

Industrial Tourism in Vila Nova de Famalicão: a case study

Ana Araújo* Hugo Martins** António Pinheiro***

University of Maia (Portugal)

Abstract: Industrial Tourism has been consolidated in Portugal. There are already some successful examples, such as Vila Nova de Famalicão (VNF). This region was involved in the creation of an industrial tourism network within the brand of "Famalicão Cidade Têxtil", to promote industry and industrial heritage. In this piece of research, we seek to assess the perceptions of the local entities involved in this network project in VNF. Methodologically, after carrying out a questionnaire survey, it is possible to identify that, in most of the partners, the dissemination of information about the company and the product was the main reason for their integration, also highlighting the increase in local tourism and the desire to open doors to the public. It is concluded that the project was a bid by the municipality to allow for valorisation of industries, whether they are in operation or not, attracting more and more visitors.

Keywords: Industrial tourism; Network of industrial tourism; Tourism; Vila Nova de Famalicão; Portugal.

Turismo Industrial em Vila Nova de Famalicão: um estudo de caso

Resumo: O Turismo Industrial tem vindo a consolidar-se em Portugal, havendo já alguns exemplos de sucesso como é o caso de Vila Nova de Famalicão (VNF). A região envolveu-se na criação de uma rede de turismo industrial no âmbito da marca "Famalicão Cidade Têxtil", a fim de promover a indústria viva e o património industrial. Nesta investigação, procuramos aferir as perceções das entidades locais envolvidas neste projeto em rede da localidade de VNF. Metodologicamente, após a realização do inquérito por questionário, é possível identificar que, na generalidade dos parceiros, a divulgação da empresa e do produto foi o principal motivo para a sua integração, destacando-se também o aumento do turismo local e a vontade de abrir portas ao público. Conclui-se que o projeto foi uma aposta do concelho que permitirá a valorização das indústrias, quer estejam em funcionamento ou não atraindo cada vez mais visitantes.

Palavras-chave: Turismo Industrial; Rede de Turismo Industrial; Turismo; Vila Nova de Famalicão; Portugal.

1. Introduction

The economic potential of industrial heritage "is a strong incentive to the implementation of several activities such as information and education centres, visitor centres, museums, shopping centres, tourist accommodation and sports facilities" (Rodrigues, 2019). Industrial Tourism has been consolidating in Portugal through the increase of an offer supported by visits to factories in operation and museum facilities linked to old industrial complexes and know-how, complemented with different contact experiences with products and production processes. There are several companies and municipalities all over the country that promote industrial tourism initiatives, thus contributing to a better knowledge of the national production, distinct in tradition and modernity.

Vila Nova de Famalicão (VNF) is one of those examples being a municipality with a great business dynamism. This vitality was highlighted, in 2019, with the title of the Most Exporting Municipality in the North of Portugal, due to the positive balance of trade (Opinião Pública, 2021). Inserted in the Ave

Cite: Araújo, A.; Martins, H. & Pinheiro, A. (2023). Industrial Tourism in Vila Nova de Famalicão: a case study. PASOS. Revista de Turismo y Patrimonio Cultural, 21 (2), 405-416. https://doi.org/10.25145/j.pasos.2023.21.026



^{*} University of Maia, CEDTUR; Email: ana-3araujo@hotmail.com; https://orcid.org/0000-0001-6888-1412

^{**} University of Maia, CEGOT; Email: hugomartins@umaia.pt; https://orcid.org/0000-0002-1651-8715

^{***} University of Maia, CEGOT; Email: apinheiro@umaia.pt; https://orcid.org/0000-0002-8846-295X

Region, it is the second municipality with the highest number of companies. The Textile Sector, the Agro-Food Industry, the Metalworking Industry and the Automobile Industry stand out.

This study aims to understand the importance that industrial tourism has for the region, identifying the main motivations of local entities for their integration in the county's Industrial Tourism project, as well as to understand the vision of these entities about the Industrial Tourism Network they are part of.

Methodologically we used a questionnaire survey aimed at the partners of the Industrial Tourism Network: three living industries, four wine tourism spaces and a research and development centre. The use of this methodology allowed us to respond to the objectives, learn about the current state of the Network and its partners, as well as identify possible particularities that need to be improved.

This article is divided into six parts. After the introduction, the second part addresses the concept of industrial tourism with some concrete examples of this type of tourism, with special focus on prominent cases in the Portuguese territory and the Portuguese industrial tourism network. In the third part we focus on the territory where the study took place, making a framework about the territory under analysis, in tourism terms, focusing on the industrial sector and local entities that are part of the industrial network. In the fourth part a methodological framework is developed justifying the choice of the case study. Subsequently, the answers to the surveys filled in by the partners of the industrial tourism network are analysed to answer the research question. Finally, the conclusion follows with the final considerations and suggestions for future research.

