.1 Demographics

Most of the participants were men (68,9 %), 30-49 years old (66,4%) and well educated (see table 1). Indicatively, 60,7 % of the respondents held a Master Degree, while 27,9 % had also a PhD. The degree of involvement of participants in NN was low (mean: 2,29); that was desirable for avoiding response error. Lastly, the level of experience of informants in participating in similar large infrastructure projects was higher (mean: 4,45).

**Table 1:** Sample demographics

| **Variable** | | **N** | **%** |
|---|---|---|---|
| *Gender* | | | |
| | Male | 84 | 68,9 |
| | Female | 38 | 31,1 |
| | Total | 122 | 100,0 |
| *Age* | | | |
| | 18-29 | 9 | 7,4 |
| | 30-39 | 34 | 27,9 |
| | 40-49 | 47 | 38,5 |
| | 50-59 | 25 | 20,5 |
| | 60+ | 7 | 5,7 |
| | Total | 122 | 100,0 |
| *Educational level* | | | |
| | University/College | 14 | 11,5 |
| | Master | 74 | 60,7 |
| | PhD | 34 | 27,9 |
| | **Total** | **122** | **100,0** |
| Experience & Involvement | | **Mean** | |
| | Degree of involvement in Nuevo Norte Project | **2,29** | |
| | Level of experience in participating in large infrastructure projects | **4,45** | |

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*(1=Not at all, 7= to a great extent)*

**6.2 Descriptive measures**

**Economic impact**

Firstly, the analysis revealed that NNMP will have an overall positive economic outcome in the region of Madrid. In particular, it is expected that NN will: attract investments, provide opportunities for local firms, enhance local employment and increase revenues for local government authorities. The effect in tourism is expected also to be positive. Concerns regarding the costs and the associated risks of the NNMP were fluctuated in moderate levels, revealing the positive stances of urban planners towards NNMP. However, the effect of NN in eliminating economic inequalities is milder.

**Environmental Impact**

NNMP is considered also that will have a positive environmental impact in the city of Madrid. This is reflected mainly in the provision of sufficient open and green spaces, as well as in the application of green practices during the construction process. Nevertheless, NNMP is expected to cause air and noise pollution, whereas the effects on ground and water are considered as less adverse.

**Social impact**

The positive social impact of NNMP is reflected in three facts. Firstly, as a Mega project will provide basic civic facilities, improving the quality of life of local residents. Secondly, NNMP will improve transportation efficiency and mobility in the Madrid, enabling walking and biking. Thirdly, NNMP will ensure safety for workers and for end users. Furthermore, the visual impact of the Mega project is expected to be notable. Finally, urban planners support that overall NNMP has the acceptance of the community of Madrid, a factor that has vital importance for its overall success. On the other hand, NNMP fails in representing the local cultural and historical heritage of the Spanish capital.

**NNMP Success**

Concerns were expressed regarding the time schedule and the budget of NNMP. It is expected that the construction of the project will last long, as well as that it will require more funds to be completed. However, final users will be satisfied from NNMP. Technical professionals and local authorities are considered as capable for completing and manage NNMP. Although, the ability of the engineers exceeds the capacity of local governors. It is notable that in most South European Countries there is a skepticism regarding the efficiency of local authorities.

**City marketing strategies**

Overall, the research showed that NNMP will facilitate and accelerate the implementation of city marketing strategies. Most of these strategies concern the economic development of Madrid (attraction of foreign investments and European funds, creation of a favorable business climate, enhanced competitiveness of the city, etc.). Additionally, there is a number of practices that is relevant with spatial and urban management issues (urban regeneration, improvement of the green infrastructures of the city, regeneration of existing secondary centers, etc.) revealing the multidimensional role of NNMP. Lastly, NNMP is expected to assist the implementation of tourism marketing strategies.

**6.3 Exploratory Factor Analyses (EFAs)**

Firstly, the EFA that concerned the economic dimensions of NN indicated three constructs: F1: Local economic benefits, F2: Risks, costs, and F3: Economic fairness. As shown in table 2, seven factors were loaded in F1, five factors were loaded in F2 and three factors were loaded in F3. Cronbach A in all cases was larger than 0,7, revealing scale reliability and inner consistency of each construct [51,52]. Kaiser-Meyer-Olkin (KMO) measure was 0,858 and Barlett Test of Sphericity was statistically significant at 0.000 level, indicating the appropriateness of the factor analysis [52,53]

Moreover, the EFA that concerned the environmental dimensions of NNMP revealed two latent factors: F1: Environmental benefits and F2: Pollution (see table 3). F1 included eight factors and F2 involved four aspects that concerned the type of environmental pollution caused by the construction of NNMP. In this case, Cronbach A was even higher,

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more than 0,9 in both constructs, indicating measurement reliability and consistency. KMO value was 0,895 and Barlett Test of Sphericity was statistically significant at 0.000 level, revealing that the data was suitable for the certain type of analysis. It is also notable that all factor loadings were above 0,58.

