

**“Come and Visit Us!”-  
Influence of Industrial Tourism on Customer Behavior**

**Dissertation**

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## Preface

This dissertation was written as an external student at the marketing department at TU Dortmund University in Germany. I would like to take this opportunity to thank everyone who supported me during the development and writing of this doctoral thesis.

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## Abstract

Industrial tourism is an important marketing tool for companies to promote their brand or present their company. Despite its significance, there is still a lack of research on the effect of factory tours on customer attitudinal and behavioral loyalty. In a first study, the paper encompasses a detailed literature overview of existing research on industrial tourism. The paper outlines the advantages and disadvantages of factory tours and delimits consumer tourism to industrial tourism. As part of their marketing strategy, B2B manufacturers regularly invite customers for factory tours. Despite its widespread use, however, there is a lack of research on the economic consequences, as well as the underlying perceptual processes. Thus, the second paper entails the results of two studies conducted in collaboration with an industrial manufacturer, allowing for detailed analyses of the effects of factory tours on customer loyalty. The results of a first study show that customer participation in a factory tour leads to an increase in revenues. A second study explores the potential mediating role of attitudinal loyalty and customer perceptions of the tour guide, a finding that remains unconfirmed. The results confirm the positive effects of factory tour participation on behavioral loyalty (i.e., purchases) and attitudinal loyalty (i.e., affective commitment). Moreover, the analysis reveals evidence for the effects of customers' perceived competence as tour guides on loyalty. The third paper concludes the topic by examining financial aspects of factory tours, which are part of a company's experience tourism. This example does not demonstrate the impact of factory tours on the short-term financial benefits of a company. Moreover, the customer loyalty resulting from factory tours plays a decisive role in terms of long-term effects for the companies.

**Keywords:** industrial tourism, factory tours, satisfaction, loyalty, affective commitment, purchases

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# **1. Paper 1: “Come and Visit Us!”: A Conceptual and Theoretical Perspective on Industrial Tourism and Factory Tours**

## **1.1 Abstract**

Industrial tourism, including factory tours, represents a challenge for manufacturing companies whose core competencies are not tourism oriented. This thesis presents a framework in a business-to-business setting (B2B), for closing a market gap and literature void in industrial marketing. Several studies regarding business-to-consumer (B2C) tours exist, but there is little research on effects regarding B2B tourism. This paper deals with the influence of industrial tourism on recommendations, revisits, consumers' purchase intention, and long-term relationships. Besides behavioral reactions, the paper also encompasses attitudinal reactions, as they relate to satisfaction and affective commitment regarding factory tours. In addition, the paper highlights the important role of a tour guide.

## 1.2 Introduction

Companies have almost unlimited opportunities to advertise their products and brands. Businesses therefore face a variety of strategies to successfully reach current or potential customers or even regain lost customers. Managers can use different channels to achieve their goal of expanding the brand and generating profits. In addition to traditional marketing strategies, new strategies provide companies with the opportunity to offer factory tours as a marketing tool. Factory tours are part of industrial tourism and enable the company to communicate with customers and present the production process (Yale, 1991, p. 142).

Dodd and Bigotte (1997) describe industrial tourism as a visit to a manufacturing facility that can include educational tours and information about the product to create a learning experience for participants (Dodd and Bigotte, 1997, p. 47). People's interests have broadened and shifted towards more experience-oriented activities, including action, adventure, or other experiences. These changes partially explain the development of industrial tourism. Factory tours can be a possibility to spend leisure time combined with educational experiences. With the growing interest in how business is conducted and products are made, combined with the desire for life enrichment and learning experiences while traveling, the market for industrial tourism continues to grow (Chen and Morrison, 2004, p. 115). In addition, the transition from a manufacturing to a service economy led to fewer people working in the manufacturing sector, which means they have less contact and knowledge of industrial work. A factory tour can close the gap by providing both a nostalgic and a new perspective on manufacturing processes. Older employees who no longer work in a producing factory are enthusiastic about past experiences and modern technology. The same applies to younger people who lack experience but are curious about the production (Mitchell and Orwig, 2002, p. 33).

Thus, visitors can be people who work directly in the industry or people who are affected by it, as they generally do not encounter the production processes. Part of the success of industrial tourism is that it offers visitors a real experience, including the taste, smell, sounds, or sights of manufacturing that is not encountered in everyday life. Another aspect is that many people have a specific idea of a manufacturing process but no knowledge of the reality of modernized and automated industries (Frew, 2000, p. 62).

Despite the increasing digitalization of business transactions, the importance of interpersonal contact between an industrial company and its customers remains. Visitors in B2B industries participate in factory tours for personal reasons, as they arrive with their own list of interests and expectations of the tour to learn and understand the manufacturing processes (Frew,

2000, p. 63). Furthermore, B2C consumers shop to satisfy their need for leisure through pleasure and recreation. Companies therefore use industrial tourism experiences to fulfill these desires, stimulate customers, and satisfy their needs, resulting in higher customer satisfaction and increased positive attitudes toward the brand (Coles, 2004, p. 379).

Companies have many different intentions for offering factory tours as a marketing tool. Factory tours are not only beneficial for the customers but also for the companies. The potential economic and social benefits of industrial tourism are one reason for companies' growing interest in it. Some enterprises have long traditions of providing tours to take advantage of the opportunity to communicate with people outside the company or to enhance their image by clarifying misinformation about their industry (Chen and Morrison, 2004, p. 115). Mitchell and Orwig (2002) state that manufacturing companies use the factory tour as a tool to strengthen the bond between the company and the visitors. The tour provides visitors with information about the product, the manufacturing process, and the history of the company, which can lead to higher product involvement and thus stronger brand loyalty (Mitchell and Orwig, 2002, p. 30). Company visits can create trust and understanding by showing the production process. Visitors also become more loyal to the brand by identifying with the products and production processes through communication with employees (Mitchell and Orwig, 2002, p. 35). A successful implementation of factory tours thus establishes a positive bond between the visitor and the product or the company, which subsequently leads to brand loyalty (Frew, 2000, p. 51).

Moreover, companies can improve their public image and corporate social responsibility with factory tours. Additionally, factory tours can lead to a positive financial effect (Dodd and Bigotte, 1997, p. 47). Financial advantages result from purchases made at the site. Direct purchases and distributions account for a significant amount of total revenues and are therefore crucial for the companies. In Texas, for example, seven wineries made more than 60% of their revenues from sales at the cellar door (Dodd and Bigotte, 1997, p. 47). Thus, guided tours can also lead to higher turnover (Frew, 2000, p. 51). Furthermore, factory tours can be beneficial to companies by introducing new products to sales representatives or the creation of interest in an existing product line and promoting the company's goods or events in the media during the visit (Frew, 2000, p. 52).

Despite possible higher brand loyalty or turnover, it is important to investigate the determining factors for a positive experience. The reasons for a successful plant visit also depend on the customer's perception of the tours' quality. Therefore, factory tours can have a negative impact on a company's marketing strategy if the quality of the tour does not meet customer

expectations. In addition, industrial tourism represents an effort on the part of the company that is associated with costs that not every company is willing to invest in (Frew, 2000, p. 54).

As industrial tourism relates to manufacturing companies, some firms state that they do not need to offer tours as they are not operating on a consumer market. Furthermore, a tour can interrupt or slow down the production process and the work of employees (Frew, 2000, p. 56). Since industrial tourism is not the primary use of most sites, safety and logistical issues arise (Frew, 2000, p. 54). Additionally, visitors pose some risks, such as theft, manipulation, and industrial espionage (Frew, 2000, p. 55). If the factory visit has a negative impact on the customers' perception of the company, this experience can destroy the company's reputation. Hence, the factory tour should be captivating for the visitors and meet their expectations. If the production process is not visually appealing to the visitors, this can also have the opposite effect (Frew, 2000, p. 55).

All in all, the advantages for customers and companies are multifaceted, but the risks are prevalent as well. Therefore, a company should consider whether to offer guided factory tours.

### **1.3 Research Objectives**

There is widespread use of marketing communication tools. Besides commercials, manufacturing factory tours, company museums, or visitor centers count as strategic marketing tools to involve customers with a brand and build brand loyalty (Mitchell and Orwig, 2002, p. 30). To be a successful industrial tourism destination, a factory tour experience has to be more impressive and exciting than alternative tourism destinations. Thus, it is crucial to evaluate the factors that contribute to satisfied visitors, to achieve customers' intention to revisit, and to positively recommend the destination. Recommendation or word-of-mouth (WOM) advertising reaches informal networks of friends, relatives, and other potential customers to visit manufacturing companies (Lee, 2015, p. 263).

This paper gives an overview of existing literature and the current state of research regarding tourism, in particular industrial tourism. Additionally, the study provides insights to help the managers and enterprises decide whether to offer factory tours and to develop an optimal marketing strategy for the successful implementation of factory tours. This paper aims to investigate the influence of factory tours on customer behavior, including satisfaction or long-term relationships, purchase intention, and commitment. Hence, the influence of industrial

tourism on attitudinal as well as on behavioral loyalty is condensed, which supports the importance of further investigation on this literature gap.

#### **1.4 Development of Industrial Tourism**

The term industrial tourism is a modern word, but the idea of this kind of tourism has existed since the end of the 18<sup>th</sup> century, when the Jack Daniel's Distillery opened and offered tours through its production area. A further example of providing factory tours is the company Hershey Chocolate, where visitors were able to see the manufacturing process of the chocolate and received some samples in 1904 (Frew, 2000, p. 39). Industry-related companies used to produce near cities, providing the public with an opportunity to become familiar with the factory and the daily manufacturing process. During industrialism, a shift from small production lines to increasing mass production led to an extension of production sites. In turn, a relocation from cities to wider landscapes occurred. For people, production became a mystery, and for many years, factory tours were no longer offered, as, for example, large mills and factories were inaccessible (Littmann, 2003, p. 72).