2. Literature Review

2.1. Industrial tourism

Industrial Tourism has aroused the curiosity of several researchers (Rodriguez-Zulaica, 2017) given its ability to develop and create new opportunities in spaces and companies, in which its main functions are not tourism, but a complement. One of the biggest disagreements focuses on extending the definition of Industrial Tourism to Industrial Heritage, i.e. whether it is possible to refer to Industrial Tourism as only visits to operational spaces or also to non-operational spaces where industrial traces of the past are still visible. Frew (2000) acknowledges the difficulty in arriving at a definition but considers Industrial Tourism as visits to operational industries. The author excludes visits to non-operational spaces, considering only companies in full operation. For Frew (2000), companies can produce goods or services, i.e. products can be categorised in two ways: *a*) tangible, when companies can produce goods that the visitor can touch or smell and taste during the visit; and *b*) non-tangible, such as services.

In a broader perspective, Otggar, Van Den Berg & Feng (2016) define Industrial Tourism as visits to operational or non-operational companies, where an experience is offered to the visitor, such as the possibility to know the production process and even the history of a product but considering that its main activity is not tourism. The authors attest Frew (2000) in the fact that tourism is not their main activity, but they include non-operational spaces in their definition. Otggar et al. (2016) also recognize the difficulty of reaching a consensus given that the term Industrial Tourism, in some countries, is used only for visits to operational spaces and, in other countries, is already used for visits to non-operational spaces or for the combination of both.

Edwards & Coit (1996) define that Industrial Heritage Tourism represents tourism activities and industries in humanized places, buildings and landscapes that result from industrial processes in the past. Soyes, cited by Otgaar (2010) defines Industrial Tourism as a group that visits operational and non-operational companies, also making the identification of 3 groups of visitors: Business Visitors: in this group are included the professionals in the industry who visit other companies; Educational Visitors: visitors who are linked to the academic world, such as teachers and students; Other Visitors: in this group are encompassed the tourists.

In turn, Abad (2004) concludes that industrial tourism can be divided into two models, varying according to what what is visited, i.e., visits can fall on productive spaces, such as industries in production and in this case the interest is basically technical to observe the machinery in use. The visits can also focus on industrial or historical heritage, and visits take place in abandoned factories, "with museological reuse or with installations of artistic or interpretative centre" (Abad, 2004, p. 29). The author also includes in his definition preserved pieces such as chimneys or steam engines that portray the industrial activities

of different periods, in this context the author considers that the interest is cultural. Otgaar (2010, p. 24) considers that "Industrial Tourism involves visits to sites that allow visitors to learn about economic activities in the past, present and future".

The implementation of Industrial Tourism brings advantages and disadvantages to companies, but also to regions. Frew (2000) refers that the associated costs are one of the reasons that companies are faced with the development of Industrial Tourism.

For the development of the product an initial investment is necessary, which can happen to capacitate the spaces, that is, to create conditions to receive the tourists, as well as for necessary material and for the hiring or training of the agents. Besides the initial investment, there are costs associated with visits, which can be fixed or variable depending on the number of visitors. There is also the expense of advertising and promoting the product, as well as the loss of income given the disturbance of the visits in the normal running of the business. Industrial Tourism also has associated financial benefits. In most visits there is an associated cost for visitors. This amount may vary according to the number of visitors per group, by age and by the nature of the visits, i.e. if they are school groups, business visits or just leisure visits. Another benefit is the promotion of the product, which translates into an increase in sales. These sales may occur during the visit, if the space has a product display and enables its marketing, as well as post-visit sales, when the visitor is satisfied with the product and makes a regular purchase (Otgaar, 2010).

Industrial Tourism is a solution for the tourist and economic development of mainly industrial regions, as it can be used as a Marketing strategy. As they are not prepared to receive visitors, investment is needed in the creation of infrastructures and complements such as services. A practical example of a region that has developed in terms of industrial tourism is Turin, in north-western Italy in the Piedmont region. The city brings together its strong historical link to industry and innovation and development mainly at a technological level with networking in order to develop the territory. Named as the "Capital of the Automobile" due to its automotive cluster with the presence of R&D centres and engineering schools that allow networking (Città di Torino, 2022). In 2005 the Industrial Tourism project was launched named as "Made in Torino" a collaboration between Torino Tourism and the Torino Chamber of Commerce (which currently brings together about 70 member companies), a project that aims to provide experiences to tourists with visits to different sectors divided into Aerospace, Food, Food and Energy, Art and Culture, Automotive and Car Design, Cosmetics, Manufacturing and Crafts and, finally, Textile Turismo Torino and Provincia, 2022).