**Table 2: EFA –** Economic factors

| Construct | Items | Factor loadings | Cronbach A |
|---|---|---|---|
| *F1: Local economic benefits* | NNMP will have a positive impact on local employment. | ,743 | ,873 |
| | NNMP will have a positive impact on tourism development of Madrid. | ,674 | |
| | NNMP will cause a significant increase in nearby property values. | ,741 | |
| | NNMP will provide opportunities to local businesses. | ,555 | |
| | NNMP will contribute in the local economic development of Madrid. | ,660 | |
| | NNMP will have economic benefits to local government. | ,565 | |
| | NNMP will encourage businesses to make investments in the area | ,774 | |
| *F2: Risks and Costs* | I consider the cost of construction of NNMP as high. | ,635 | ,836 |
| | There is a high financial risk in the construction of NNMP due to the recent economic recession. | ,812 | |
| | There is a high economic risk in the construction of NNMP due to the pandemic (COVID-19). | ,829 | |
| | NNMP will have high maintenance cost | ,755 | |
| | NNMP will Increase the cost of living in Madrid. | ,673 | |
| *F3: Economic Fairness* | The procedures for carrying out NNMP are done in a transparent manner. | ,500 | ,747 |
| | The prices of the houses and residents in NNMP will be affordable. | ,824 | |
| | NNMP will contribute in the fair distribution of wealth in the citizens of Madrid. | ,800 | |
| Kaiser-Meyer-Olkin | ,858 | | |
| Bartlett's Test of Sphericity (Sig.) | ,000 | | |

**Table 3: EFA –** Environmental factors

| Construct | Items | Factor loadings | Cronbach A |
|---|---|---|---|

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| | | | |
|---|---|---|---|
| *F1: Environmental benefits* | NNMP promotes efficient urban land usage. | ,582 | 0,913 |
| | NNMP will contribute in energy saving. | ,705 | |
| | NNMP promotes usage of green energy. | ,822 | |
| | NNMP will provide sufficient public open spaces. | ,776 | |
| | NNMP will provide sufficient green spaces (trees, flora, and fauna in neighborhood). | ,711 | |
| | In NNMP, green building practices throughout the design and construction processes will be applied. | ,811 | |
| | NNMP preserve the local character (such as natural landscape) and natural resources during construction. | ,610 | |
| | NNMP is harmonized with the local natural setting and with surrounding. | ,587 | |
| *F2: Environmental Pollution (Negative impact)* | NNMP will cause water pollution. | ,803 | 0,944 |
| | NNMP will cause noise pollution. | ,908 | |
| | NNMP will cause air pollution. | ,904 | |
| | NNMP will cause ground pollution. | ,883 | |
| Kaiser-Meyer-Olkin | ,895 | | |
| Bartlett's Test of Sphericity (Sig.) | ,000 | | |

The EFA that was relevant with the social dimensions of NNMP revealed also two latent constructs: F1: Social benefits and F2: Safety and social acceptance. Eight factors were loaded in Social benefits (Cronbach A: 0,914) and four factors in Safety and social acceptance (Cronbach A: 0,705). KMO value was 0,896 and Barlett Test of Sphericity was statistically significant at 0.000 level. All Factor loadings were above 0, 49 (see table 4).

The fourth EFA indicated that city marketing strategies could be distinguished in two categories: F1: Economic development strategies and F2: Local governance strategies. In this case, F1 included eight subfactors and F2 included seven subfactors. KMO value was 0,937 and Barlett Test of Sphericity was statistically significant at 0.000 level, indicating the appropriateness of factor analysis. Cronbach A was relatively high in both constructs (0,950 and 0,929 respectively) and all factor loadings ranged from 0, 59 to 0,872. As stated by He et al. (2019), such results further validate the rationality of classifying city marketing strategies according to these two proposed constructs (see table 5).

Finally, the construct NNMP Success was generated by computing five Likert scale items, namely: Ability of engineers and technical professionals to perform the mega project, Satisfaction of the community from NNMP, Local authorities' capacity in managing NNMP, Meeting expected objectives and Completion of the project according to timeline. The reliability value of NNMP success was 0,817.

**Table 4:** EFA – Social factors

| **Construct** | **Items** | **Factor loadings** | **Cronbach A** |
|---|---|---|---|

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| | | | |
|---|---|---|---|
| *F1: Social Benefits* | NNMP is designed in a way that represents the local cultural and historical heritage of Madrid. | ,723 | ,914 |
| | The aesthetic quality (visual impact) of NNMP will be high. | ,496 | |
| | NNMP will reduce traffic problems in Madrid. | ,781 | |
| | NNMP will have a positive impact on the quality of living of the citizens of Madrid. | ,853 | |
| | NNMP is aligned with resilient planning enabling future expansions due to population growth. | ,857 | |
| | NNMP will expand mobility and transportation. | ,634 | |
| | NNMP will provide basic services and civic facilities (banks, hospitals, parks). | ,618 | |
| | NNMP will improve proximity to jobs for the residents. | ,841 | |
| | NNMP will enable walking and biking. | ,811 | |
| *F2: Safety and social acceptance* | Health safety of the workers will be ensured during the construction of NNMP. | ,657 | ,705 |
| | The community of Madrid is involved in the design and the construction of NNMP. | ,602 | |
| | There is public acceptance towards the project of NNMP in Madrid. | ,516 | |
| | NNMP will ensure security within buildings to end users. | ,580 | |
| Kaiser-Meyer-Olkin | | ,896 | |
| Bartlett's Test of Sphericity (Sig.) | | ,000 | |

**Table 5:** EFA – City marketing strategies

| Construct | Items | Factor loadings | Cronbach A |
|---|---|---|---|
| *F1: Economic Development strategies* | NNMP will contribute in the urban regeneration of Madrid. | ,779 | ,950 |
| | NNMP will contribute in the development of the human capital of Madrid. | ,759 | |
| | NNMP will enhance the competitiveness of Madrid in an international basis. | ,872 | |
| | NNMP will create a favorable business climate. | ,708 | |