But interest rose again after criticism of industrialization emerged. The manufacturers were accused of concealing dangerous conditions in the factories. To enhance the image of the company and positively change the mindset of the public, factory tours proved to be a suitable marketing tool to represent the company as a good place to work. The social and economic behavior of companies reflected the treatment of their employees. This association led to a change in how attractive factory buildings and museums were presented by installing reception areas, glass windows, and platforms for customers to be able to see the production processes and working environments (Littmann, 2003, p. 72). In the minds of visitors, the cleanliness and architecture of a firm as well as attractive buildings represented beneficial conditions for the workers and were an indicator of a successful company (Littmann, 2003, p. 73). Thus, factory tours enhanced the image of industrial enterprises criticized for poor workplace conditions in an increasing mass production industry. Visitors can assure themselves of improved working environments within the factory, attractive architecture, clean and hygienic conditions, and exemplary administration buildings (Littmann, 2003, p. 75).

The manufacturer Heinz Company in Pittsburgh used this strategy by offering factory tours that can be booked and scheduled, including several stops through various departments: the kitchen, employee dining room, powerhouse, production area, and auditorium. Each step

added a novel impression to the experience. These tours were a successful advertising strategy and led to name recognition. Many companies, such as Ford Motor Company, followed this example between 1900 and 1920 and welcomed thousands of visitors each year (Littmann, 2003, p. 73). Some companies even hired external tour guides to improve their communication with visitors during the factory tour (Littmann, 2003, p. 76). Another example is one of America's largest manufacturing companies Kellogg's, which opened its doors for the public in 1912. Visitors of the factory tour were impressed by the size and hygienic conditions of the plant. Seeing the production process of converting corn into breakfast was a popular attraction. Nevertheless, Kellogg's had to close public tours due to disruption of production processes, espionage, and security concerns (Littmann, 2003, p. 71).

Other companies faced negative impacts of factory tours. After several visitors were injured at the factory, Heinz decided to close factory tours to the public. Thus, plant visits declined due to security risks, sabotage, and hygiene concerns. Some smaller companies that were dependent on WOM advertising continued to offer factory tours. Larger companies compensated tours by offering staged reproductions of production processes in visitor centers. Some even opened entertainment complexes and gift shops to substitute factory tours (Littmann, 2003, p. 81).

Dealing with the risk considerations, some companies in the 1920's decided to show only parts of the production areas. Furthermore, tour guides refused to provide visitors with every detail of a production step or material to avoid espionage (Littmann, 2003, p. 76). To ensure the security of customers at factory tours, platforms or bridges were built to keep visitors as close to the process as possible but at the same time as far away as necessary from dangerous machinery. Between 1930 and 1970, companies prioritized entertaining visitors, taking into account their decreasing interest seeing parts of a production process. Furthermore, during a factory visit, tour guides emphasized the economic effects and promoted purchasing products from local companies and addressed their contribution to the environmental impact (Littmann, 2003, p. 80). Additionally, tour guides enhanced the image by appealing to visitors' emotional side through design, furniture, or paintings (Littmann, 2003, p. 78). The presentation of the industrial past and history, as an essential supplement to modern buildings and advanced technology for manufacturing, appeals to people's emotions (Littmann, 2003, p. 79). The creation of nostalgic feelings with old technology displayed in factory museums evokes emotions and fulfills the educational desire of history and quality and, in turn, leads to a bond between customers and the company (Littmann, 2003, p. 78; Mitchell and Orwig, 2002, p. 33).

Industrial tourism became more and more popular as many factories offered tours to achieve an extra income and to build brand image (Lee, 2015, p. 262). The company Celestial Seasonings offered, besides factory tours, also a visitor center for customers. Within the first four years, the number of visitors increased sixfold, from 8,000 visitors per year to over 50,000. The company stated that one guest with a positive WOM recommendation to friends and family is more effective than hundreds of commercials (Mitchell and Orwig, 2002, p. 30). In Taiwan in general, from 2010 within 2 years, visitors doubled from 5 to 10 million, and revenues from industrial tourism increased by more than 50% (Lee, 2015, p. 262).

Besides offering factory tours in addition to the core business of the company, some non-tourism companies entirely replaced their core business with tourism. One successful example is Universal Studios, whose tourism surpasses the main objectives of the film industry (Frew, 2008, p. 33).

Motivations for customers to participate in industrial tourism activities have changed from passive to active and from fun to learning inducements. Thus, the economy shifts to an information and knowledge economy (Otgaar, 2010, p. 47). Nowadays even online factory tours have evolved. Firms show their factory via a virtual tour to assess production processes (Mitchell and Orwig, 2002, p. 37). Industrial tourism, not being a new phenomenon, is nowadays a marketing strategy, as it leads to an enhanced relationship and bond between customers and a brand (Nella and Christou, 2010, p. 3).

## **1.5 Conceptual Basis**

The conceptual basis defines various terms and expressions that are important for the area of industrial tourism in a first section. An overview and short description are given, including tourism attractions, and the concepts of consumer and industrial tourism, are differentiated from each other in more detail. Additionally, the paper summarizes the benefits of factory tours in a B2B setting, the reasons customers participate, and the motivations for companies to offer factory tours. Finally, the paper highlights the positive effects of factory tours, but potential risks and negative experiences associated with offering these tours are also pointed out. The last chapter deals with the role of the tour guide as a crucial determinant in factory tours.

### 1.5.1 Tourism and Tourism Attractions

Tourism plays an important social, environmental, and economic role, both globally and locally (Cudny and Horňák, 2016, p. 1). Tourism is a travel activity and indicates a temporary movement to a destination outside the daily environment (Otgaar, 2010, p. 16). It is independent of the reason for travel and regardless of distance or time frame (Soyez, 1986, p. 109). The motivation to travel can range between business, leisure, recreation, visiting friends, enhancing personal experiences, individual mental purposes, or a combination of these (Leiper, 1990, p. 372; Otgaar, 2010, p. 16).

Tourists are defined as everyone who is travelling outside of their normal place of work and residence regardless of their purpose (Otgaar, 2010, p. 25). Tourists can be grouped in four categories: First, demographic segments refer to attributes of visitors, including age or gender. The second category is the geographic one, which complies with the origin of the trip, region, and residential characteristics. The third category, the behavioral category, includes first-time or repeat visitors. Finally, the psychographic segment entails personality and lifestyle attributes (Dodd and Bigotte, 1997, p. 47).

Tourism would not exist without tourist attractions and vice versa. Almost anything can be a tourist attraction, subject to the condition that three components are necessary. The first requirement is tourists, followed by a site to experience and finally an image that makes the site interesting. Beside the tourist attraction itself, infrastructure is a crucial element of attractions, including among others, catering, services, facilities, or tourist information (Lew, 1987, p. 554). Leiper (1990) states that a tourist attraction exists when an arrangement of, again, three elements is prevalent. The first two elements align with Lew's findings (1987) and include a person with tourist purposes and a target or motivation for the visit (also called nucleus). The third element differs slightly from the mentioned image and involves a marker who provides information (Leiper, 1990, p. 381). Markers are the link between the visitors and the core of the attraction, and they capture several roles. They provide information, advertise, motivate to travel, establish expectations, plan the stay, select activities, or even offer souvenirs (Dodd, 1994, p. 18; Leiper, 1990, p. 378). Thus, markers directly influence the perception and expectation of the attraction (Leiper, 1990, p. 378).

In addition to Leiper's model, markers and chosen attractions are influenced by the distance to the destination, length of stay, and travel form (Richards, 2002, p. 1052). Visitors who stay for a short time concentrated on the main attraction of the destination, leaving less time for exploration and guidance provided by on-site markers. Therefore, the provision of information depends on the length of stay in the destination, which influences the markers encountered by

tourists. Repeat visitation also impacts the use of markers because they are aware of more markers than first-time visitors (Richards, 2002, p. 1053). Leiper also examined time and money as additionally important in determining attraction visits and the use of markers. People with higher incomes also attend significantly more attractions (Richards, 2002, p. 1059). As the type of attraction influences demographic features such as gender and age, females tend to visit more art galleries, whereas males visit science museums. Regarding age, younger people attend fairs and festivals, middle-aged persons more often visit museums and galleries, while older people prefer historical sites (Nowacki, 2013, p. 31).

Tourism attractions are of interest to companies and can represent consumer tourism as well as industrial tourism destinations, attracting consumers on the one hand, and customers on the other hand (Frew, 2000, p. 33; Mitchell and Orwig, 2002, p. 31).

### **1.5.2 Consumer Tourism**

Consumer tourism, a tool in consumer marketing, refers to a product or service that is exclusively for the use of consumers and relies on their personal or physical interaction, such as amusement parks (Frew, 2000, p. 27). Consumer tourism indicates a site open to the public with or without prior booking. The company provides access for tourists, where consumers do not see the operational aspects an attraction (Frew and Shaw, 1999, p. 214; Frew, 2008, p. 28). Without consumers visiting the attraction, consumer tourism would not exist. For instance, specific buildings without visitors would not be a tourist attraction. Tourism is therefore required for the existence of the attraction (Frew, 2000, p. 28; Leiper, 1990, p. 382). Attractions or sites for consumer tourism produce goods or services exclusively for tourists (Frew, 2000, p. 25).

Consumer tourism can be distinguished between general and specific consumer attractions. Theme parks pertain to general consumer tourism, while museums are classified under specific consumer tourism (Frew, 2000, p. 33). Consumer tourist attractions induce people to visit a particular destination by providing activities and experiences (Richards, 2002, p. 1049). Thereby, the purpose of consumer attraction's is the entertainment of tourists, creating fun and leisure (Frew, 2000, p. 53).