2.2. Industrial Tourism in Portugal

In Portugal, the first initiative related to Industrial Tourism appeared in 1997, with the creation of the Portuguese Association for Industrial Heritage. This association aims to research the industrial heritage, safeguard and intervene in its defence, establish scientific collaborations and valorisation in a perspective that contributes to the cultural and economic development of the surrounding area. This association has available all the places of interest of industrial heritage in the national territory, organised by districts (Associação Portuguesa para o Património Industrial, 2022).

In 2012, with the revision of the National Strategic Tourism Plan the need arose to create quality standards for the tourism sector to ensure quality in the face of growing tourism demand. In this sense, the representative standard for Industrial Tourism, NP 4556-2017, was drawn up. The standard is structured in three major fields: the Management System, Services and Facilities and Equipment. The standard aims not only to make known the manufacturing process, but to provide an experience to the visitor, ensure the basic needs to receive visitors safely and ensure environmental and social sustainability (Cordeiro, 2018).

The next steps in Industrial Tourism were taken by companies offering guided tours to visitors. All over Portugal, we are witnessing vestiges of industrial heritage, the recognition of historical companies, but also the appearance of new and increasingly technological companies. Examples are S. João da Madeira, Vale do Ave, Sines and Marinha Grande.

São João da Madeira was a region that sought to consolidate itself in Industrial Tourism. The idea emerged in 2012 with the aim of attracting new tourists and making the Sanjoanense industry known. Currently, it has about 16 spaces, divided between living industry, industrial heritage and creativity and technology, being a success case in Portugal.

Another example of this type of tourism is the Ave Valley Industrial Heritage Route. This route was promoted by the Vale do Ave Regional Development Agency in 2002. It counted on community funds

from the Operational Programme of the North Region and was created with the aim of strengthening the identity of Vale do Ave and fostering, among the public, the history of the region. The project brought together 24 spaces that once operated and developed industry, in eight municipalities such as Fafe, Guimarães, Póvoa de Lanhoso, Santo Tirso, Trofa, Vieira do Minho, VNF and Vizela (Rodrigues, 2019).

Sines is another example. It is a municipality that preserves a connection with industry, namely the chemical and petrochemical industry, also benefiting from a port with high importance at national level. Initially, tourism in the region was essentially sun and sea tourism, associated with the Porto Covo brand. Meanwhile, the Sines - Sustainable Industrial Tourism project was developed. Currently, it has about seven companies and is divided into three circuits: the Energy Route, the Logistics Route and the Environment Route.

Besides Sines, Marinha Grande, since the installation of the Royal Glass Factory in the 18th century, has maintained a link with the glass industry. In the 20th century, the Moulds and Plastics industry emerged, which still characterises the municipality today. Based on an entrepreneurial DNA and in the need to have an offer for the whole year, the Industrial Tourism project was created in 2013, with about eleven spaces, divided between living industries that characterize the municipality, companies associated to glass, moulds and plastics, two technological spaces, the CENCAL and the CENTIMFE – "Centro Tecnológico da Indústria da Indústria e da Moldes, Ferramentas Especiais e Plásticos e o Museu do Vidro" (CM Marinha Grande, 2021).

2.3. The Portuguese Industrial Tourism Network

With the ambition to strengthen the attractiveness of the territories and capture different visitors, the Tourism of Portugal, with the collaboration of the Municipality of São João da Madeira, launched in January 2020 the program "Industrial Tourism - 2020 offer structuring program" in the III Industry Meeting History and Heritage in alignment with the Tourism Strategy 2027. The program aims the structuring of products throughout the national territory, acting in network in order to achieve greater awareness, attracting different visitors who can arrive throughout the year and extend the average stay in the territory through the enhancement of living industry and industrial heritage, to provide authentic experiences to visitors, contributing to environmental, social and economic sustainability and consolidation of the national network of industrial tourism to attract new markets (Turismo de Portugal, 2020).