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| | | | |
|---|---|---|---|
| | NNMP will assist the city of Madrid to attract foreign investments and European funds. | ,848 | |
| | NNMP will facilitate the operation of Small and Medium size Enterprises (SMEs). | ,590 | |
| | NNMP will enhance the levels of visitor's satisfaction in the city of Madrid | ,669 | |
| | NNMP will result in increased revenues from tourism arrivals. | ,623 | |
| *F2: Local governance strategies* | NNMP will assist authorities in Madrid to create networks with other cities. | ,660 | ,929 |
| | NNMP will accelerate institutional collaboration/ co-operation among levels of government and between public and private actors | ,607 | |
| | NNMP will improve the quality of social services (healthcare, education, social assistance). | ,654 | |
| | NNMP will promote the cultural heritage and the historicity of the city. | ,842 | |
| | NNMP will help authorities to identify zones for different spatial policies | ,815 | |
| | NNMP will assist local authorities to organize more cultural events and activities. | ,751 | |
| | NNMP will enhance the overall efficiency of the transport means of the city of Madrid. | ,709 | |
| Kaiser-Meyer-Olkin | ,937 | | |
| Bartlett's Test of Sphericity (Sig.) | ,000 | | |

Table 6 summarizes the results of the four EFAs that were presented before. As shown below, NNMP seems that is aligned with the principles of sustainability since it incorporates economic, environmental and social benefits. However, risks, costs, pollution, social acceptance and economic fairness should be taken under consideration for improving the overall outcome of the certain NNMP is also a vehicle for applying city marketing strategies. Local authorities probably can play a substantial role in designing and applying these strategies, aiming mainly in boosting economic development in the region of Madrid.

**Table 6**: A summary of EFAs

| Economic dimensions | Environmental dimensions | Social dimensions | City marketing strategies |
|---|---|---|---|
| F1: Local economic benefits | F1: Environmental benefits | F1: Social Benefits | F1: Economic Development strategies |
| F2: Risks and Costs | F2: Environmental Pollution (-) | F2: Safety and social acceptance | F2: Local governance strategies |

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F3: Economic Fairness

**6.4 Regressions**

Three regression models were employed where the dependent variable was NNMP success. In the first model, we regress NNMP success with the benefits of sustainability, namely: economic, social and environmental benefits. As shown in table 7, economic and social benefits are significant predictors of NNMP success, whereas environmental benefits are not. The ties with social benefits seem to be stronger. The second model indicated that safety and social acceptance of the Mega project and the Negative environmental impact of NNMP influence also its success. Obviously, β coefficient (-0,261) revealed that the pollution caused by NNMP has a negative impact on its performance. No significant associations were identified with economic fairness and risks and costs. Lastly, NNMP success is associated only with the implementation of city marketing strategies that are focused in economic growth. No significance was identified with local governance strategies. In all models, R square values were relatively high, signifying the overall significance of the prediction models. All Variance Inflation Factor (VIF) values were below 5, indicating that multicollinearity was not a problem of the current analysis [54,55].

Two prediction models were employed where the dependent variable was city marketing approaches and more specifically economic development strategies (Table 8). The analysis showed that economic and social benefits of NN, economic fairness, safety and social acceptance and negative environmental impact are significant predictors of the efficient application of economic development strategies in the city marketing context. The same also stands for the application of local governance strategies. However, local governance city marketing approaches are associated also with the environmental benefits of NN. In short, NN can play a vital role in implementing city marketing strategies. Nevertheless, these practices should be aligned with sustainability criteria. Again, in all the aforementioned models R square values were high. Moreover, VIF was lower than 5 signifying no multicollinearity.

**Table 7:** Regression analysis (NNMP success determinants)

**Dependent variable:** NNMP success

| | Standardized β | Sig | VIF | F | $R^2$ | Overall Sig. |
|---|---|---|---|---|---|---|
| **Model 1** | | | | 39,823 | ,503 | ,000 |
| (Constant) | | ,091 | | | | |
| Economic Benefits | ,186** | ,041 | 1,919 | | | |
| Social benefits | ,446** | ,001 | 4,359 | | | |
| Environmental benefits | ,138 | ,273 | 3,699 | | | |
| **Model 2** | | | | 38,456 | ,568 | ,000 |
| (Constant) | | ,000 | | | | |
| Economic fairness | ,073 | ,359 | 1,721 | | | |
| Risks and Costs | -,140 | ,064 | 1,524 | | | |
| Safety & Social acceptance | ,484** | ,000 | 1,498 | | | |

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| | | | | | | |
|---|---|---|---|---|---|---|
| Negative Environmental impact | -,261** | ,001 | 1,688 | | | |
| **Model 3** | | | | 44,858 | ,430 | ,000 |
| (Constant) | | ,000 | | | | |
| Local Governance strategies | ,210 | ,126 | 3,854 | | | |
| Economic development strategies | ,467** | ,001 | 3,854 | | | |

**Table 8**: Regression analysis (City marketing strategies)

| **Dependent variable:** Economic development strategies | Standardized β | Sig | VIF | F | $R^2$ | Overall Sig. |
|---|---|---|---|---|---|---|
| **Model 1** | | | | 150,523 | ,793 | ,000 |
| (Constant) | | ,049 | | | | |
| Economic Benefits | ,376** | ,000 | 1,919 | | | |
| Social benefits | ,564** | ,000 | 4,359 | | | |
| Environmental benefits | ,029 | ,719 | 3,699 | | | |
| **Model 2** | | | | 55,693 | ,656 | ,000 |
| (Constant) | | ,000 | | | | |
| Economic fairness | ,332** | ,000 | 1,721 | | | |
| Risks and Costs | -,124 | ,067 | 1,524 | | | |
| Safety & Social acceptance | ,370** | ,000 | 1,498 | | | |
| Negative Environmental impact | -,209** | ,004 | 1,688 | | | |