### 1.5.3 Industrial Tourism

Industrial tourism does follow the strategy of general tourism, whereby people travel to a different place and get the possibility to purchase specific products, comparable to a trip to other locations (Soyez, 1986, pp. 106-108). The term “industrial” relates to the definition of industry and therefore the production of goods or services (Frew, 2000, p. 21). The classification of industry, based on the standard industrial classification, includes traditional manufacturing areas such as agriculture, manufacturing, mining, and construction, as well as services such as finance, retail and wholesale trade, transportation, and communication (Frew, 2000, p. 21). But the concept of industrial tourism is more specific and additionally encompasses a visit to a company (Yale, 1991, p. 142). Synonymous terms or expressions for industrial tourism are company visits, factory tours, or tourism, manufacturing tourism, industrial attractions, industrial sightseeing, or industrial heritage tourism (Chen and Morrison, 2004, p. 118; Mitchell and Orwig, 2002, p. 31; Mitchell et al., 2004, p. 2; Otgaar, 2010, p. 24).

Factory tours are defined as a “visit to working factories to see industry in action, mainly manufacturing industry” (Swarbrooke, 1995, p. 51). Every company has the potential to become an industrial tourism attraction, as visiting a company reflects a place away from home to escape from daily routines where travelers can explore landscapes, participate in activities, and have experiences to remember (Lew, 1987, p. 554). Thus, industrial tourism includes all company sites opened to the public that provide touristic experiences. Nevertheless, the primary business activities of the company are the production of goods or services. Manufacturing companies, company museums, or company visitor centers all represent industrial tourism attractions. Frew (2000) defines industrial tourism as “industrial tourism involves visits by tourists to operational industrial sites where the core activity of the site is non-tourism oriented” (Frew, 2000, p. 20). Thus, if no tourists are visiting the site, the company still exists and keeps producing. In turn, tourism is not required for the existence of the company (Frew, 2000, p. 28; Frew, 2008, p. 35). Therefore, industrial tourism does not have the core purpose of attracting visitors (Swarbrooke, 1995, p. 4). A factory tour includes the presentation of the production processes or parts of the production, whereas visitors are not involved in the production process and use the product later (Frew, 2000, p. 27).

Industrial tourism furthermore includes seeing the whole or parts of the company sites, production lines and processes, equipment, materials, or the produced products with the goal to experience, enjoy, and educate the visitors (Chen and Morrison, 2004, p. 119). Moreover, factory tours “enable visitors to learn about economic activities in the past, the present and the future” (Otgaar, 2010, p. 24).

Industrial tourism companies can be categorized into various typologies. The first typology entails time considerations, ranging from information on industrial traditions to modern tourism, including the use of contemporary and advanced techniques in the industry. The second typology encompasses manufacturing and mining. The typology includes agriculture, fishing, and hunting with crop and animal production. The last one consists of services with finance and insurance, educational services, as well as health care and social assistance (Chen and Morrison, 2004, p. 120).

Bregman (2011) clusters companies that offer factory tours into categories based on the type of activities. The first category contains companies in controversial sectors, such as nuclear energy. The implementation of industrial tourism within these companies helps regain lost credibility and can improve the public image of the nuclear sector. The second category encompasses companies that focus on large infrastructure projects such as road construction, which are captivating for visitors due to their size or level of innovation. The third category includes companies with a connection to handmade or luxury products. Within the fourth category, there are companies focusing on the production processes of ordinary products. Companies provide visitors with the opportunity to experience a behind-the-scenes look. Besides the production processes that are the focus of industrial tourism, service-related forms of industrial tourism also fall in this category, including government institutions or insurance companies (Bregman, 2011, p. 11).

Furthermore, industrial tourism can be classified according to the characteristics of the production process in a company, specifically the level of automation in the industry and the degree of tangibility of the production processes. The table below illustrates the distinction between the characteristics of industrial tourism. On the one hand, there are small industries with handmade products, such as jewelry manufacturers, where the degree of automation in production is lower. On the other hand, there are companies with a high degree of automation in production processes, such as large industries with mass production and standardized products. Industrial tourism can also be characterized by the extent of tangibility of the process, namely tangible and intangible. Tangible products include the physically produced products, while intangible products include the services provided (Frew, 2008, p. 32).

**Table 1: Characteristics of Industrial Tourism**

<b>Characterized by</b>	<b>Low Level</b>	<b>High Level</b>
The Extent of Automation of the Industry	Small scale production Handcrafted Goods e.g., arts, individualized products	Mass production Manufactured Goods e.g., manufacturing, processing raw materials
The Extent of Tangibility of the Observed Process	Tangible products Physical produced goods e.g., wineries	Intangible products Services e.g., tours of governments

(Based on Frew, 2008, p. 32).

#### **1.5.4 Differences between Consumer and Industrial Tourism**

The difference between consumer and industrial tourism follows the concepts of consumer and industrial marketing. In industrial marketing, the product is intended for further production of goods or services, whereas in consumer marketing, it is intended for the direct and exclusive use by the consumer (Frew, 2008, p. 35).

Frew and Shaw (1999) describe the differences as follows: “a site open to the public with or without prior booking, with facilities provided for the access of tourists, where the core business is either the production of goods and/or services intended solely for current visitors (consumer tourism) or the production of goods and/or services not intended solely for visitors (industrial tourism)” (Frew and Shaw, 1999, p. 214). Accordingly, the main objective of consumer tourism is to attract visitors and to produce products exclusively for tourists, while industrial tourism companies aim to produce goods or services for further production or usage purposes. Even if the attractions of industrial tourism do not attract visitors, the site remains and continues to produce (Frew, 2000, p. 28).

Consumer attractions are open to the public without booking in advance, whereas industrial tourism attractions often require booking for organizing the tour, minimizing visitors’ interference with production, and overcoming any potential safety or security problems (Frew, 2008, p. 33; Swarbrooke, 1995, p. 3).

The access to the site also marks a significant difference between consumer and industrial tourism. Pure industrial companies create goods or services with no admittance for tourists to the site. Industrial tourism companies produce goods while access for tourists is limited. In

contrast, consumer tourism companies produce products or services that require tourists' attendance, but they do not consider the operational aspects of running an attraction (Frew, 2008, p. 35).

During a factory visit, tourists are either passively involved (industrial tourism), including only watching the production process, or actively involved, meaning physically engaged in the attraction (consumer tourism) (Frew, 2000, p. 26; Frew, 2008, p. 32). This illustrates another difference between consumer and industrial tourism. In consumer tourism, consumers are more likely to be physically involved or interact personally, while industrial tourists are less likely to be actively involved in the production process (Frew, 2000, p. 27).

Consumer attractions are for the entertainment of tourists, fun, and leisure. Industrial tourists' targets are often specialized, educational, and job-related purposes (Frew, 2000, p. 53).

Overall, industrial tourism sites can return to their core activity, thus pure manufacturing, when they have no tourists. But without visitors, a consumer tourism site cannot fulfill its core function (Otgaar, 2010, p. 18). The following table summarizes the main differences between industrial and consumer tourism, both from the perspective of companies and visitors.

**Table 2: Consumer versus Industrial Tourism**

	<b>Consumer Tourism</b>	<b>Industrial Tourism</b>
<b>Company perspective</b>		
Production of goods/ services	For tourists only	For further use
Site open to public	✓	✓
Tourism is the core business	✓	-
Visitors are essential for existence	✓	-
Admittance of tourists	✓	Limited
<b>Visitor Perspective</b>		
Motivations for the visit	Leisure, fun	Education, job-related
Specific Purpose of the visit	-	✓
Experience of operating	-	✓
Involvement of visitors	Active	Passive
Required booking in advance	-	✓

### 1.5.5 Factory Tours in B2B Settings

Factory tours are part of industrial tourism. Every industrial company can establish and transform its site into a tourist attraction (Frew, 2000, p. 29). Consequently, a company becomes less dependent on its core business and develops from a secondary business to one with a stronger focus on tourism activities (Otgaar, 2010, p. 26). Several companies do not recognize the potential of industrial tourism for their business purposes (Frew, 2000, p. 55; How, 1994, p. 14). Generally, non-tourist-oriented attractions are more authentic, and the actual site itself attracts tourists (Lew, 1987, p. 560). "Tourists desire a real, authentic and educational experience of a factory visit" (Otgaar, 2010, p. 1). Factory tours offer a new and nostalgic view for those who are interested. While younger people aim to expand their knowledge, older people want to revive their sentimental feelings (Mitchell et al., 2004, p. 3). Factory visits target current or potential customers and business partners as well as community stakeholders (Mitchell and Orwig, 2002, p. 33). In the Netherlands, nine out of ten companies offer tours, but mainly for business relationships and not for private individuals (Otgaar, 2010, p. 1).

Company tours are a potential marketing tool in the B2B sector, but they go beyond traditional advertising strategies by educating customers, sharing knowledge, and demonstrating transparency. B2B factory tours support purchasing decisions of business partners, deliver product-related insights, and enhance customer satisfaction (Sun et al., 2022, p. 1308). Manufacturing enterprises differentiate between the production of B2C or B2B products. Companies that mainly produce B2C products are more consumer-oriented and consequently more transaction-focused. B2B-producing companies are mainly concerned with strengthening relations with their customers by gaining trust and loyalty (Otgaar, 2010, p. 60).

In B2B factory visits, the aspect of a detailed understanding of production, building trust, and personal contact is more pronounced than in B2C settings (Österle et al., 2018, p. 74), because customers are more focused on information than consumers who are focused on leisure (Frew, 2000, p. 53). Consumers are generally more entertainment- and leisure-oriented, while customers are more business-oriented tourists and have a stronger professional interest (Mitchell and Orwig, 2002, p. 33; Otgaar, 2010, p. 59). Therefore, B2B customers want to get to know the company and receive information about the brand and the products. For a successful B2B factory tour, visitors therefore need a benefit from the tour for further business activities. Consequently, the content of the visit should meet customers' expectations and include contextual and individualized information or training (Österle et al., 2018, p. 83).

