

Exploring Industrial Tourism's Potential: How Can It Contribute to Business Innovation?

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Abstract: This article delves into the potential of industrial tourism and emphasizes its significance as an innovative and sustainable product for industrial companies. The research question driving this exploration is, "How can industrial tourism contribute to business innovation?" In answering this question, the article provides valuable insights into the development of strategies that allow companies to leverage industrial tourism for their benefit, ultimately positioning it as a strategic factor for enhancing their competitiveness. As part of an ongoing research project, the study adopts the Delphi research methodology and presents the initial findings from the first round of questionnaires administered to a panel of 27 experts. The results demonstrate that industrial tourism can act as a catalyst for innovation within industrial companies, making a notable impact across various areas, including Operations, Marketing, and Human Resources. Moreover, the findings indicate that generating additional income, prioritizing environmental and social integrity, and preserving industrial heritage is closely associated with innovation through industrial tourism. The research underscores the pivotal role of the Financial, Operational, and Human Resources areas within industrial companies for the successful diversification into industrial tourism. However, the strategic alignment of the company's overall vision with industrial tourism is equally fundamental. Despite not being the primary focus of industrial companies, industrial tourism emerges as a potent source of innovation and competitiveness within these organizations. The results suggest that the Financial, Operational, and Human Resources areas of industrial companies are central to the success of diversification into Industrial Tourism. Still, it is fundamental that the company strategy is aligned with industrial Tourism. Although Industrial Tourism is not the focus of industrial companies, it can be a source of innovation and competitiveness within companies.

Keywords: Industrial Tourism; Industrial Companies; Innovation; Competitiveness; Delphi Methodology

1. Introduction

Industrial tourism is a burgeoning field that capitalizes on the exploration of industrial heritage for tourism purposes (Pardo Abad, 2017). This form of tourism can manifest in decommissioned production facilities, such as industrial museums, or in operational production sites, which, due to their unique nature, attract visitors as educational and tourist attractions (Moral-Moral & Fernandez-Alles, 2019). Regrettably, the latter variant of industrial tourism remains underexplored, with scarce analyses adopting the perspective of the industrial enterprise.

In the pursuit of competitive advantage, innovation emerges as a pivotal factor (Porter, 1990), and the tourism sector is no exception (Kozak, 2017). Nevertheless, research on industrial tourism remains in its infancy, with consistent attention to this subject matter commencing only from 2015 onwards. Regrettably, the limited focus has been dedicated to the strategies pursued by industrial companies that incorporate tourism within their portfolio of activities. Nevertheless, extant research suggests that industrial tourism represents a potential source of innovation and diversification for companies and regions, with the impact of embracing tourism hinging on the strategies deployed by industrial firms (Montenegro, 2020; Montenegro & Sousa, 2021). Strategically linking industrial tourism with consumer experience tourism facilitates the reinforcement of connections between consumers and brands, fostering personal bonds with consumers, employees, investors, residents, and other stakeholders (Mitchell & Mitchell, 2001).

While some scholars posit that Industrial Tourism caters primarily to niche markets (Kao et al., 2015; Morales et al., 2015; Harfst et al., 2021), others contend that it holds the potential to appeal to a diverse array of audiences. Younger generations exhibit curiosity towards the manufacturing industry, given their limited exposure to factory work. In contrast, older generations harbor nostalgia for the industrial era, evoking a desire to explore different industrial processes and reminisce about the "good old days" (Mitchell & Mitchell, 2001). Furthermore, factory visits can serve as a strategic recruitment approach for younger visitors, particularly college students (Nielsen, 2012), who are poised to enter the labor market shortly.

Industrial tourism is leveraged by companies as an integral facet of their business operations, yielding increased profits, expanded market share, and the mitigation of economic strains associated with the transition to a post-industrial society. Moreover, it bolsters industrial environmental integrity and nurtures a positive rapport between the enterprise and the physical environment (Rudd & Davis, 1998)

Tourist visits to industrial companies prove invaluable in maintaining or enhancing the company's image (Nielsen, 2012) and also contribute to the financial sustenance of these establishments (Saghafi et al., 2023).