(continued)

| **Dependent variable:** Local governance strategies | Standardized β | Sig | VIF | F | $R^2$ | Overall Sig. |
|---|---|---|---|---|---|---|
| **Model 1** | | | | 124,775 | ,760 | ,000 |
| (Constant) | | ,071 | | | | |
| Economic Benefits | ,146** | ,021 | 1,919 | | | |
| Social benefits | ,556** | ,000 | 4,359 | | | |
| Environmental benefits | ,233** | ,008 | 3,699 | | | |
| **Model 2** | | | | 43,869 | ,600 | ,000 |
| (Constant) | | ,000 | | | | |
| Economic fairness | ,337** | ,000 | 1,721 | | | |
| Risks and Costs | -,073 | ,312 | 1,524 | | | |
| Safety & Social acceptance | ,309** | ,000 | 1,498 | | | |

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| | | | | |
|---|---|---|---|---|
| Negative impact | Environmental | -,264** | ,001 | 1,688 |

**7. Conclusions**

NNMP (Madrid New North) is an urban redevelopment program applied in the city of Madrid in Spain. In relevance with this, the aim of this project was twofold: firstly, it was investigated if NNMP is aligned with the principles of sustainability. Secondly, the paper examined the impact of NNMP on the application of city marketing strategies in Madrid. Firstly it, was found that NNMP overall meets the criteria of sustainable development. More specifically, the project is expected to contribute in the local economic development of Madrid, as well as provides social benefits such as provision of basic civil facilities, positive visual impact, enhanced transportation efficiency and mobility, etc. For all that reasons NNMP has the acceptance of the local society. Furthermore, the environmental outcome of NNMP is also considered as positive, since it will provide sufficient open and green spaces, whereas the pollution that will be caused during the construction process is expected to be in controllable levels. On the other hand, key limitations of the NNMP involve inability to: eliminate social inequalities and to harmonize with the cultural and historical heritage of the Spanish capital. Besides, concerns were identified regarding the budget and the timeline of the project. In sum, urban planners and professionals illustrated positive stances and attitudes towards the effects of NNMP in the city of Madrid. It seems that the certain Mega project will overall upgrade the quality of life in the Spanish capital, succeeding in addressing the needs of modern urban centers.

However, the success of NNMP is highly depended on meeting key sustainability criteria. In particular NNMP performance is associated with economic and social benefits, economic fairness, safety issues and social acceptance. These criteria were also mentioned in previous studies by several authors [56-62]. It seems that Mega projects, for being successful, should take under consideration several sustainability dimensions, highlighting the crucial role that the philosophy of sustainable development plays in urban regeneration and planning. It is notable that no association was found between NNMP success and environmental benefits of NNMP, revealing that the there is room for further improvement of the environmental outcome of NNMP. Social acceptance and elimination of inequalities are also critical points that the constructors of NNMP should give emphasis to improve the overall performance of the project.

The research also showed that NNMP is an efficient vehicle for the implementation of city marketing strategies. City marketing practices that are applicable in the case of NNMP can be distinguished in strategies that concern the economic development of Madrid and local governance strategies. It is indicative these strategies are also aligned with sustainability principles. More specifically, city marketing strategies address the following sustainability criteria: economic, social and environmental benefits, economic fairness, safety and social acceptance. Therefore, NNMP provides significant opportunities to local authorities to implement sustainable city marketing strategies, aiming to improve the competitiveness and the quality of life in the city of Madrid. To this end, it seems that city marketing, through the construction of Mega projects, should sift to sustainability, ensuring a better life for local residents and communities in general.

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## Appendix A

### Questionnaire items & sources

| Economic Factors | Source: |
|---|---|
| 1. The procedures for carrying out Nuevo Norte are done in a transparent manner. | 62, 55 |
| 2. Nuevo Norte will have a positive impact on local employment. | 56, 57, 59, 60, 61 |
| 3. Nuevo Norte will have a positive impact on tourism development of Madrid. | 56 |
| 4. I consider the cost of construction of Nuevo Norte as high. | 56 |
| 5. Nuevo Norte will cause a significant increase in land value in Madrid. | 58 |
| 6. Nuevo Norte will cause a significant increase in nearby property values. | 58 |
| 7. Nuevo Norte will provide opportunities to local businesses. | 58, 61 |
| 8. There is a high financial risk in the construction of Nuevo Norte due to the recent economic recession. | 63, 58 |
| 9. There is a high economic risk in the construction of Nuevo Norte due to the pandemic (COVID-19). | - |
| 10. Nuevo Norte will have high maintenance cost | 57 |
| 11. The prices of the houses and residents in Nuevo Norte will be affordable. | 57, 59 |
| 12. Nuevo Norte will contribute in the local economic development of Madrid. | 59 |
| 13. Nuevo Norte will contribute in the fair distribution of wealth in the citizens of Madrid. | 59, 61 |
| 14. Nuevo Norte will Increase the cost of living in Madrid. | 59 |
| 15. Nuevo Norte will have economic benefits to local government. | 60 |
| 16. Nuevo Norte will encourage businesses to make investments in the area. | 61 |
| **Environmental factors** | |
| 17. Nuevo Norte will cause water pollution. | 62, 56, 58, 59, 60, 61 |
| 18. Nuevo Norte will cause noise pollution. | 62, 56, 58, 59, 60, 61 |
| 19. Nuevo Norte will cause air pollution. | 59, 60, 61 |
| 20. Nuevo Norte will cause ground pollution. | 59, 61, 58 |
| 21. Nuevo Norte promotes efficient urban land usage. | 58, 59 |
| 22. Nuevo Norte, as a Mega project, addresses climate change problems. | 58, 59 |