For a positive experience of the factory tour, visitors with an interest in technology will be emotional, entertained, or enthusiastic if they can interact and get involved during the production

tour. Emotions and experiences are closely related concepts, with emotions being a determining factor for positive experiences, even in B2B environments. Emotions are less obvious in B2B compared to B2C, but they are still an important aspect. For example, emotions entail the appreciation of the visitor by the operating company or communication at eye level. Visitors who associate positive emotions after visiting the B2B experience can more easily remember and understand the information and content provided. This leads to enhanced relationship building with the brand and its employees (Österle et al., 2018, p. 84). Overall, factory tours in a B2B environment have to provide information, be interactive, and be experience-based at the same time (Sun et al., 2022, p. 1309).

### **1.5.6 Motives for Visitors attending Factory Tours**

Visitors are interested in every detail of the system and seek to observe the whole production process (Frew, 2000, p. 200). Industrial tourism satisfies and attracts visitors by providing the opportunity to see the production process, which reflects the tangible product of factory tours. The augmented product of factory tours entails the opportunity for customers to purchase the industrial product or use the provided service (Frew, 2008, p. 34). In addition, tourists visit a company to see the factory and the production process, to buy or inform themselves about the products produced, and to gather experiences (Cudny and Horňák, 2016, pp. 27-29; Nowacki, 2013, p. 17).

However not all visitors are industrial tourists. There is a difference between regular business trips, where visitors do not see the production process, and industrial tourism, where they see the production steps (Otgaar, 2010, p. 20). Therefore, the reasons to attend differ from business-related visitors, educational interests, or other purposes such as leisure or recreation (Soyez, 1986, p. 106). In the study by Lee (2015), the most frequently cited reasons for visiting a company are, on the one hand, leisure and entertainment with more than 60% and, on the other hand, gaining practical experiences with almost 30% (Lee, 2015, p. 268). Visitors use leisure experiences to relax or to experience something new (Leiper, 1990, p. 372). Therefore, industrial tourism also represents a connection between leisure and work (Frew, 2000, p. 61). Other reasons for visitors include job relations, training purposes, or knowledge building (Soyez, 1986, p. 106). Therefore, the reasons for visiting sites are multifaceted, and the following sections summarize the primary objectives of most factory tours.

## **Learning Tours**

Educational or learning tourism is a part of industrial tourism. Factory tours can include educational tours and information about the product as a learning experience for visitors (Dodd and Bigotte, 1997, p. 47; Frew, 2000, p. 29). The incentives of industrial tourists to visit a site can include the purpose of learning about economic activities in the past, present, and future (Otgaar, 2010, p. 1). Hence, the main motivation for visitors to travel is to learn something they are interested in or even to learn something new about the industry, company, or production process (Frew, 2000, p. 36). Additionally, visitors desire to expand their knowledge of the company and its products, the quality of the products or services, industrial areas, technologies used, industry-related buildings, and production processes (Cudny and Horňák, 2016, p. 26; Packer and Ballantyne, 2002, p. 189). The motivation of customers or business partners to visit industrial companies combines, besides knowledge or learning purposes, also business purposes (Otgaar, 2010, p. 62). The interaction and exchange with experts during the tour, seeing the materials and activities that go into the manufacturing process, and the opportunity to inspect the quality of the products being produced provide customers with intimate knowledge (Mooney, 2018, p. 4). A more specific reason for business partners to take part in a company tour is the modernity and technological progress, especially for manufacturing companies (Cudny and Horňák, 2016, p. 35). Thus, companies can use factory tours to impart new knowledge to visitors, and they can promote learning by emphasizing practices over numbers. In this context, seeing a process is more valuable than a detailed theoretical description of workflows (Upton and Macadam, 1997, p. 98). Furthermore, industrial knowledge includes the information provided by the tour guide during the tour and the understanding of industrial history and process knowledge (Lee, 2015, p. 264). Therefore, real practical experience and the insights of experts are more valuable for customers who communicate face-to-face than a written report (Upton and Macadam, 1997, p. 101).

## **Cultural or Agricultural Tours**

Tourists seek to understand places, people, lifestyles, and historical connections. In industry, this reflects a visit to a company and its achievements in the humanities or its historical background (Frew, 2000, p. 36). Industrial tourism also incorporates agricultural elements such as visiting a farm that grows and processes the products. One example is a winery tour where visitors can get information about the wine industry, taste and even purchase wine, and see the production or storage process (Frew, 2000, p. 38).

### **Assessment Tours**

Through assessment tours, customers aim to determine whether the company meets their needs (Upton and Macadam, 1997, p. 100). Additionally, visitors can convince themselves of the quality of the products produced or services provided (Cudny and Horňák, 2016, p. 26). In a B2B context, for instance, assessing the quality of a potential supplier can be important for further business relations. Thereby, companies focus not only on existing capabilities but also on the opportunity to perform better. In addition to suppliers, investors or buyers also visit a company to decide whether to invest or acquire a plant based on a deeper understanding. Therefore, visiting a company is crucial to assess and evaluate the requirements (Upton and Macadam, 1997, p. 100). Moreover, visitors can familiarize themselves with the product range and benefit from the visit to the factory with experiences of how they control their processes and production steps, how their quality management is structured, and how sustainably and responsibly they produce (Mooney, 2018, p. 4).

### **Experiential Tours**

Besides these reasons for factory tours, some authors summarize them as part of experience marketing. Thus, visitors and tourists visit the site to have a unique experience (Coles, 2004, p. 383; Sun et al., 2022, p. 1308) or to fulfill the desire to experience something new (Packer and Ballantyne, 2002, p. 189). An experience is a product, an atmosphere surrounding a product, a history, a design, a production process, or an element associated with the product. The experience should encompass surprise, innovation, learning, or other elements to be meaningful and personally relevant to a customer (Cudny and Horňák, 2016, p. 25). Company tours offer customers an added value with the experience that aligns with their preferences. The opportunity of seeing the entire production process reflects many aspects of human life and is an experience of the complete chain of the process (Frew, 2000, p. 61). The perceived experience of customers also depends on the quality of the tour (Otgaard, 2010, p. 57). Consumers can experience the brand while companies strengthen their relationship with consumers during their visit through the visual presentation of the brand, the production process, or the history (Mitchell et al., 2004, p. 2). Thus, for companies, factory tours serve as a form of experience tourism, aiming to foster a sense of affiliation between customers and the brand (Nella and Christou, 2010, p. 3).

One example is the automotive industry, which uses industrial tourism as an experience-oriented marketing tool, combining production factories, product testing, and museums (Cudny

and Horňák, 2016, p. 27). Car producers attract visitors and customers with a differentiated and specialized offer including, among other things, a market and customer center, an automotive museum, a visitor center, an information point, a café, an insurance service, a restaurant, and the organization of events and guided tours. All these marketing strategies aim to provide technical information, strengthen the image of a brand, build a relationship with the customer, enhance customer satisfaction, and even attract new customers with unique experiences (Cudny and Horňák, 2016, pp. 32-34). Nowadays, customers have a strong desire to learn about products or services, but they also have an increased need for an enhanced customer experience during a factory visit. Therefore, factory visits must be experience-oriented (Sun et al., 2022, p. 1309).

### **Involvement**

The involvement of the visitors is one main element for industrial tourism companies and is essential for a successful factory tour (Frew, 2008, p. 35). On the one hand, customer participation is a tool for marketing segmentation; on the other, it leads to customer identification and affiliation with the company (Kelley et al., 1990, p. 327). By involving customers in factory tours, companies can differentiate themselves from other companies in terms of price or quality and create an important competitive advantage (Song and Adams, 1993, p. 5). The tour provides visitors with information about the product, the manufacturing process, and the history of the company and can lead to greater product or company involvement and thus to greater brand loyalty (Mitchell and Orwig, 2002, p. 30). Customers benefit from participating in factory tours by reaching their personal goal and enhancing their satisfaction with the visit (Coles, 2004, p. 379).

### **Passive Enjoyment or Restoration**

In addition to these categories, Packer and Ballantyne (2002) have divided the motivations of customers to visit into further categories. The category of passive enjoyment and restoration encompasses the desire to be happy and satisfied. The aspect of restoration includes recovery from stress, relaxation, the desire for social interaction, building relationships, or meeting with family and friends (Packer and Ballantyne, 2002, p. 189). The quality of recreation allows tourists to reach relaxation during or after factory tours (Lee, 2015, p. 264).

All in all, the decisive factors for a successful transformation from a production-oriented to a tourism-oriented site are the quality of recreation, industrial knowledge, and industrial culture. Since the main reasons for visiting industrial tourism attractions are seeing industry in action and buying products directly, a tour guide, shop, or outlet offering service or catering needs to be considered when offering and organizing factory tours (Lee, 2015, p. 264).

### **1.5.7 Motives for Companies offering Factory Tours**

Factory tours also satisfy curiosity about the past and present of industry. It fulfills the desire to visit industrial sites that comprise technological and industrial-related components. Thus, factory tours lead to a positive association, not only with tradition but also with modernity, high technology, and the product quality of the company. Further positive effects are that the production. Additionally, participating in a factory tour in a foreign or competing company offers the visitor or manager the opportunity to introduce the new manufacturing techniques or technologies in their own company (Hippel, 1986, p. 16).

This section provides an overview of the advantages and disadvantages of factory tours from the company's perspective. The reasons for offering factory tours vary and the following sections summarize the main objectives of factory tours.

### **Financial Aspects**

Customers' experiences with the supplier play an important role in the purchase decision (Chen et al., 2010, p. 1013), since B2B buying decisions are influenced by higher perceived risks (Österle et al., 2018, p. 72). Thus, trust in the company and the information provided has a positive impact on customers' purchasing decisions (Lee and Tan, 2003, p. 883). The more information provided, for example, during a factory visit, the more likely it is that the visitor will buy a product, as more information reduces security concerns and the risk of purchases (Chen et al., 2010, p. 1013). Consequently, the tour has to serve a strong purpose, namely, to provide information or education. The more authentically the production tour and thus the brand and the company are presented, and the more the visitor's experience of the brand in daily business is met, the more credible the factory tour is for the visitor (Österle et al., 2018, p. 84).