The ongoing research endeavors to gather pertinent data concerning the integration of Industrial Tourism in industrial companies and how this novel tourism product can enhance the value proposition for these companies, notably bolstering business innovation and competitiveness. The article aims to present the preliminary findings derived from the initial round of questionnaires administered to a panel of experts. There is a mounting interest in this multidisciplinary theme, encompassing various research areas, with a prevalent adoption of qualitative methodologies such as case studies (Montenegro et al., in press). The originality of this work lies in its innovative approach, employing a qualitative methodology based on the collaborative input of numerous experts, using the Delphi methodology. This collaborative effort aims to enrich our understanding of the strengths and weaknesses inherent in the implementation of Industrial Tourism in small and medium-sized enterprises.

As an agent of regional development, industrial tourism brings forth economic, social, and ecological benefits. Nonetheless, it also presents certain challenges, such as concerns over excessive commercialization and the potential loss of authenticity in industrial heritage sites (Ermolaev et al., 2019). This research significantly contributes to the identification and understanding of the impacts of this tourism product and the formulation of development strategies for its successful integration within industrial enterprises. The comprehensive analysis of these aspects will undoubtedly enhance the overall knowledge base and pave the way for sustainable and responsible growth in the domain of industrial tourism.

2. Methodology

The Delphi Methodology has established itself as a widely accepted and utilized approach for collecting data from experts within their respective fields (Hsu & Sandford, 2007). Its value has been substantiated both scientifically and practically (von der Gracht, 2012), making it particularly useful in theory building. Specifically, the Delphi Methodology's outcomes prove valuable in the initial stages of theory development, aiding researchers in identifying relevant variables of interest and formulating propositions that hold applicability across various contexts and settings (Okoli & Pawlowski, 2004).

At its core, the Delphi Methodology seeks to attain a convergence of opinions on specific real-world issues (von der Gracht, 2012; Rowe & Wright, 1999; Hsu & Sandford, 2007). It has been effectively employed in diverse areas such as planning, needs assessment, policy design, and resource utilization to explore a comprehensive range of alternatives, elucidate underlying assumptions, and correlate judgments across multiple disciplines (Hsu & Sandford, 2007).

Consensus building using this method is accomplished by applying a series of questionnaires, using multiple iterations to collect data from a panel on specific topics (Hsu & Sandford, 2007). According to Landeta (2006), the main characteristics of this methodology are:

1. It is a repetitive process. Experts must be consulted at least twice on the same question to reconsider their answer with the help of the information they receive from the other experts.
2. It maintains the anonymity of the participants, allows working with experts in different locations, and avoids the negative influence that could be exerted between the personalities and status of the participating experts.
3. Controlled feedback. The information collected in each round of questions is processed, collated, and integrated into the next round so that the experts have feedback on the overall perspectives and opinions of the panel.
4. Statistical group response. All opinions are part of the final response. The questions are formulated to treat the answers quantitatively and statistically.

Following the preparation and review of a round of questionnaires, participants have the opportunity to either maintain their initial responses or modify them based on the group's response. This iterative process encourages participants to engage in in-depth discussions when their answers significantly diverge from the group response

(von der Gracht, 2012). The successive rounds of data analysis facilitate the measurement of consensus, its strength, and the convergence of opinions (von der Gracht, 2012).

The feedback mechanism in the Delphi process allows participants to reevaluate their initial judgments based on the information presented in previous rounds (Hsu & Sandford, 2007). This controlled feedback is designed to reduce the noise effect, providing a well-organized process that enables each participant to contribute additional knowledge and clarify data presented in earlier rounds (Hsu & Sandford, 2007).

When implementing a Delphi study, it is essential to ensure that the research serves a beneficial purpose for society, fostering collaboration among experts and generating pride in contributing to research that benefits the community (Landeta, 2006). Curating a diverse team with expertise in the studied area is crucial, and prioritizing experts' motivation is of utmost importance. The coordinator must consider factors that encourage active participation and sustained collaboration throughout the project, even if it means sacrificing certain questions and rounds to ensure the panel's continued engagement (Landeta, 2006).