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| | |
|---|---|
| 23. Nuevo Norte will contribute in energy saving. | 57, 59 |
| 24. Nuevo Norte promotes usage of green energy. | 57 |
| 25. Nuevo Norte will provide sufficient public open spaces. | 58, 60, 56 |
| 26. Nuevo Norte will provide sufficient green spaces (trees, flora, and fauna in neighborhood). | 58, 60, 57, 61 |
| 27. In Nuevo Norte project, green building practices throughout the design and construction processes will be applied. | 60, 61 |
| 28. Nuevo Norte will preserve the local character (such as natural landscape) and natural resources during construction. | 61, 58 |
| 29. Nuevo Norte is harmonized with the local natural setting and with surrounding. | 60, 56 |
| **Social factors** | |
| 30. Nuevo Norte is designed in a way that represents the local cultural and historical heritage of Madrid. | 56, 59, 60, 61 |
| 31. Health safety of the workers will be ensured during the construction of Nuevo Norte. | 56, 58, 59, 61 |
| 32. The community of Madrid is involved in the design and the construction of Nuevo Norte. | 58, 57 |
| 33. There is public acceptance towards the project of Nuevo Norte in Madrid. | 62 |
| 34. Nuevo Norte will ensure safety for pedestrian & public transport users. | 58, 60 |
| 35. The aesthetic quality (visual impact) of Nuevo Norte will be high. | 58, 60, 61 |
| 36. Nuevo Norte will reduce traffic problems in Madrid. | 58, 61 |
| 37. Nuevo Norte will have a positive impact on the quality of living of the citizens of Madrid. | 57, 59, 64 |
| 38. Nuevo Norte will reduce social inequity by enabling residents from a wide range of economic levels to live in one community. | 57, 59, 61 |
| 39. Nuevo Norte will ensure security within buildings to end users. | 57, 59, 61 |
| 40. Nuevo Norte is aligned with resilient planning enabling future expansions due to population growth. | 61 |
| 41. Nuevo Norte will expand mobility and transportation. | 61 |
| 42. Nuevo Norte will provide basic services and civic facilities (banks, hospitals, parks). | 61 |
| 43. Nuevo Norte will improve proximity to jobs for the residents. | 61 |
| 44. Nuevo Norte will enable walking and biking. | 61 |
| 45. Nuevo Norte involves high social risk (Involvement of too many multi-level decisions making bodies). | 63 |

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| Other critical factors – NN success | |
|---|---|
| 46. Project engineers and technical professionals have the ability to effectively perform Nuevo Norte. | 64 |
| 47. Local authorities in Madrid have the ability to effectively manage Nuevo Norte. | 64, 60 |
| 48. Nuevo Norte will be completed on schedule | 64 |
| 49. The construction of Nuevo Norte will last long. | 58, 63 |
| 50. Nuevo Norte will be completed on budget | 64, 55 |
| 51. The results or deliverables of Nuevo Norte will meet the expected objectives. | 64 |
| 52. Overall, the community of Madrid will be satisfied from the establishment of Nuevo Norte. | 58, 60 |

| Nuevo Norte and City marketing | Source: |
|---|---|
| 1. Nuevo Norte will assist authorities in Madrid to create networks with other cities. | 65, 66, 67 |
| 2. The construction of Nuevo Norte signifies that Madrid has efficient urban governance. | 68, 69 |
| 3. Nuevo Norte will contribute in the urban regeneration of Madrid. | 66 |
| 4. Nuevo Norte will contribute in the development of the human capital of Madrid. | 69 |
| 5. Nuevo Norte will improve the green infrastructures of Madrid. | 70, 71, 67 |
| 6. Nuevo Norte will enhance the competitiveness of Madrid in an international basis. | 72, 73 |
| 7. Nuevo Notre will accelerate institutional collaboration/ co-operation among levels of government and between public and private actors | 74, 69, 72 |
| 8. Nuevo Norte will create a favorable business climate. | 68 |
| 9. Nuevo Norte will improve the quality of social services (healthcare, education, social assistance). | 68 |
| 10. Nuevo Norte will promote the cultural heritage and the historicity of the city. | 66 |
| 11. Nuevo Norte will help authorities to identify zones for different spatial policies | 67 |
| 12. Nuevo Norte will assist the city of Madrid to attract foreign investments and European funds. | 73, 75, 76, 77, 78 |
| 13. Nuevo Norte will assist the city of Madrid to sustain the vitality of its center. | 68, 79 |

| | | |
|---|---|---|
| 14. | Nuevo Norte will assist the city of Madrid to regenerate existing secondary centers. | 68 |
| 15. | Nuevo Norte will facilitate the operation of Small and Medium size Enterprises (SMEs). | 80 |
| 16. | Nuevo Norte will enhance the levels of visitor's satisfaction in the city of Madrid | 81 |
| 17. | Nuevo Norte will result in increased revenues from tourism arrivals. | 82 |
| 18. | Nuevo Norte will assist Madrid to efficiently rebrand its urban area. | 77 |
| 19. | Nuevo Norte will assist local authorities to organize more cultural events and activities. | 83 |
| 20. | Nuevo Norte will enhance the overall efficiency of the transport means of the city of Madrid. | 84, 85 |