Furthermore, the company can promote new products or innovations and give visitors the opportunity to try them before purchasing them. This minimizes risks and uncertainty and allows the company to exhibit and sell their products (Dodd and Bigotte, 1997, p. 47). For

manufacturing companies, factory tours can therefore be an effective tool for increasing revenue, as they offer the opportunity to purchase manufactured products directly at the site (Dodd and Bigotte, 1997, p. 47; Otgaar, 2010, p. 56). On-site sales further increase monetary benefits by, for instance, opening commercial units such as souvenir shops or offering catering (Bregman, 2011, p. 16). Thus, further financial benefits arise from the sale of souvenirs, food and beverages, or products developed specifically for visitors (Dodd and Bigotte, 1997, p. 47; Otgaar, 2010, p. 56). The effectiveness of offering souvenirs depends on the motivation of the visit. Leisure tourists are more willing to buy souvenirs than business tourists (Otgaar, 2010, p. 56). Nevertheless, attitudes toward a company significantly enhance product purchases, but not the purchase of souvenirs (Dodd, 1994, p. 69).

Regarding financial benefits of company tours, manufacturing companies can charge an entrance fee for visiting the company (Bregman, 2011, p. 16). A successful factory tour that results in an increase in purchases can lead to further financial benefits due to potential repurchases. These economic advantages result from loyal industrial customers, who, on the one hand, promote the brand to colleagues, relatives, and other purchasing agents and, on the other hand, consider other products from the company's product range. A further economic benefit can be afforded from loyal customers who do not switch to competitors or are even willing to pay a higher price for their favorite brand, leading to increased sales (Rather et al., 2019, p. 198; Österle et al., 2018, p. 72). Thus, from a financial perspective, industrial tourism can have positive effects on sales that help cover off-season periods (Frew, 2000, p. 52; Frew, 2008, p. 37). Hence, factory tours can also contribute to a stable organization by using the profits in the offseason to maintain full employment (Mitchell and Orwig, 2002, p. 35). If companies want to build another financial source in addition to future sales, it is important to increase total revenue from visitors, and marketers should focus on promoting their company as a tourist destination. Therefore, improving overall sales promotion can have a positive financial impact for companies (O'Mahony et al., 2006, p. 134).

The reception of visitors is not only a potential source of income but also a possibility to communicate with stakeholders (Frew, 2000, p. 200; Mitchell et al., 2004, p. 9; Otgaar, 2010, p. 26). Thus, company tours are a further tool for strengthening relationships with business partners, as they facilitate personal contact (Otgaar, 2010, p. 446). Companies therefore offer factory tours, museum visits, or visitor centers to build trust, strengthen relations with consumers, and provide a unique experience regarding a company, brand, history, or production process (Mitchell and Orwig, 2002, p. 37; Otgaar, 2010, p. 23). The bond with consumers is different compared to those with business partners, as the latter often have a professional rather than a personal involvement with the company. However, company tours with business partners

create trust and loyalty within the supply chain. Additionally, business customers get a better understanding of how production processes work and can even make suggestions for improving efficiency (Bregman, 2011, p. 20).

The increasing concern of environmental and climate change, as well as corporate social responsibility (CSR), underlines the importance of communication between companies and their stakeholders (Otgaar, 2010, p. 45). Industrial tourism can also be a strategic management decision in terms of marketing, public relations, and CSR policies. Companies can benefit from factory tours by improving the degree of transparency and CSR actions, as concerns of environmental and climate change remain widespread (Otgaar, 2010, p. 63). The advantages of factory tours are, amongst others, improving the company's image and reputation, as well as educating visitors through knowledge transfer (Frew, 2000, p. 200; Otgaar, 2010, p. 26). Furthermore, factory tours can be a strategic marketing tool by promoting open communication, positive WOM, or media attention through press officers or journalists visiting the site (Mitchell and Orwig, 2002, p. 35).

Factory tours, visitor centers, and production plants offer greater marketing and event platforms where visitors can immerse themselves in the world of the company or brand (Coles, 2004, p. 383). Factory tours satisfy curiosity about the past and present of industry. They fulfill the desire to visit industrial sites that comprise technological and industrial-related components. Thus, factory tours lead to a positive association, not only with tradition but also with modernity, high technology, and the product quality of the company (Cudny and Horňák, 2016, p. 35). Further modernized and automated processes could have positive effects on the production process in the minds of visitors (Frew, 2000, p. 63). Process innovations that save production costs are important and of significant interest. Additionally, participating in a factory tour in a foreign or competing company offers the manager the opportunity to introduce the new manufacturing techniques or technologies in their own company (Hippel, 1986, p. 16). All these positive effects have a strong impact on visitors and result in a stronger attachment to the brand, which influences current and future customer behavior (Cudny and Horňák, 2016, p. 35).

According to the involvement theory (detailed explanation in chapter 1.6.4), involvement in, for instance, production processes, intensifies brand loyalty and satisfies customers' desire for learning (Mitchell et al., 2004, p. 10). Hence, visitors expand their knowledge of the product, brand or company through familiarity with the production process, interaction with employees, product identification, or quality assurance (Mitchell and Orwig, 2002, p. 35; Otgaar, 2010, p. 46). Factory tours can furthermore build brand awareness by allowing to taste before purchase

or by telling the history of the brand (Nella and Christou, 2010, p. 4). Positive and memorable experiences induce an emotional attachment and an ensuing commitment to the company (Nella and Christou, 2010, p. 5).

In addition, industrial tourism has an impact on the company's employees. It can increase the number of new job opportunities by increasing demand for the product or the need for tour guides. The image of the company and the industry can be enriched, and the morale of the existing workforce can be strengthened (Frew, 2000, p. 51; Mitchell et al., 2004, p. 9). Furthermore, it is a recruitment strategy to increase human capital or diversify the tasks of existing employees, as well as for internal job rotation. Companies can promote themselves as employers, for example, by inviting students to visit the operational site. The elderly or retired are not potential employees, but they do have their value in recommendation and WOM processes (Otgaard, 2010, p. 62). In this way, companies benefit from industrial tourism to become attractive as a potential employer, which also positively influences the company's human resource department (Bregman, 2011, p. 21).

Also mentioned, but less crucial for companies, are the at least important effects, the influence of factory tours on improving the company's physical environment (Chen and Morrison, 2004, p. 125).

Overall, industrial tourism is an effective method to add value to the company's core business objectives. It supports the development of potentially lifelong relationships with current customers and attracts potential customers (Coles, 2004, p. 387). For companies, industrial tourism has a positive impact on their public relations, building a positive bond between the visitor and the company or product, creating affiliation with the industry and brands, developing brand loyalty, or even attracting new customers (Frew, 2000, p. 51). The most important objectives of providing company tours are therefore the promotion and sale of products, followed by improving the improvement of image and the reinforcing of brand loyalty (Coles, 2004, p. 383). Thus, factory tours also provide the company with an additional source of income and enhance the company's image in the long term (Frew, 2000, p. 200). In addition to attitudinal loyalty, behavioral loyalty is also increased by positive experiences, which manifest themselves in repurchases, revisits, and positive WOM (Frew, 2000, p. 53; Nella and Christou, 2010, p. 5).

Chen and Morrison (2004) examined the most positive benefits of industrial tourism for companies. Image improvement was rated as the most important benefit, followed by brand loyalty reinforcement. Product promotion was ranked in third place and classified stimulating staff morale as the fourth most important positive impact for businesses. Also mentioned, but less

crucial for companies, are important effects, the influence of factory tours on improving the company's physical environment (Chen and Morrison, 2004, p. 125).

All in all, positive visitor experiences after the factory tour indicate a successful marketing strategy (Littmann, 2003, p. 80). In summary, manufacturing companies use industrial tourism as a marketing tool to improve public relations, to enhance their corporate social responsibility, and to achieve financial and reputational benefits (Coles, 2004, p. 379; Swarbrooke, 1995, p. 51).

### **1.5.8 Risks of Factory Tours**

Industrial tourism companies primarily focus on manufacturing, making them unsuitable for visitors. Non-tourist-oriented attractions involve greater risks and are less structured (Lew, 1987, p. 560). The following sections give an overview of risks and disadvantages for companies when offering factory tours.

#### **Safety**

This results in logistical and safety issues. Risks and security are important issues when visiting a site, as they are ranked right behind the basic psychological needs of food and housing (Otgaar, 2010, p. 41). Visitors are afraid of industrial disasters or accidents, even if these accidents rarely occur. People perceive an industrial site as a dangerous place (Otgaar, 2010, p. 47). Thus, companies are required to implement safety instructions, which are subject to government regulation. Visitors must identify themselves, register in advance, or pass security controls (Otgaar, 2010, p. 48). In some cases, the company needs insurance for each visitor in case of an accident (Frew, 2000, p. 54). Furthermore, companies have to guarantee the safety of visitors and protect them from danger by installing walkways and protective screens so that visitors can see the process in detail by standing close to the production process (Frew, 2000, p. 200; Frew, 2000, p. 54). Hygiene concerns also confront companies, leading to an increase in factory tour costs (Frew, 2000, p. 54).