The programme has three lines of action which include a) Resources, with the survey and identification of resources; b) Product, with the definition of requirements, the increase in sustainable practices and the implementation of the Portuguese standard for Industrial Tourism services (NP 4556-2017), as well as the training of agents and financial support; and c) Promotion and Sales, identifying markets and the profile of the tourist who seeks industrial tourism, and the promotion and digital offer of the product (Turismo de Portugal, 2020). The management is the responsibility of the Portuguese Industrial Tourism Network Steering Group, still in constitution, which includes the Tourism of Portugal, the regional tourism entities, municipalities and other partners. The constituent entities are Porto e Norte, Centro de Portugal, Região de Lisboa, Alentejo e Ribatejo, Algarve, Madeira, Azores; the municipalities of São João da Madeira, VNF, Santo Tirso, Santa Maria da Feira, Vila do Conde and Vale de Cambra; and other partners such as Roteiro das Minas e Pontos de Interesse Mineiro e Geológico de Portugal, Fábrica Vista Alegre, New Hands Lab, the Portuguese Association of Industrial Heritage and Marinha Grande. In order to ensure success, the Group accompanies the partners in the implementation of the Quality Standard for Industrial Tourism; it is responsible for training the partners, writing the Guide of Good Practices; it also intends the creation of a platform where all the information, services and programme at national level of Industrial Tourism will be made available (Turismo de Portugal, 2021).

The creation of the Good Practices Guide resulted from the need to implement quality services, aiming to: contribute to the efficient management of each Industrial Tourism service provider; stimulate networking, extolling the importance of networking; promote the enhancement and safeguarding of industrial heritage; raise awareness of the need for continuous improvement; contribute, in general, to the enhancement of the Industrial Tourism offer, through the notoriety and qualification of the territories' offer, the promotion of the country's image through its differentiating economic activities and its authentic heritage; the strengthening of the attractiveness of the industrial sector and its potential for innovation and growth among young people (Turismo de Portugal, 2021), through the

implementation of a series of requirements necessary for the entire network, taking into account international practices.

The guide starts by making a brief framework on definitions and typologies of Industrial Tourism, as a way to better organize and structure the offer. Typologies are then considered by Sectors, "Fashion and Textile", "Goldsmithery", "Ceramics and Glass", "Cork", "Agro-Food", "Extractive", "Energy", "Transport, Services and Communications", "Metalworking" and "Other Sectors", and other complementary attributes that add value to the resources may also be considered, such as ". ...integrate a UNESCO World Heritage Site, integrate the European Industrial Heritage Route, integrate a Route or an organized Offer Network, configure a place of remarkable/prized Industrial Architecture" (Turismo de Portugal, 2021, p. 5).

The integration of partners into the network has to take into account several factors such as the facilities and equipment that are necessary for its operation. All visits have to be secured by information about the tourism resource, from the location, the risks, included services and requirements. The booking and cancellation process must be available on the website. Human resources must also be ensured for the provision and reception of visitors. The facilities and equipment must be provided with signs and parking, such as toilets, visitable areas with interpretative elements and available in more than one language, a shop or exhibition area and the "Clean & Safe" seal (Turismo de Portugal, 2021).

3. Vila Nova de Famalição and the tourism sector

VNF is in the northwest of Portugal, is integrated in the district of Braga, belongs to the Ave region (NUT III), presents an area of 201.59 km2 and is subdivided into 34 parishes. The municipality, known as the gateway to Minho, has a privileged location with the presence of national and international companies (with an average of 70.2 companies per Km² (PORDATA, 2021)).

It is bordered to the North by Braga, to the East by Guimarães, to the South by Santo Tirso and Trofa, to the West by Vila do Conde and Póvoa de Varzim and to the Northwest by Barcelos. Its location allows the municipality to present an excellent social and economic dynamism. Land of Camilo Castelo Branco, of culture and industry, VNF is an attractive and dynamic pole, preserving its identity but showing an investment in the future. It has enjoyed a great investment in its recognition and promotion, in the valorisation of its heritage and gastronomy, which has allowed a tourist growth in the last years. It emerges as a complete and comprehensive destination, taking into account that tourism "has a vital role in the economy" (Martins, 2022, p. 266), as it has the ability to generate wealth and employment for thousands of people (Martins, Carvalho & Almeida, 2021). It stands out its recent focus on Industrial Tourism, reinforcing its connection with the industry, which is present in the history of the county, as with Research and Development and Wine Tourism.

In 2019, following the Tourism Strategy 2027 and the Tourism Marketing Strategy of Tourism Porto and Norte of Portugal 2020, VNF developed the Famalicão Turismo 2020 Development Strategy. This strategy synthesises eight strategic objectives that aim to recognise and enhance the territory, provide a unique experience to visitors and contribute to innovation in the sector. After recognition of the strategic attractions of the municipality, four products were launched that intend to contribute to the growth and recognition of the territory, through experiences: i) Cultural and Landscape Touring; ii) Industrial and Business Tourism; iii) Gastronomy and Wine; and iv) Tourism Animation and Events (CM Vila Nova de Famalicão, 2018).