**References**


1. Kotler, P. et al. Marketing Places Europe: How to Attract Investments, Industries, Residents and Visitors to Cities, Communities, Regions and Nations in Europe. London: Financial Times Prentice Hall, 1999. Available at: http://books.google.com/books?id=UFO3QgAACAAJ&pgis=1 (Accessed: 21 December 2020).
2. Davoudi, S. European Briefing: Polycentricity in European spatial planning: From an analytical tool to a normative agenda. European Planning Studies, 2003, 11(8), 979–999. doi:10. 1080/0965431032000146169.
3. Oliveira, E. Place branding in strategic spatial planning: An analysis at the regional scale with special reference to Northern Portugal. (Doctoral Dissertation), 2016, Retrieved from https://www.rug.nl/research/portal/files/30810451/Complete_thesis.pdf
4. Richardson, T., & Jensen, B. Discourses of mobility and polycentric development: A contested view of European spatial planning. European Planning Studies,2010, 8(4), 503–520,doi:10.1080/713666421
5. 5. Metaxas, T. (2009) 'Place Marketing, Strategic Planning and Competitiveness: The Case of Malta', European Planning Studies. 2009, 17(9), pp. 1357–1378. doi:10.1080/09654310903053539.
6. Warnaby, G., & Medway, D. What about the 'place' in place marketing. Marketing Theory, 2013, 13(3), 345–363. doi:10.1177/1470593113492992
7. Gleeson, B., & Low, N. Australian urban planning: New challenges, new agendas. New South Wales: Allen & Unwin, 2000
8. McGuirk, P. Neoliberalist planning? Re-thinking and re-casting Sydney's metropolitan planning. Geographical Research, 2005 43(1), 59–70. doi:10.1111/j.1745-5871.2005.00297.x
9. Van Assche, K., Beunen, R., & Lo, M. Place as layered and segmentary commodity. Place branding, smart growth and the creation of product and value. International Planning Studies, 2016 21(2), 164–175. doi:10.1080/13563475.2015.1115339
10. Lucarelli, A. Place branding as policy: The (im-)political place branding. Cities, 2018, 80, 12–21. doi:10.1016/j.cities.2017.08.004
11. Garcia-Falcon, Juan Manuel, and Diego Medina-Muñoz. "The relationship between hotel companies and travel agencies: An empirical assessment of the United States market." Service Industries Journal 19.4 (1999): 102-122.
12. McClamroch J., Byrd J., Sowell L.S., 'Strategic Planning: politics, leadership and learning', Journal of Academic Librarianship, 2001, vol. 27 (5), pp. 372-378
13. Syrett, S, 'Local Power and Economic Policy: Local Authority Economic Initiatives in Portugal', Regional Studies,1994, vol. 28.1, pp. 53-67
14. Williams, Alistair. Understanding the hospitality consumer. Routledge, 2002.
15. Kavaratzis, M. and Ashworth, G. 'Place marketing: how did we get here and where are we going?', Journal of Place Management and Development, 2008, 1(2), pp. 150–165. doi:10.1108/17538330810889989.
16. Skinner, H.'The emergence and development of place marketing's confused identity', Journal of Marketing Management, 2008, 24(9–10), pp. 915–928. doi:10.1362/026725708X381966.
17. Asnawi, A. 'City Marketing In Tourism: A Literature Review About Periodical Concept And Definition', Jurnal Perspektif Pembiayaan dan Pembangunan Daerah, 2020, 8(1), pp. 79–90. doi:10.22437/ppd.v8i1.8743
18. Rivero Moreno, L. D. 'Sustainable city storytelling: cultural heritage as a resource for a greener and fairer urban development', Journal of Cultural Heritage Management and Sustainable Development, 2020, 10(4), pp. 399–412. doi: 10.1108/JCHMSD-05-2019-0043.