Designing and implementing a Delphi study requires careful consideration of various aspects, such as selecting appropriate topics, establishing realistic time frames, addressing potential inadequate responses, and avoiding unintentional bias in the feedback from the respondent group (Hsu & Sandford, 2007).

The first round of the study, which is the focus of this paper, followed the traditional Delphi methodology, commencing with a questionnaire containing open-ended questions to serve as a guide for subsequent rounds of data collection (Hsu & Sandford, 2007). This initial questionnaire was employed as the instrument for the second round of data gathering.

The research commenced with an invitation to a select group of experts affiliated with Industrial Tourism at the national level. Following this initial phase and the careful assembly of a panel of 27 experts, a meticulously crafted questionnaire containing 12 open-ended questions centered around the subject matter of Industrial Tourism within companies and regions was distributed. The responses gathered were then meticulously collated, organized, and analyzed based on their frequency. The primary objective of this article is to unveil the most commonly cited insights and opinions offered by the experts during the first round of our study.

3. Results

The Delphi panel of experts for our study comprises 27 specialists hailing from diverse training areas, including History and Heritage, Business Sciences, Engineering, and Tourism. Notably, the panel represents several stakeholders of Industrial Tourism, encompassing City Councils, Industrial Companies, Travel Agencies, Tourism Associations, Regional Tourism Entities, Museums, and Universities. The first round of the study involved open-ended questions, prompting experts to share their knowledge and experiences concerning the advantages, disadvantages, strategies, and barriers associated with Industrial Tourism for industrial companies.

According to the experts, Industrial Tourism serves as a source of innovation for companies when they open their doors to external visitors. Through this form of tourism, companies can uniquely showcase their products and services, bolstering brand visibility. Additionally, adopting Industrial Tourism allows companies to pursue differentiation strategies and venture into new business areas.

The field of Human Resources benefits from Industrial Tourism as an innovative recruitment approach. By receiving different types of visitors throughout the year, industrial companies can establish early relationships of trust and pride with potential future employees. Each company can tailor attractive proposals during visits to suit the sought-after candidates and implement strategies to maintain these relationships beyond the visit, such as through social networks.

The benefits of Industrial Tourism extend to the company's supply chain as well. Visitors gain insight into the company's operations, including its supply chain, fostering greater public understanding and trust. This leads to a positive perception of the company among visitors, potentially transforming them into future brand ambassadors within their social circles.

Moreover, the sharing of information between the company and visitors during Industrial Tourism provides an opportunity for the company to highlight its environmental and social integrity, promoting responsible practices and garnering public support.

As Industrial Tourism emerges as a new business area for industrial companies, it has the potential to enhance company revenues through current sales or future sales in physical stores or online platforms, depending on each company's chosen strategy.

In addition to the various benefits for industrial companies, experts also acknowledge that dedicating a portion of Industrial Tourism revenues to support social causes can foster stronger relationships between the company and the local community.

For older companies with somewhat deteriorated tangible heritage, Industrial Tourism can serve as the necessary impetus for improvement, reconstruction, and adaptation. This drive toward restoration and adaptation promotes innovation in the company's physical resources and processes. Additionally, Industrial Tourism contributes to sustainability by repurposing industrial spaces and revitalizing post-industrial territories with environmental enhancements.

In summary, the insights provided by the panel of experts highlight the manifold advantages of Industrial Tourism for industrial companies, ranging from brand visibility and innovative recruitment strategies to fostering community relationships and promoting environmental sustainability. As this new business area continues to gain momentum, it holds the potential to transform industrial enterprises and contribute positively to the broader community and environment.

Table 1 summarizes the panel's expert opinions on the different areas in industrial companies where Industrial Tourism intervenes as a factor of innovation and competitiveness.