3.1. VNF Industrial Tourism Network

The VNF Industrial Tourism Network is a municipal project developed in the scope of the brand "Famalicão Cidade Têxtil" (Famalicão City of Textile) which was born in the need to promote the living industry and the industrial heritage, following the Tourism Development Strategy 2020 with the axis Industrial and Business Tourism. The development of a product or tourist destination depends on the communication that is used to reach the final consumers. In this context, strategies have been adopted that allow reaching consumers. One of the most important strategies is the creation of an image that allows to differentiate the destination, but also to arouse curiosity in visitors. The creation of a logo, besides being easier to recognize, represent the essence of a brand, so they are fundamental to create a connection with the visitor (Park, Eisingerich, Pol & Park, 2013). In this way, the Municipality of VNF designed the logo of the Industrial Tourism for easy identification,

which consists of a representation of the industries of the municipality and the proximity to the river Ave and its tributaries. Figure 1 is present in the material created for the Network, not only in promotional leaflets, but also in the signage of the spaces.

This is in line with several researchers who state that territories have come to understand how important it is to have an association with a logo/brand, assuming a preponderant role in economic and social terms having "the ability to simplify the decision-making process and reduce risks, in a context in which life becomes increasingly complex (Keller, 1993; Martins, Silva, Pinheiro & Gonçalves, 2021).



Figure 1: Image associated to Industrial Tourism in VNF

Source: CM Vila Nova Famalicão (2020)

The project not only intends to focus on the history of industry, but also on the present with the possibility of getting to know industries in operation and also the future by combining innovation. It aims to benefit from the industrial context of the municipality, highlighting the innovative, strong, attractive and dynamic industry, broaden the offer of tourism in the municipality, reach different audiences and provide an experience to the visitor.

In the launching of the experience Industrial and Business Tourism, Famalicão Turismo Industrial counted on eleven partners, three of which represent Industrial Heritage, three Live Industries, one of Research and Development and also following the cross selling, four Enotourism partners are presented (table 1).

The operationalisation of the project consists of partnership protocols between the Municipality and the tourism companies and operators. The Municipality of VNF has the role of facilitator, coordinator and project management. The companies have the role of ensuring the visits and, finally, the tour operators have the role of marketing.

The selection of partners is the responsibility of the municipality following defined criteria, also taking into account the interest of the company or institution. The company must be located in the municipality and in activity, create a welcoming structure and ensure the circulation of people in the context of the visits, develop an attractive manufacturing process and have a relationship with the history and

growth of the municipality. A great relevance is given to storytelling, as a way to create a connection between the partner and the visitor, that demonstrates the changes/adaptation and resilience of the company over the years. In the case of Industrial Heritage the choice was made due to the museums' connection to the industry. The partners also need to ensure the presence of a guide chosen by them, to welcome visitors and provide the guided tour. The municipality, through inter-knowledge visits to the poles, intends to train local agents to provide a support service and recommendation of other poles.

Table 1: VNF Industrial Tourism Network Entities

Industrial heritage	Year of creation
Textile Industry Museum	1987
Automobile Museum	2013
National Railway Museum - Lousado Nucleus	2003
Living Industry	
Nortenha Textile Company	1954
Troficolor Textiles	1956
Chocolate Factory - Casa Grande	2009
Research and Development Centre	
Citeve	1989
Wine Tourism	
Casa de Compostela	1960
Castro - Wines of Portugal	1967
Winery Casa da Torre	1977
Casal de Ventozela	1983

Source: Elaborated by the author

The visits in the VNF Industrial Tourism Network are scheduled via email or telephone contact from the municipality's Industrial Tourism, requiring a pre-booking up to fifteen days in advance. The municipality articulates with the partners and organizes the reservations, directing them to the tour operators Clickviaja, Famalowcost, LivingTours or Saftur. The tour operators are in charge of the commercialisation of the Industrial Tourism services and their invoicing, as well as the complements requested by the visitors (transport, accommodation, catering, ...). The visits have to be made within the timetable presented by the partner, which is not uniform. They also have an associated price that varies between partners and, in some cases, some complement is included, such as wine tasting.

The municipality is in charge of the project promotion. Due to the Covid-19 pandemic, tourism fairs and events were cancelled, so its dissemination beyond the municipality's Tourism Office, is available on its website, where you can download the project brochure and have access to contacts to make reservations, through social networks are also shared news and project information.

4. Methodology

The methodology used to develop this study started from a literature review, namely through the reading of scientific articles, master's dissertations and doctoral theses. Following this, a case study was developed, aiming to answer the following research question: "What are the perceptions of the spaces/entities that associated with the VNF Industrial Tourism Network?".

To answer the research question the following specific objectives were defined: a) understand the reasons why the spaces accepted to join the Industrial Tourism Network; and b) identify the advantages and disadvantages of the Network.