19. Hospers, G.-J. 'Lynch's The Image of the City after 50 Years: City Marketing Lessons from an Urban Planning Classic', European Planning Studies, 2010, 18(12), pp. 2073–2081. doi: 10.1080/09654313.2010.525369.
20. Buhalis, D. 'Marketing the competitive destination of the future', Tourism Management, 2020, 21(1), pp. 97–116
21. Deffner, A. and Liouris, C. 'City Marketing: A significant planning tool for urban sustainable development in a globalised economy', in 45th Congress of the European Regional Science Association: 'Land Use and Water Management in a Sustainable Network Society', 23-27 August 2005, Amsterdam, The Netherlands.
22. Deffner, A. et al. 'City marketing and planning in two Greek cities: plurality or constraints?', European Planning Studies, 2020, Taylor & Francis, 28(7), pp. 1333–1354. doi: 10.1080/09654313.2019.1701291.
23. Boisen, M. et al.'Reframing place promotion, place marketing, and place branding - moving beyond conceptual confusion', Cities, 2018, Elsevier Ltd, 80, pp. 4–11. doi: 10.1016/j.cities.2017.08.021.
24. Kennedy, L. et al. 'Megaprojects and Urban Development in Cities of the South Chance2Sustain Work Package 2 Thematic Report Megaprojects and Urban Development in Cities of the South', Thematic Report, 5(September), 2014, doi: 10.13140/2.1.2344.4163.
25. Mylonas, C. and Xenidis, Y. 'Megaproject development in the context of sustainable urban regeneration', RELAND: International Journal of Real Estate & Land Planning, 2018, 1, pp. 377–384.
26. del Cerro Santamaria, G. 'Megaprojects, Development and Competitiveness: Building the Infrastructure for Globalization and Neoliberalism', ATHENS JOURNAL OF SOCIAL SCIENCES, 6(4), 2019, pp. 263–290. doi: 10.30958/ajss.6-4-1.
27. Lobo, B.'Urban megaprojects and local planning frameworks in New York City, Paris, and Sao Paulo', in Research in Urban Sociology, 2013, pp. 131–158. doi: 10.1108/S1047-0042(2013)0000013011.
28. Theurillat, T. and Crevoisier, O. (2013) 'The sustainability of a financialized urban megaproject: The case of sihlcity in zurich', International Journal of Urban and Regional Research, 37(6), 2013, pp. 2052–2073. doi: 10.1111/j.1468-2427.2012.01140.x.
29. Pitsis, A. et al.'Megaprojects redefined – complexity vs cost and social imperatives', International Journal of Managing Projects in Business, 2018, 11(1), pp. 7–34. doi: 10.1108/IJMPB-07-2017-0080.
30. Rizzo, A. 'Sustainable urban development and green megaprojects in the Arab states of the Gulf Region: limitations, covert aims, and unintended outcomes in Doha, Qatar', International Planning Studies, 2017, 22(2), pp. 85–98. doi:10.1080/13563475.2016.1182896.
31. Moreno-Jimenez, A., Cañada-Torrecilla, R., Vidal-Domínguez, M. J., Palacios-Garcia, A., & Martinez-Suarez, P. Assessing environmental justice through potential exposure to air pollution: a socio-spatial analysis in Madrid and Barcelona, Spain. Geoforum, 2016, 69, 117-131.
32. Carabante, B. Madrid ante el reto de una movilidad sostenible. Economistas, 2020, (169), 80-86.
33. Rondelez, Pieter, and Medina García, Clara. "Limits of Municipalism. What Can We Learn from Operación Chamartín?" MINIM (2020): MINIM; 2020. Web.
34. Distrito Castellana Norte: Accesibilidad, movilidad, sostenibilidad y tecnología, pilares de la ciudad del siglo XXI, 2018, Retrieved from: https://distritocastellananorte.com/accesibilidad-movilidad-sostenibilidad-y-tecnologia-pilares-de-la-ciudad-del-siglo-xxi/
35. Distrito Castellana Norte memoria (2019). Retrieved from: (https://distritocastellananorte.com/memoria/ pag10)
36. Distrito Castellana Norte: Madrid Nuevo Norte, urbanismo alineado con los objetivos de desarrollo sostenible, 2020. Retrieved from: https://distritocastellananorte.com/madrid-nuevo-norte-urbanismo-alineado-con-los-objetivos-de-desarrollo-sostenible/#1586184757222-9e6f8731-47d5
37. Nunes, A. R., Lee, K., & O'Riordan, T. The importance of an integrating framework for achieving the Sustainable Development Goals: the example of health and well-being. BMJ global health, 2016, 1(3).
38. Grosser, K. Corporate social responsibility and gender equality: women as stakeholders and the European Union sustainability strategy. Business Ethics: A European Review, 2009, 18(3), 290-307.
39. Kayaga, S., Smout, I., & Al-Maskati, H. Water demand management–shifting urban water management towards sustainability. Water science and technology: Water supply, 2007, 7(4), 49-56.
40. Owusu, P. A., & Asumadu-Sarkodie, S. A review of renewable energy sources, sustainability issues and climate change mitigation. Cogent Engineering, 2016, 3(1), 1167990.
41. Visvizi, A., Lytras, M. D., Damiani, E., & Mathkour, H. Policy making for smart cities: Innovation and social inclusive economic growth for sustainability. Journal of Science and Technology Policy Management, 2018.
42. Cascetta, E., Pagliara, F. Le infrastrutture di trasporto in Italia: cosa non ha funzionato e come porvi rimedio. (Transport infrastructures in Italy: what has not worked and how to solve it.), 2015, 288 p. Aracne, Rome.
43. Bailey, D. The environmental paradox of the welfare state: The dynamics of sustainability. New political economy, 2015, 20(6), 793-811.
44. Kenworthy, J. R. The eco-city: ten key transport and planning dimensions for sustainable city development. Environment and urbanization, 2006, 18(1), 67-85.
45. Buerke, A., Straatmann, T., Lin-Hi, N., & Müller, K. Consumer awareness and sustainability-focused value orientation as motivating factors of responsible consumer behavior. Review of Managerial Science, 2017, 11(4), 959-991.
46. Gills, B., & Morgan, J. Global Climate Emergency: after COP24, climate science, urgency, and the threat to humanity, 2020.
47. Pardo, G., & del Prado, A. Guidelines for small ruminant production systems under climate emergency in Europe. Small Ruminant Research, 2020, 106261.