#### **Espionage**

Another important aspect of industrial tours is the possibility of theft by tourists, as well as offenses of security and espionage (Bregman, 2011, p. 25; Frew, 2000, p. 55). Companies

need to adjust their policies, for instance, by issuing regulations on taking pictures or checking customers' baggage after the visit (Otgaar, 2010, p. 66). Dealing with espionage issues during a factory tour is challenging because it is difficult to prevent the disclosure of expertise about equipment or visible techniques, as direct competitors may also be among the invited tourists. Trading know-how with a non-rival company does not create a competitive disadvantage, but the exchange of secret information between rivals can cause negative side effects (Hippel, 1986, p. 24). Thus, companies prefer to trade know-how with non-rivals, since in this case the exchanged information induces fewer or no competitive costs (Hippel, 1986, p. 28). In addition, suppliers of process equipment who visit a plant for sales, repair, or advice purposes diffuse information in the industry (Hippel, 1986, p. 12). Moreover, certain customers cannot be excluded from tours because they want to ensure product quality or request information on process changes. Therefore, there are several companies that prohibit factory visits as a matter of principle and thus protect their know-how (Hippel, 1986, p. 13).

### **Costs**

Industrial tourism attractions require enhanced infrastructure and general conditions. These include the supply of sanitary facilities, a reception area, and sufficient parking spaces. This is associated with costs that not every company is willing to spend (Otgaar, 2010, p. 52). The feasibility of factory tours depends, among other things, on the production and customer costs or the subjective effort required for participation. Transportation and delivery costs are further costs for factory tours (Song and Adams, 1993, p. 7). Hygiene concerns are also a problem for companies, leading to an increase in the costs of factory tours (Frew, 2000, p. 54). Beside the various types of costs, including labor costs for employees and visitor insurance costs, investment costs arise when organizing factory tours, which are the costs of adapting or extending the facilities required for factory tours. Organizing factory tours in existing buildings requires lower investment costs compared to new communication centers or additional facilities (Bregman, 2011, p. 23). These initial investments are not fixed costs in the long term, as they need to be maintained or expanded (Otgaar, 2010, p. 52). Additionally, inviting visitors generates variable costs that depend on the number of people supplied with coffee or goody bags. In addition, the company incurs costs when one or more tour guides are required (Otgaar, 2010, p. 53). In some cases, companies provide transportation for the tourists, reserve meeting rooms, and operate a shop or a reception, which all induce additional costs (Otgaar, 2010, p. 54). Therefore, the cost perspective for companies offering factory tours should be evaluated.

## **Production**

Industrial tourism reveals its limitations as a marketing tool through reachability, which is based on the restriction of the number of visitors (Otgaar, 2010, p. 61). With the development of tourism at an industrial site, objectives may arise that are not compatible with each other. For example, conflicts between the production of non-tourism products or services and allowing customers to visit the production site. If the company's salespersons want to attract more customers to the site, this may clash with the managers' desire to create more space to increase production (Frew, 2008, p. 37).

The attractiveness of production processes also impacts tourists. Thereby, both traditional and modern or automated processes are appealing. The production process must be visible and tangible to be of interest. If visitors have the opportunity to get or participate in the process, this is a great advantage but is often prevented by closed production processes due to safety regulations (Otgaar, 2010, p. 68). A further contradictory influence on visitors is that production processes are not fascinating to observe if you cannot see the detailed steps of the machine or if they are not visually appealing to tourists (Frew, 2000, p. 55). Additionally, production areas are usually loud due to the running machines and workers, which prevents visitors from listening to the tour guide. Stopping production would be counterproductive for the visitors and would incur costs and time for the company (Farrell, 2021, p. 3). However, if you try to let visitors get closer to the production area, the workers might feel observed, which would jeopardize productivity (Frew, 2008, p. 37). In addition, factory tours can decelerate productivity of the company by distracting and hindering workers from their actual task. Workers who perform additional activities for tourists cannot work at full productivity while they spend time preparing for or supporting visits. Moreover, visitors can influence workers with no additional tasks by causing them inconvenience or distraction, or even demotivating them by lacking privacy (Bregman, 2011, p. 25; Otgaar, 2010, p. 66).

## **Experience of Customers**

Another important fact is that visitors pursue different goals depending on their motives, expectations, and experiences. The production process that visitors have in mind could change due to a lower standard of modernized and automated processes. Additionally, many visitors have their own expectations of the attraction, which can have a negative impact on their experience if they are not met (Frew, 2000, p. 63). For some companies, factory tours are not a suitable marketing tool to promote their business, as seeing a production process that does

not meet the expectations of visitors may not achieve the expected results and can lead to a negative experience (Frew, 2000, p. 29; Otgaar, 2010, p. 57). Hence, not every company is appealing for visitors. The attractiveness of products plays another important role in industrial tourism. Attractive products involve a certain experience for people, such as unusual, regional, technologically advanced, luxury, branded, or consumer products (Otgaar, 2010, p. 67).

Thus, it is not always possible to satisfy every customer with their specific needs. Furthermore, companies must ensure a positively perceived service quality through good customer service, staff friendliness, and visitor education to achieve a positive bond. Service quality, therefore, has an impact on the consumer experience and affects on-site purchase decisions and post-purchase behavior (Nella and Christou, 2010, p. 7). But the personal experience is not always controllable or predictable. All of these considerations can be a disadvantage in cases of disappointments and the associated negative WOM, lack of loyal customers, and loss of the consumer (Nella and Christou, 2010, p. 6). Therefore, it is important to find a compromise between the productivity of a company and the interests of visitors. In order to decide which objectives to pursue, the management must weigh the potential for profit (Frew, 2008, p. 37).

The following table provides a brief overview of the risks of factory tours.

**Table 3: Risks of Factory Tours**

<b>Topic</b>	<b>Risks</b>
Security	Thefts, risks of spying by business visitors, safety and hygiene concerns
Orientation of the company	Difficult to find the balance between producing (market orientation) and providing factory tours (toursitic orientation)
Production	Employees are influenced in a negative way due to industrial tourism activities on the workplace
Costs	Extra costs e.g., wage costs, investment costs
Experience	Visitors have individual expectations that are difficult to fulfill

(Bregman, 2011, p. 25).

All in all, there are many disadvantages that companies face when offering factory tours. However, further investments or regulations can eliminate some negative aspects. Ultimately, however, companies must decide whether they want to open their doors to the public by prioritizing the advantages while considering the disadvantages mentioned above.

### **1.5.9 Tour Guide**

Even if visitors are not attracted to the services, they use them and they are unavoidable because they influence the overall experience of a factory visit (Lew, 1987, p. 557). In this process, tour guides are the link between the visitors and the core of the attraction and directly influence the perception and expectation of it (Leiper, 1990, p. 378). This section shows the various roles of a tour guide during a factory visit and the required skills a tour guide needs for a successful factory tour.

#### **Technological Expert**

In recent years, the application and enhancement of manufacturing technologies have changed. The importance of changes in equipment and process technology for companies with manufacturing and process operations underlines the importance of current technical knowledge for operating personnel (Ghingold and Johnson, 1997, p. 273). In terms of marketing activities, the technical knowledge that technically adept vendors possess gives companies an advantage over less knowledgeable competitors (Ghingold and Johnson, 1997, p. 272; Mooney, 2018, p. 4). Thus, technical knowledge within the company is a crucial foundation of competitive advantage. Knowledge is distributed throughout the organization and includes a dimension that refers to the knowledge and skills of employees, which result from technical knowledge, training, and experience. It represents an asset that successful companies acquire and leverage for marketing advantage. If there are not many differences in terms of product-related attributes, access to technical knowledge or technological expertise as an intangible resource can represent a significant marketing advantage. Technical knowledge appears to be important as an input and as a potential marketing strength (Ghingold and Johnson, 1997, p. 273). Competent tour guides are also crucial for a successful factory tour, as the technical skills are valued by customers. Technical knowledge is therefore an important and intangible value that can be acquired or shared in the context of relationships with suppliers or customers (Ghingold and Johnson, 1997, p. 272).

## **Personal Contact**

In the B2B context with highly technical products, the customers' choice to purchase advanced capital goods depends less on simple market transactions and is rather characterized by extensive interaction and communication between the customer and the producer. This interactive communication enables customers to gather as much information as possible about the product and to assess the reliability and trustworthiness of the manufacturer (Gertler, 1995, p. 3; Mooney, 2018, p. 4). Good language skills, as well as an empathic approach toward visitors, are required when interacting and communicating with them (Bildat and Schaal, 2013, p. 3). Tour guides offer visitors the opportunity for explicit, hands-on training for the employees of the visited user plant, but they also provide a platform for the exchange of technical and operational knowledge and information (Gertler, 1995, p. 19). Furthermore, it can also allow the user to communicate their technological needs to the manufacturer more easily and clearly, creating the conditions for a meaningful customization of the product to the user's intended application to become more likely. However, to enable customization, users have to give an outside company certain confidential information about their products or production processes. They may be unwilling to do this unless they have built a sufficient level of trust with the manufacturing company through close interaction over an extended period of time (Gertler, 1995, p. 3).

Many users complained about the difficulties that arose when their contact with the manufacturer was exclusively remote. Personal interaction that leads to a close connection needs face-to-face contact (Gertler, 1995, p. 16). Moreover, practical experiences such as factory visits and expert insights are more valuable when shared face-to-face in contrast to a written report (Upton and Macadam, 1997, p. 101). Personal contact with visitors during a factory tour enhances a better supplier relationship. Additionally, face-to-face contact and communication with tour guides during a visit lead to a better and more individualized service (Mooney, 2018, p. 3). Therefore, tour guides have a crucial function during factory visits while keeping personal contact with visitors and functioning as representatives and promoters of the company (Bildat and Schaal, 2013, p. 2).

## **Organizational Skills**

Tour guides need organizational competencies that include planning, organizing, and executing. A further requirement is support and cooperation combined with an empathic approach customers and their needs and interests. This entails service orientation and social and

moderating skills. The next important factor addresses leadership skills, which refer to self-confidence and leading with great enthusiasm. Therefore, tour guides should be able to impart knowledge in an empathic and humorous way to guide guests with great enthusiasm (Bildat and Schaal, 2013, p. 8). The core tasks of tour guides are therefore diverse, as they not only accompany tourist groups, but also organize the entire visit, impart knowledge about factory tours, and provide background information about the attraction. Additionally, it is important to manage group dynamics, as each group is individual (Bildat and Schaal, 2013, p. 2).