The methodological choice for this research was guided by criteria that respected the starting question and the objectives outlined. The option fell on the case study because it fits into the qualitative and quantitative methods is a flexible research strategy used in social sciences, addressed by several authors and aims to answer questions "How" and "Why", in order to clarify the decision or a set of decisions, as the reason why they were taken (Yin, 2001). According to Fidel (1993) the objective of case studies is to understand the event and at the same time develop more generic theories concerning the phenomenon that was observed. According to Brito & Cordeiro (2020), the case study is used in research in Tourism, contributing to its validation in future investigations.

In order to obtain answers to the initial questions, a questionnaire survey was prepared, a research technique consisting of a set of questions. The questionnaire survey requires planning. It begins with the definition of the problem and the objectives that are intended with the preparation of the survey. This is followed by the definition of the target audience and then the development of the questionnaire. After this, the questionnaire is applied. After collecting the data, it is then organised and analysed. Finally, conclusions are drawn, and proposals are developed to respond to the issues raised in the questionnaires.

The sample of this survey focused on the Network partners, namely the living industries (Nortenha Textile Company, Troficolor Textiles, Chocolate Factory - Casa Grande), the research and development centre (Citeve), the wine tourism spaces (Casa de Compostela, Castro - Wines of Portugal, Winery Casa da Torre and Casal de Ventozela). The museological spaces were not part of this sample as they are under the responsibility of the VNF Town Council and, given their nature, it made perfect sense for them to be associated with the Network. Seven of the eight partners responded to the survey.

5. Analysis of the Results

The questionnaire survey allowed the identification of the reasons that led to the integration of the partners in the VNF Tourism Network, as the main advantages and disadvantages of it. It is also possible to identify the strengths and weaknesses named by the partners, such as their opinion on the Network enlargement and suggestions for its improvement.

Table 2 presents the responses obtained through the surveys addressed to the partners of the VNF Tourism Network, followed by an analysis of the values obtained.

Questions	Response Options	f
Development area	Textile	2
	Agroalimentary	5
	Research and Development	0
Reasons for integrating into the Industrial Tourism Network	Promotion of the company and the product	5
	Develop local tourism	1
	Open the doors to the community	1
	Economic component	0
	Dissemination of Know-how	0
Advantages of the Partnership with VNF Industrial Tourism	Promotion of the company	3
	Recognition and valorisation of the product	3
	Increase in sales	0
	Company development	1

Table 2: Frequency of responses to the survey

Disadvantages of the Partnership with VNF Industrial Tourism	Disruption of the normal functioning of the company	1
	Deviation of human resources for monitoring	4
	Expenses with materials needed for the visits	1
	Low employee profitability	0
	No disadvantages	1
Strengths of the VNF Industrial Tourism Network	Divulgation of companies	4
	Brand recognition "Made In"	6
	Growth potential and diversification	1
	Increased tourism in Vila Nova de Famalicão	3
	Lack of complementary services (hotels, transport,)	4
	Reduced Offer	5
Weaknesses of the VNF Industrial	Lack of brand awareness	3
Tourism Network	Low product attractiveness	0
	Need for training of agents	1
	Tour Operator Involvement	1
Sharing the project on digital media (Municipality website, Facebook, Instagram, Twitter,)	Very Weak	0
	Weak	0
	Moderate	3
	Good	4
	Very Good	0
Extension of the Industrial Tourism Network in VNF	Not necessary	0
	It is necessary	3
	Need to include different industry sectors	4
	Reinforcement of the textile branch	0
Suggestions for inclusion of partners	"Restaurants, churches, hotels"	
Suggestions for improving the Network	"Greater dissemination by tourism agents"	

Source: Elaborated by the author

After conducting the survey to the partners and visits to them, it is necessary to highlight the positive opinion of the partners regarding the VNF Industrial Tourism Network. The survey was answered by 7 partners, most of whom are associated with the agro-food industry, with around 5 answers and 2 answers from the textile industry. It is possible to identify that in most partners, the dissemination of the company and the product was the main reason for their integration, also highlighting the increase in local tourism and the willingness to open doors to the public.

The main advantages of the integration of the Network are the dissemination of the company and the valorisation of the product, meeting the main motivation for its integration. On the other hand, the main disadvantage is the diversion of human resources, bearing in mind that to enter into a partnership, the space has to provide a guide for the visits.

In the identification of the two strong points, the options were in line with the choices made in the previous questions: the recognition of the "Made In" brand, the dissemination of the brand and the increase in tourism in the municipality were identified. On the other hand, in the question which asked for two weaknesses, the reduced offer was highlighted, as well as the scarcity of services and the lack of brand awareness. Regarding the sharing of the project in the digital media, the partners elected the sharing as good and moderate. They also considered the expansion of the Industrial Tourism Network to be necessary, namely with the integration of new branches. The last two questions were of an optional

nature, in which only one answer was obtained: the inclusion of partners such as "Restaurants, churches, hotels" and "greater dissemination" was suggested to improve the existing network.