Table 1 - Areas of intervention of Industrial Tourism in industrial companies

Marketing	Valorization and promotion of the brand and its products. Promotion of emotional connection with customers. Visibility to the sector's professionals. Knowledge sharing with audiences outside the company.
Human Resources	Motivation and valorization of employees through internal Marketing. Recruitment strategy to attract potential future employees. Creation of employment opportunities.
Sales	Extra Source Revenue from entry tickets and factory store sales.
Environmental and social integrity	Openness and connection to society. Participation in the tourist and economic dynamics of the territory. The practice of social responsibility.
Supply Chain	Contact with new customers and stakeholders.
Renovation of the physical space	Access to finance for improving infrastructure and equipment.

Source: Elaborated by the author

Industrial Tourism has the potential to foster innovation and diversification within industrial enterprises, serving as a source of creative and innovative inputs and expanding the business into tourism-related activities. The different areas of intervention, as outlined in Table 1, encompass marketing, human resources, sales, environmental and social integrity, supply chain, and renovation of physical space. Through these areas, Industrial Tourism can contribute to enhancing the company's brand image, building strong emotional connections with customers, attracting talent, creating new employment opportunities, generating additional revenue streams, promoting social responsibility, and improving relationships with customers and stakeholders.

By leveraging Industrial Tourism in these key areas, industrial companies can enhance their competitiveness, unlock untapped growth potential, and align themselves with sustainable practices. The integration of Industrial Tourism as an innovative business strategy holds promise not only for the companies themselves but also for the broader societal and economic development of the regions in which they operate.

Indeed, while industrial tourism brings numerous benefits to industrial companies, experts have also identified several disadvantages associated with its implementation. These disadvantages highlight the potential challenges and considerations that companies must address when venturing into this form of tourism.

The primary disadvantage centers around the implementation cost, which can vary significantly among different industrial companies. While some may incur only residual expenses, for others, the cost may be substantial, potentially limiting their ability to embrace industrial tourism fully.

For active industrial companies, industrial tourism may lead to a loss of focus on their main activity. The influx of visitors and the logistical demands of accommodating tourists can create disturbances in the production chain and disrupt the company's overall operations.

Human Resources is another area of concern for the experts. The allocation of some employees to serve in the capacity of industrial tourism may divert their attention from their initial roles within industrial production. This change can pose challenges in workforce management and may impact productivity. Additionally, exposure to external viewpoints for manufacturing employees may serve as a source of motivation, but it may also lead to dissatisfaction if not managed effectively.

Seasonality and visiting hours present further drawbacks. The need for flexibility in daily logistics to accommodate tourist schedules can pose challenges for companies, requiring them to adjust their regular operations to cater to visitor demands.

Opening doors to external visitors necessitates additional measures for security and facility cleanliness. While this may spur innovation in some companies, others may view it as an extra obstacle to implementing industrial tourism within their facilities.

Overall, the most significant disadvantages that could hinder the implementation of industrial tourism in industrial companies primarily revolve around the Financial, Production Management, and Human Resources areas. These challenges call for careful planning, resource allocation, and strategy development to overcome potential hurdles and ensure the successful integration of industrial tourism as a strategic business endeavor. By addressing these concerns, companies can better capitalize on the benefits while mitigating the associated disadvantages of industrial tourism.

The experts were also asked to provide their insights into the implementation strategies of Industrial Tourism in industrial companies and identify potential barriers to the success of this partnership. Considering that business innovation is the focal point of this article, the primary strategies presented (without intervention from the government sector) that align with the previously mentioned benefits are as follows:

- Strategy - Reinforcing Industrial Tourism in the Strategy and Culture of the Company:

Experts emphasize the importance of integrating Industrial Tourism as a core component of the company's overall strategy and culture. By embedding this tourism concept into the fabric of the organization, industrial companies can ensure that it receives adequate attention, resources, and support from top management and employees alike.

- Human Resources - Carrying out Training Actions on Industrial Tourism:

To navigate the challenges associated with Human Resources, experts recommend conducting training sessions for employees directly involved in industrial tourism activities. These training initiatives aim to equip them with the necessary skills and knowledge to effectively engage with visitors, enhancing their overall experience and maintaining seamless integration with the company's industrial operations.