48. Pecl, G. T., Araújo, M. B., Bell, J. D., Blanchard, J., Bonebrake, T. C., Chen, I. C., ... & Falconi, L. Biodiversity redistribution under climate change: Impacts on ecosystems and human well-being. Science, 2017, 355(6332).
49. Bayramoğlu, T. U. R. G. U. T., & Durmaz, A. T. A. K. A. N. Sustainablity in Economics. EE Başar, & T. Bayramoğlu. 2017.
50. Distrito Castellana Norte: Madrid Nuevo Norte, una nueva norma de hacer urbanismo, 2017. Retrieved from: https://distritocastellananorte.com/madrid-nuevo-norte-una-nueva-forma-de-hacer-urbanismo/
51. Malhotra, N., Birks, D. Marketing research: An applied Approach, 2nd European edition. Harlow: Pearson Education, 2003
52. Malhotra, N., Birks, D. Marketing research: An applied Approach 3rd European edition. Harlow: Pearson Education, 2006.
53. Meng, F., Tepanon, Y., & Uysal, M. Measuring tourist satisfaction by attribute and motivation: The case of a nature-based resort. Journal of vacation marketing, 2008, 14(1), 41-56.
54. Ringle, Christian M., Wende, Sven, & Becker, Jan-Michael. SmartPLS 3. Bönningstedt: SmartPLS, 2015. Retrieved from http://www.smartpls.com [accessed 20/12/2020]
55. He, Q., Chen, X., Wang, G., Zhu, J., Yang, D., Liu, X., & Li, Y. Managing social responsibility for sustainability in megaprojects: An innovation transitions perspective on success. Journal of Cleaner Production, 2019, 241, 118395.
56. Ugwu, O. O., & Haupt, T. C. Key performance indicators and assessment methods for infrastructure sustainability—a South African construction industry perspective. Building and environment, 2007, 42(2), 665-680.
57. Nair, A., & Nayar, S. K. Key performance indicators of sustainability. In IOP Conference Series: Earth and Environmental Science, 2020, June, Vol. 491, No. 1, p. 012047. IOP Publishing.
58. Song, Y., Hou, D., Zhang, J., O'Connor, D., Li, G., Gu, Q., ... & Liu, P. Environmental and socio-economic sustainability appraisal of contaminated land remediation strategies: A case study at a mega-site in China. Science of the Total Environment, 2018, 610, 391-401.
59. Xing, Y., Horner, R. M. W., El-Haram, M. A., & Bebbington, J. A framework model for assessing sustainability impacts of urban development. In Accounting forum, 2009, Vol. 33, No. 3, pp. 209-224.
60. Li, H., Zhang, X., Ng, S. T., Skitmore, M., & Dong, Y. H. Social sustainability indicators of public construction megaprojects in China. Journal of Urban Planning and Development, 2018, 144(4), 04018034.
61. Karji, A., Woldesenbet, A., Khanzadi, M., & Tafazzoli, M. Assessment of Social Sustainability Indicators in Mass Housing Construction: A Case Study of Mehr Housing Project. Sustainable Cities and Society, 2019, 50, 101697.
62. Banihashemi, S., Hosseini, M. R., Golizadeh, H., & Sankaran, S. Critical success factors (CSFs) for integration of sustainability into construction project management practices in developing countries. International Journal of Project Management, 2017, 35(6), 1103-1119.
63. Boateng, P., Chen, Z., & Ogunlana, S. O.An Analytical Network Process model for risks prioritisation in megaprojects. International Journal of Project Management, 2015, 33(8), 1795-1811.
64. Wu, G., Li, H., Wu, C., & Hu, Z. How different strengths of ties impact project performance in megaprojects: the mediating role of trust. International Journal of Managing Projects in Business. 2020.
65. Meijers, E., Hoekstra, J., & Aguado, R.. Strategic planning for city networks: the emergence of a Basque global city? International Planning Studies, 2008, 13(3), 239-259.
66. Lee, J. H., Ostwald, M. J., Sher, W. D., & Lee, H. Developing strategic planning schemes for urban regeneration through mixed-use development in Seoul. International Planning Studies, 2016, 1-21.
67. Xu, J. Governing city-regions in China: Theoretical issues and perspectives for regional strategic planning. Town Planning Review, 2008, 79(2-3), 157-186.
68. Tsenkova, S. Reinventing strategic planning in post-socialist cities: Experiences from Sofia. European Planning Studies, 2007, 15(3), 295-31.
69. Partidário, M. R., Paddon, M., Eggenberger, M., Chau, D. M., & Van Duyen, N. Linking strategic environmental assessment (SEA) and city development strategy in Vietnam. Impact Assessment and Project Appraisal, 2008, 26(3), 219-227.
70. Young, R. F. Planting the living city: Best practices in planning green infrastructure—Results from major us cities. Journal of the American Planning Association, 2011, 77(4), 368-381.
71. Kim, J. I. Making cities global: the new city development of Songdo, Yujiapu and Lingang. Planning Perspectives, 2014, 29(3), 329-356.
72. Cavenago, D., & Trivellato, B Organizing strategic spatial planning: Experiences from Italian cities. Space and Polity, 2010, 14(2), 167-188.
73. Metaxas T. Cities Competition, Place Marketing and Economic Development in South Europe: The Barcelona case as FDI destination. Theoretical and Empirical Researches in Urban Management, 2010, vol. 5(14), 5-19.
74. Percoco, M.. Strategic planning and institutional collective action in Italian cities. Public Management Review, 2016, 18(1), 139-158.
75. Oliveira, E.. Place branding as a strategic spatial planning instrument: a theoretical framework to branding regions with references to northern Portugal. Journal of Place Management and Development, 2016, 9(1), 47-72.
76. Deffner A., Metaxas T. Arvanitidis P. Developing Place Marketing Pilot Plans in Northern Europe: The cases of Rostock (Germany) and Kainuu (Finland). Anatolia: An International Journal of Hospitality and Tourism, 2013, vol. 24(2): 241-263.
77. Carlisle, S., Johansen, A. and Kunc, M. Strategic foresight for (coastal) urban tourism market complexity: The case of Bournemouth. Tourism Management, 2016, 54, pp.81-95.

78. Angelevska-Najdeska, K., & Rakicevik, G. Planning of sustainable tourism development. Procedia-Social and Behavioral Sciences, 2012, 44, 210-220.
79. Searle, G. 'Relational' Planning and Recent Sydney Metropolitan and City Strategies. Urban Policy and Research, 2013, 31(3), 367-378.
80. Spahiu, L., & Kopacek, P. Strategic Planning in Small and Medium Enterprises at Tourism Sector in Kosovo. IFAC Proceedings Volumes, 2010, 43(25), 123-127.
81. Risteskia, M., Kocevskia, J., & Arnaudov, K. Spatial planning and sustainable tourism as basis for developing competitive tourist destinations. Procedia-Social and Behavioral Sciences, 2012, 44, 375-386.
82. Kamble, Z., & Bouchon, F. Tourism Planning and a Nation's Vision: A Review of the Tourism Policy of Sri Lanka. Procedia-Social and Behavioral Sciences, 2014, 144, 229-236.
83. Jamhawi, M. M., & Hajahjah, Z. A. A bottom-up approach for cultural tourism management in the old city of As-Salt, Jordan. Journal of Cultural Heritage Management and Sustainable Development, 2017, 7(1), 91-106.
84. De Luca, S. Public engagement in strategic transportation planning: An analytic hierarchy process based approach. Transport Policy, 2014, 33, 110-124.
85. Burt, G., Mackay, D. J., van der Heijden, K., & Verheijdt, C. Openness disposition: Readiness characteristics that influence participant benefits from scenario planning as strategic conversation. Technological Forecasting and Social Change, 2016, 124, 16-25.