After analysing the data obtained in the surveys and the opinions that were transmitted during the visits to the spaces, it was possible to answer the specific objectives that help us to answer the research question.

a) understand the reasons why the spaces accepted to join the Industrial Tourism Network

The most significant motivations for the integration of the VNF Industrial Tourism Network focus on the dissemination of the product and the company, also contributing to the increase of local tourism values. This idea corroborates Otgaar (2010) when he states that Industrial Tourism has financial benefits, which can lead to the integration of companies in Industrial Tourism projects. In this case study, the partners do not assume the economic aspect as the main motivation, but refer to the dissemination of the product. Otgaar in his research mentions that Industrial Tourism, besides being a good marketing strategy, allows the dissemination of the products and thus an increase in sales.

b) identify the advantages and disadvantages of the Network

The questionnaire surveys allowed us to identify the partners' vision of the project after their integration. In general, they recognise that the partnership allows for the dissemination and recognition of the product and the company, but they acknowledge that the biggest disadvantage of the partnership is the diversion of human resources. There are several strong points of the project: the increase in tourism numbers, the promotion of "Made In" and the promotion of the companies stand out. As for the project's weak points, they acknowledge the lack of complementary services, the lack of supply and the low brand awareness. All spaces recognised the need to expand the offer, either to other branches or to the continuity of the same. It was also suggested, during the visits to the spaces, the need to create a pool of guides, given the diversion of human resources, such as the creation of a route associated only with wines.

6. Conclusions

VNF is distinguished by its industrial structure, rooted in its history, in its present and with a great prosperity for the future. The business and industrial dynamism, the proximity to the Northern tourist hubs, the accessibility, the cultural diversity, allowed the creation and implementation of an Industrial Tourism project in Vila Nova de Famalicão.

Since the project is still recent and there is no study, a case study was developed to answer the question initially formulated ("What are the perceptions of the spaces/entities that associated with the VNF Industrial Tourism Network?"). Through research, we concluded that the partners' motivations for becoming part of the industrial tourism network revolved around the dissemination of the entity itself and its respective products. As a direct consequence, the fact of belonging to this project will bring financial profitability to all those involved. However, most of these entities reinforce the idea of the need to expand the network itself with companies both in the same industry and beyond, in order to add value and dynamism to the tourism sector.

During the survey some obstacles to the growth and development of the project were detected, namely *a*) the lack of dissemination, existing the need for greater disclosure by the municipality; and *b*) the timetables for the visits, since they are concentrated mainly during the week, which translates into an impediment for many visitors.

It can be concluded that the project, despite still being in growth, was a bet of the municipality, which will allow the increase of tourism numbers and the valorisation of industries, whether they are in operation or not. Industrial Tourism has an enormous potential in the region where VNF is inserted, the NUT Ave, characterized by its abundant industrial landscape. The project's success is only possible with the cooperation of all agents. The fusion between Industrial Tourism, Cultural Tourism and Gastronomic Tourism allows VNF to become a success case.

After two years of pause caused by Covid-19, the municipality of VNF intends to reopen the visits to the spaces, extend to other companies and promote the implementation of complementary services with the partners, such as workshops, product sales and showrooms. The municipality intends to focus on the national market, but in partnership with Turismo of Portugal, other municipalities and private entities, it intends to create a national network of Industrial Tourism with the aim of internationalising

the project in the future and thus enabling its commercialisation in neighbouring markets such as Spain, France and England.

As a suggestion for future research, we consider important to understand the perceptions of entities in other regions where industrial tourism is more consolidated, namely in Sines or S. João da Madeira, in order to understand, because they are at another level of development, the benefits of an enlargement of the industrial tourism network.