- Stakeholders - Partnerships with Tour Operators and Hotels:

Forming strategic partnerships with tour operators and hotels can significantly contribute to the success of industrial tourism ventures. Such collaborations can lead to increased visibility, reach, and marketing opportunities, allowing industrial companies to tap into established tourist networks and attract a broader audience.

- Marketing - Internal Investment of the Companies in the Promotion of their Proposals:

Experts advocate for companies to allocate internal resources for marketing efforts targeted at promoting their industrial tourism offerings. By investing in marketing activities, companies can effectively communicate their unique value propositions and attract a steady stream of visitors.

- Planning - Elaboration of an Annual Plan of Activities for Industrial Tourism:

A well-structured annual plan of activities tailored to industrial tourism is deemed essential by the experts. This proactive approach ensures that the company can effectively manage visitor flow, schedule tours, and plan immersive experiences, maximizing the overall impact of industrial tourism.

- Tourism Offer - Use of Technology to Create Immersive and Interactive Experiences; Creation of Storytelling about the Company; Creation of a Factory Store; Visits in More Than One Language; Offer Based on Experience Tourism:

To enhance the appeal of industrial tourism offerings, experts recommend embracing technological innovations to create immersive and interactive experiences for visitors. Additionally, storytelling about the company's history, achievements, and innovations can captivate visitors and foster a deeper emotional connection. The creation of a factory store can augment the visitor experience and generate additional revenue streams. Providing tours in multiple languages accommodates a diverse range of tourists, further expanding the company's reach. Finally, designing the tourism offer around Experience Tourism principles enhances the overall visitor experience and sets the company apart in a competitive market.

While these strategies present valuable opportunities for industrial companies, the experts also caution against potential barriers to the success of industrial tourism implementation. These barriers may include financial constraints, operational disruptions, resistance to change within the company's culture, and the need to strike a balance between industrial production and tourism activities. Addressing these barriers effectively is crucial for industrial companies to fully leverage the benefits of Industrial Tourism and drive business innovation in this emerging domain.

4. Conclusion

In conclusion, Industrial Tourism offers industrial companies the opportunity to drive innovation and enhance their competitiveness across various aspects of their operations, including products, services, and processes. Despite not being the primary focus of industrial companies, Industrial Tourism can serve as a valuable source of innovation and a strategic factor for enhancing their overall competitiveness.

This paper's objective is to explore how industrial companies can develop effective strategies to leverage Industrial Tourism and fully benefit from its potential advantages. To achieve this, the study adopted the Delphi research methodology, a rigorous and systematic approach that collects and analyzes expert perspectives and opinions to build a consensus on the subject of industrial tourism in industrial regions and enterprises. This paper represents the initial phase of a more extensive research project on industrial tourism.

The findings indicate that a healthy strategic alignment among the various areas of the industrial company is crucial for the success of Industrial Tourism. Failure to achieve this alignment can become a significant barrier to the successful implementation of this tourism product. The Financial, Operational, Human Resources, and Marketing areas are central to Industrial Tourism's success, and they play vital roles in shaping the overall experience for visitors and ensuring seamless integration with industrial operations. However, the strategic vision and organizational culture, represented by the company's manager, hold paramount importance in deciding whether to embrace Industrial Tourism and in ensuring its successful integration within the company.

This paper's preliminary results provide valuable insights into the potential of Industrial Tourism as a source of innovation and competitiveness for industrial companies. As the study progresses, subsequent rounds of the Delphi methodology will be conducted to refine the analysis and seek consensus among the participants. By delving deeper into the strategies and barriers related to Industrial Tourism, this research aims to offer practical recommendations for industrial companies to leverage this form of tourism effectively.

In summary, the exploration of Industrial Tourism in industrial companies has the potential to foster innovation and competitiveness. By focusing on strategic alignment, efficient resource management, and strong leadership support, industrial companies can fully harness the benefits of Industrial Tourism and enhance their overall competitiveness in today's dynamic business landscape.

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