In summary, tour guides capture several roles, including providing information, motivating travel, establishing expectations, influencing the selection of activities, or providing souvenirs (Dodd, 1994, p. 18; Leiper, 1990, p. 378). Tour guides are also responsible for safety and convenience issues during the tour (Bildat and Schaal, 2013, p. 2). Therefore, enhancing the education and skills of employees or tour guides who interact with customers can have positive long-term effects for companies (O'Mahony et al., 2006, p. 134).

## **1.6 Theories of Factory Tours**

This chapter presents various underlying models and theories in the literature on factory tours. The following sections present theories that explain the effects of personal characteristics on customer behavior, expectations of a factory visit, or loyalty intentions. In addition, the theories consider other factors that influence customer behavior, such as the intention to visit a factory and customer satisfaction, which lead to loyal behavior.

### **1.6.1 Holland's Theory of Personality Types**

Holland's theory of personality types is an underlying explanation of the general behavior of tourists (Frew, 2000, p. 2). Applied to industrial tourists, the personality types declare the intention of visitors and the reason for their behavior (Frew, 2000, p. 67). This theory groups six personal types of customer characteristics realistic, investigative, artistic, social, enterprising, and conventional. Frew (2000) was able to demonstrate a significant relationship between Holland's personality types and visits to industrial tourism attractions and environments. The personality types include realistic, investigative, artistic, social, enterprising and conventional. The

dominant features of an individual mainly influence their decisions (Frew, 2000, p. 72; Holland, 1985, p. 32). The following table displays an overview of the types.

**Table 4: Holland's Personality Types and Preferred Environments**

<b>Personality Type</b>	<b>Characteristic</b>	<b>Profession</b>	<b>Preferred Environment</b>
<b>Realistic</b>			
Prefer concrete things (money, power, status) Mechanical abilities Lacks social competencies	Asocial, materialistic, uninvolved, persistent	Automotive Engineer, Electrician, Farmer	Interest oriented (Outdoors, rural areas)
<b>Investigative</b>			
Prefer science Maths & scientific abilities Lacks leadership abilities	Analytical, precise, rational, independent, intellectual, critical, complex	Chemist, Mathematics Teacher	Achievement oriented (universities, research labs, medical & computer related facilities)
<b>Artistic</b>			
Prefer aesthetics Artistic & musical abilities	Emotional, unstructured, flexible	Actor, Artist	Artistic oriented (Art Gallery, Museum)
<b>Social</b>			
Prefer social skills Teaching abilities Lacks scientific abilities	Friendly, empathic, helpful, sociable, warm	Social Science Teacher, Librarian	Social Activities (Schools, Meetings, Special Events)
<b>Enterprising</b>			
Prefer economic success Leadership abilities Lacks scientific abilities	Adventurous, ambitious, extroverted, self-confident, optimistic	Contractor, Lawyer, Real Estate Agent	Powerful organisation (independently or large businesses)
<b>Conventional</b>			
Prefer business & economic achievements Numerical abilities	Defensive, inflexible, methodical, unimaginative	Bookkeeper	Attention to detail and accuracy (Models, charts, graphs)

(Frew, 2000, p. 93).

When a realistic person acts in a realistic environment, the result is congruent and positive, including in terms of satisfaction, achievement, or job stability (Holland, 1985, p. 35). Congruent means that interests, competencies, values, or perceptions are similar. If a factory tour or the environment of a company matches the personality type of the visiting customer, the customer perceives the experience as reinforcing and satisfying (Frew, 2000, p. 91; Holland, 1985, p. 49).

Hence, industrial tourism attractions with a congruent environment are interesting for customers with a corresponding personality type. For example, a realistic person is more likely to be interested in attractions with mechanical elements, while the visitation intentions of a person with a social type are relatively uninterested in visiting (Frew, 2000, p. 185). Moreover, a person's visit history predicts their attitude toward a specific industrial tourism attraction (Frew, 2000, p. 197).

A visitor to a factory tour is motivated by his personality type, but satisfaction with the visit depends on the consistency and differentiation of the types (Frew, 2000, p. 73; p. 99). Consistency is the degree of relatedness of personality types within a person (Frew, 2000, p. 70). Differentiation refers to the extent to which a personality structure is defined. Undifferentiated personality types refer to individuals who fit into the six types to the same extent (Frew, 2000, p. 72).

### **1.6.2 Search Escape Theory**

The Search Escape Theory, also called Iso-Ahola's motivation theory, explains the motivation behind tourism. The motivation to travel is a process involving psychological factors such as needs or desires (Snepenger et al., 2006, p. 140). Besides psychological factors, there are also physiological processes that motivate people to participate in tourism or factory tours (Iso-Ahola, 1982, p. 257). Assessing the potential satisfaction of traveling induces the visitor to decide based on two motivational forces: seeking or searching and escaping or avoiding (Iso-Ahola, 1982, p. 259). 'Search' refers to intrinsic incentives such as feelings, while 'escape' refers to leaving familiar environments (Iso-Ahola, 1982, p. 258; Snepenger et al., 2006, p. 141). As far as factory tours are concerned, industrial tourism includes the desire to escape from the daily routine (push factor) and to search for something new outside the normal environment (pull factor) (Snepenger et al., 2006, p. 141).

Different factors influence the search for information about a destination. These include previous experiences with the destination, whether the visit is with a group, family or friends, or

whether the destination is new. Factors influencing product search behavior include the number of available products, time and social pressure, the risk associated with the purchase, previous experiences, the involvement with the product, and demographic variables related to the customer's individuality (Dodd, 1988, p. 78).

To explore the relative importance of the two motivational, a distinction is made between personal and interpersonal dimensions. Escaping from the personal world includes personal problems, difficulties, or failures, while escaping from the interpersonal world comprises colleagues, family, or friends. The search for personal rewards implies feelings, learning, or relaxation. In contrast, seeking interpersonal rewards refers to improving social interaction with employees, or group members at a new destination (Iso-Ahola, 1982, p. 260).

Snepenger et al. (2006) measured the two elements based on four intrinsic motivation dimensions. The items for personal escape are escaping from the normal environment, changing the daily routine, and overcoming a negative mood. Interpersonal escape was measured by avoiding annoying people, escaping from a stressful social environment, and avoiding interactions with others. Personal seeking means telling others about the experience, feeling positive after the experience, and searching new experiences. Interpersonal seeking refers to the fact of being with people with similar interests, with friends or family, and meeting new people (Snepenger et al., 2006, p. 143). Thereby, personal escape and personal seeking have higher rates of change than interpersonal escape or seeking (Snepenger et al., 2006, p. 145). Tourists may visit one reason or start with one factor but end up with another, or even go through all four combinations during their visit (Iso-Ahola, 1982, p. 260).

The relative importance of the two forces and their dimensions for travel impacts the selection of the tourist group as well as the destination (Iso-Ahola, 1982, p. 260). The study reveals that personal escape and seeking motivations have a stronger influence on tourism experiences than recreational experiences. This implies that tourism advertising efforts need to focus on motivating experiences to provide more personal escape and search opportunities than recreational experiences (Snepenger et al., 2006, p. 146).

### **1.6.3 SERVQUAL Model**

Customers evaluate service quality based on various factors that influence their expectations and perceptions of the service provided, such as factory tours. These factors are reliability, which means correct and accurate billing and records, responsiveness, competence, access, courtesy, communication, credibility, security, empathy and tangibles. Responsiveness is the

willingness to help and to make contact in time. Competence refers to the knowledge and skills possessed by the contact person. Moreover, accessibility refers to the availability of the service during convenient hours. Another factor is courtesy, which includes politeness, respect, and friendliness. Communication encompasses information provided and the language used. Credibility means being honest, trusting, and maintaining a good reputation. Security, encompasses both physical safety and financial security. Furthermore, understanding the customer indicates being empathic, individualized, and providing a specific service. Finally, there are tangibles, such as physical facilities or equipment (Parasuraman et al., 1985, p. 47; Parasuraman et al., 1988, p. 23).

Most determinants are experience-based attributes that develop in the context of the provided service and are unknown prior to the purchase decision or experience. Therefore, these service dimensions are intangible, indicating that they cannot be measured, counted, or tested prior to the purchase. Only tangible services can be evaluated prior to the purchase (Parasuraman et al., 1985, p. 48). The production and consumption of many services are inseparable because of the interaction between customers. Hence, service quality is difficult to evaluate because it encompasses the interaction between a customer and elements of the service, such as facilities, the company's image, or personal contacts (Parasuraman et al., 1985, p. 42). Additionally, personal needs and previous experiences have a significant impact on the formation of expectations regarding a service (Parasuraman et al., 1985, p. 48).

In turn, customer expectations regarding the visit or the experience influence, among other things, the level of overall satisfaction with the service during a visit (Nella and Christou, 2010, p. 8). Additionally, service quality also has a direct influence on the degree of overall satisfaction. More specifically, higher evaluations of tangible assets (physical situations), reliability, and contact have a positive effect on the level of satisfaction. Contact, then, encompasses the interaction between employees and customers. It is derived from the SERVQUAL model, which looks at responsiveness, empathy, and security (Nella and Christou, 2010, p. 9).

The service quality at the site has a strong impact on the level of satisfaction with the experience (Nella and Christou, 2014, p. 711). Thus, companies can use SERVQUAL, a reliable and valid multiple-item scale, to understand consumers' service expectations and perceptions and finally to improve their service during a factory tour (Parasuraman et al., 1988, p. 31). Therefore, the importance of interpersonal contact between an industrial company and its customers remains crucial (Parasuraman et al., 1985, p. 42).

#### **1.6.4 Involvement Theory**

Involvement is defined as the personal significance of a product or interest that the consumer perceives as a result of a particular experience. The three factors that have the strongest influence on involvement are situational, product-related, and consumer-related characteristics (Dodd, 1994, p. 32). Certain product characteristics, such as price, brand, product attributes, or product class influence the level of involvement.