Bibliography

- Abad, C. J. P. 2004. La reutilización del patrimonio industrial como recurso turístico. Aproximación geográfica al turismo industrial. *Treballs de la Societat Catalana de Geografia*, 7-32.
- Associação Portuguesa para o Património Industrial. 2022. Património Nacional. http://www.museu-daindustriatextil.org/appi/patrimonio-nacional.php
- Brito, M., & Cordeiro, A. 2020. Sines: Território de Turismo Industrial–Inovar para a Sustentabilidade turística. *Cadernos de Geografia*, (41), 43-58.
- CM Marinha Grande. 2021. *Turismo Industrial*. Retrieved from https://www.cm-mgrande.pt/pages/711 Città di Torino. 2022. *Open for business Torino*. http://www.comune.torino.it/openforbusiness/en/tourism.html
- CM Vila Nova de Famalicão. 2018. Estratégia Desenvolvimento Famalicão Turismo 2020. CM Vila Nova de Famalicão.
- CM Vila Nova Famalicão. 2020. *Mapa de VNF* https://www.cm-vnfamalicao.pt/mapa-famalicao-visitar Cordeiro, J. M. L. 2018. A Norma de qualidade e os desafios que se colocam ao turismo industrial. *Dos Algarves: A Multidisciplinary e-Journal*, (30), 6-17.
- Edwards, J. A., & i Coit, J. C. L. 1996. Mines and quarries: Industrial heritage tourism. *Annals of tourism research*, 23(2), 341-363.
- Fidel, R. 1993. Qualitative methods in information retrieval research. Library and information science research, 15, 219-219.
- Frew, E. A. 2000. *Industrial tourism: a conceptual and empirical analysis* (Doctoral dissertation, Victoria University).
- Keller, K. L. 1993. Conceptualizing, Measuring, and Managing Customer-Based Brand Equity. *Journal of Marketing*, 57(1), 1–22. https://doi.org/10.2307/1252054
- Martins, H. 2022. Os impactos económicos da Covid-19 em eventos. Revista Turismo & Desenvolvimento, 38, 265–280. https://doi.org/10.34624/rtd.v38i0.25863
- Martins, H., Carvalho, P., & Almeida, N. 2021. Destination Brand Experience: A Study Case in Touristic Context of the Peneda-Gerês National Park. Sustainability, 13(21). https://doi.org/10.3390/su132111569
- Martins, H., Silva, C., Pinheiro, A., & Gonçalves, E. 2021. A importância da marca no turismo: o caso da entidade regional Turismo do Porto e Norte de Portugal. *PASOS Revista de Turismo y Patrimonio Cultural*, 19(4 SE-), 753–762. https://doi.org/10.25145/j.pasos.2021.19.049
- Opinião Pública. 2021. Famalicão continua a ser o concelho mais exportador do Norte. https://opiniao-publica.pt/economia/01/27/famalicao-continua-a-ser-o-concelho-mais-exportador-do-norte/
- Otgaar, A. 2010. Industrial Tourism: Where the Public Meets the Private (Issue EPS-2010-219-ORG) [Erasmus Research Institute of Management]. http://hdl.handle.net/1765/21585
- Otgaar, A. H., Van Den Berg, L., & Feng, R. X. 2016. *Industrial tourism: opportunities for city and enterprise*. Routledge.
- Park, C. W., Eisingerich, A. B., Pol, G., & Park, J. W. 2013. The role of brand logos in firm performance. *Journal of Business Research*, 66(2), 180-187.
- PORDATA. 2021. Pessoal ao serviço nas empresas não financeiras: total e por sector de actividade económica. https://www.pordata.pt/DB/Municipios/Ambiente+de+Consulta/Tabela
- Rodrigues, J. C. 2019. La ruta del patrimonio industrial en el valle del Ave (norte de Portugal) en una nueva tendencia turística. *PASOS Revista De Turismo Y Patrimonio Cultural*, 17(5), 989–1003. https://doi.org/10.25145/j.pasos.2019.17.070
- Rodriguez-Zulaica, A. 2017. Redefiniendo el concepto de Turismo Industrial. Comparativa de la terminología en la literatura castellana, francesa y anglosajona. *PASOS Revista De Turismo Y Patrimonio Cultural*, 15(2), 311–318. https://doi.org/10.25145/j.pasos.2017.15.019
- Turismo de Portugal. 2020. Programa para a estruturação da oferta. http://business.turismodeportugal. pt/SiteCollectionDocuments/estruturacao-oferta/turismo-industrial-programa-estruturacao-oferta.pdf

Turismo de Portugal. 2021. *Turismo Industrial: Guia de Boas Práticas*. http://business.turismodeportugal.pt/SiteCollectionDocuments/turismo-industrial/guia-boas-praticas-turismo-industrial-mai-2021.pdf Turismo Torino and Provincia. 2022. *Touristic Products*. https://www.turismotorino.org/en/your-trip/tourist-products

Yin, R. 2001. Estudo de caso: planejamento e métodos. *Trad. Daniel Grassi*. https://forumturbo.org/wp-content/uploads/wpforo/default_attachments/1553321313-Estudo-de-caso_Planejamento-e-Mtodos-Robert-K-Yin.pdf

Recibido: 09/08/2022Reenviado: 26/08/2022Aceptado: 09/09/2022Sometido a evaluación por pares anónimos