The involvement theory indicates that people who experience a product become more brand loyal as they identify themselves with the product, the brand or the interaction with employees firsthand (Mitchell and Orwig, 2002, p. 33). In terms of industrial tourism, factory visits aim to engage visitors with a company or brand and subsequently reach loyalty through the visual presentation of a brand, production process, history, or operation (Mitchell and Orwig, 2002, p. 31). Situational factors such as the weather, the location, or the purchasing situation also influence involvement (Dodd, 1994, p. 35). The direct experience with the product, the company, the brand, or the employees influences the customers' attitude towards it, as they become more involved, committed, and ultimately loyal. This effect is dependent on the quality of the factory tour (Otgaar, 2010, p. 57).

Additionally, visitors can interact with the employees in person and face-to-face and gain insight into quality assurance processes and other internal needs (Mitchell and Orwig, 2002, p. 35). Hence, customer participation in a factory tour leads to the customer identifying with and affiliating with the company (Kelley et al., 1990, p. 327). Thus, factory tours can establish familiarity with the company's production process and products (Mitchell and Orwig, 2002, p. 35).

As factory tours increase engagement with a product or company, this involvement enhances loyalty and improves the brand image (Nella and Christou, 2010, p. 3). Furthermore, personal involvement in production processes intensifies brand and company loyalty and satisfies customers' desire for knowledge (Mitchell et al., 2004, p. 10). Therefore, personal involvement increases brand loyalty on the one hand and enhances promotional efforts of the company through WOM recommendations on the other (Mitchell and Orwig, 2002, p. 31; Mitchell et al., 2004, p. 2).

## 1.7 Current State of Research

This section provides an overview of important literature and existing studies on the impact of factory visits on behavioral and attitudinal loyalty. Thereby, behavioral loyalty encompasses customers' purchase intention, revisitation and repurchase, and recommendation behavior. Attitudinal loyalty includes customer satisfaction and affective commitment to the company. Finally, the relationship between attitudinal and behavioral loyalty is shown. Finally, the role of the tour guide in relation to the effects of factory visits on loyalty behavior is presented.

### 1.7.1 Customer Loyalty

Loyalty to a company, a destination, or a visitor attraction is often an indicator of successful marketing activities in the field of industrial tourism (Dick and Basu, 1994, p. 99; Nowacki, 2013, p. 23). Two types of loyalty can be distinguished: behavioral and attitudinal loyalty. Behavioral loyalty refers to the customers' willingness to repurchase the product or to return and to continue a relationship with the supplier, while attitudinal loyalty is the level of the customers' psychological attachment and attitudinal endorsement towards the supplier (Cater and Cater, 2010, p. 1325).

One advantage of a factory visit for companies is that both the company and the customer benefit in the form of knowledge, affection, and loyalty (O'Mahony et al., 2006, p. 131). Company tours enhance customer loyalty by providing information about the business, the history, quality, or production processes (Otgaar, 2010, p. 57). Exceeding expectations of the visit or quality enhances customer loyalty (Ryu and Han, 2011, p. 608). Participation and exploration are further indicators of customer loyalty (Chen et al., 2008, p. 3).

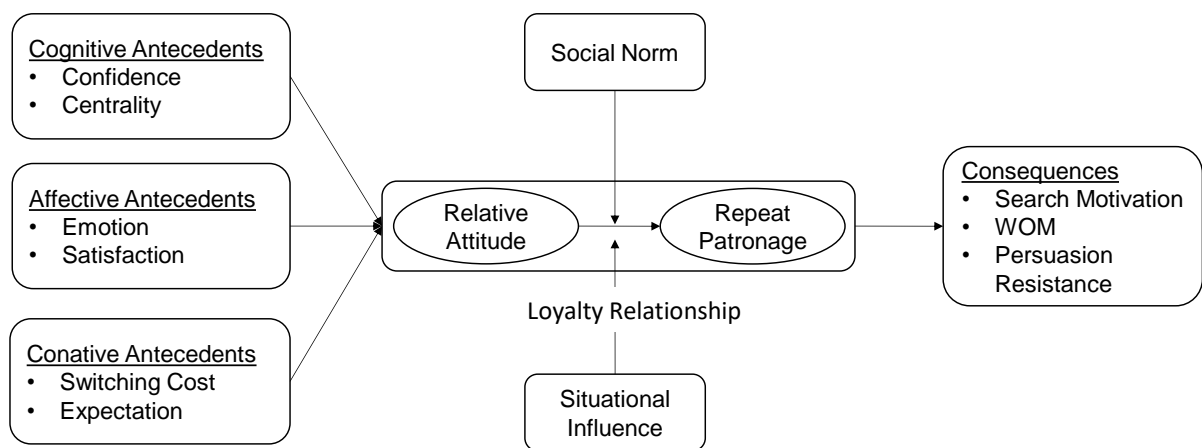
Personal characteristics can influence the loyalty of customers. Younger people are less brand loyal than older people. Younger people tend to search for information, switch brands, and exhibit a weaker link between satisfaction and loyalty, which explains this phenomenon. By contrast, older customers are more brand loyal due to their past investment in specific knowledge. Education also impacts the level of loyalty. People with less education switch brands less often and are more brand loyal (Mittal and Kamakura, 2001, p. 132; Paulssen and Birk, 2007, p. 983).

Benefits of a loyal base of returning visitors include the ability to reduce marketing and operating costs on the one hand and increase sales and visitor numbers on the other. This means that loyal visitors need less information and serve as a source of information for others

(Nowacki, 2013, p. 24). When customers are loyal to a brand, they do not feel the need to search for alternatives (De Figueriedo, 2000, p. 43). Overall, companies with loyal customers develop a strategic competitive advantage (Dick and Basu, 1994, p. 99).

Dick and Basu (1994) distinguished loyalty on a repeat patronage and relative attitude pattern in these loyalty categories: latent loyalty, spurious loyalty, and no loyalty. The following figure displays the relationships of loyalty, i.e., relative attitude and repeat patronage. The antecedents as well as the consequences of the loyalty relationship are also shown.

**Figure 1: A Framework for Customer Loyalty**



(Dick and Basu, 1994, p. 100).

Spurious loyalty encompasses people with high repeat purchasing behavior and low relative attitude, which indicates that the person is hardly aware of segmentation between brands or companies. Customers buy products based on the situation or market conditions, unlike people who have a high level of involvement with the company (Dick and Basu, 1994, p. 101). Latent loyal customers have a high relative attitude toward a company but low repeat patronage due to varying preferences. Loyal customers perceive differences from competing companies and show a high level of repurchase behavior (Dick and Basu, 1994, p. 102).

The cognitive antecedent factors (confidence and centrality) influence the perception of relative attitudes. Confidence is the degree of certainty that consumers have in relation to their purchase decision. This can be improved by providing information. People's value systems can change attitudes towards a brand and ensure loyalty through centrality. To gain loyal

customers, attitudes unrelated to consumers' value systems need to be more convincing (Dick and Basu, 1994, p. 103).

Emotions such as familiarity, environmental conditions, past experiences, moods, or feeling states, and satisfaction are further drivers for loyal customers. Positive emotions, good moods or satisfied customers therefore lead to more loyalty (Dick and Basu, 1994, p. 104).

In addition, conative antecedents, such as switching costs and customers' expectations of a visit or the service provided, have a direct impact on loyalty. Switching costs are a common marketing strategy. These costs arise when a customer switches from one company to another which significantly influence their purchase behavior. Repurchases, i.e. repeat patronage, are also influenced by expectations and customer needs (Dick and Basu, 1994, p. 104).

Relative attitude indicates the association between an object and an evaluation. Repeat patronage describes the repurchasing behavior of customers. Customers who are not loyal have a low level of repeat patronage and a low relative attitude. Spurious loyalty encompasses people with high repurchase behavior and low relative attitude, which indicates that the person is hardly aware of segmentation between brands or companies. Customers buy products based on the situation or market conditions, as opposed to individuals who have a high level of involvement with the company (Dick and Basu, 1994, p. 101). Latent loyal customers have a high relative attitude towards a company, but a low repeat patronage due to different preferences. Loyal customers perceive differences along with a relative attitude, social norms developed in the family or among friends, as well as environmental or situational factors, such as pricing strategies, advertising promotions, or the unavailability of the product, influence repeated patronage (Dick and Basu, 1994, p. 105). The consequences for companies are that they influence the motivation of customers to search for information. When customers have a high level of relative attitude as well as a high level of repeat patronage, the search for information decreases, which is advantageous for companies because customers are generally more loyal. Additionally, both the relative attitude and the repeat patronage leads to positive WOM recommendations from customers to friends, family, or colleagues. Furthermore, customers with a strong commitment to the company are more resistant to attempts by competitors to change their minds about buying certain products or brands, which in turn is an indicator of loyalty behavior (Dick and Basu, 1994, p. 106).

### **1.7.2 Behavioral Effects of Factory Tours**

This chapter deals with repeated customer patronage and purchases after factory visits. Most research connects loyalty to product purchases, which is important not only in a B2C context but also for industrial goods in a B2B context (Dick and Basu, 1994, p. 99). In the literature, the construct customer behavioral loyalty measures the probability that the customer will return, renew the contract, make recommendations, make purchases, or increase patronage (Cater and Cater, 2010, p. 1325). In addition, behavioral loyalty entails customer's willingness to repurchase the product and to continue a relationship with the supplier (Cronin et al., 2000, p. 204).

Behavioral intentions are a similar construct for measuring behavioral loyalty and refer to the ability of companies to get customers to say positive things, recommend it to other consumers, remain loyal by repurchases, make more purchases, and be willing to pay a higher price (Chen et al., 2008, p. 3; Cronin et al., 2000, p. 204; Harrison and Shaw, 2004, p. 25; Lee and Lee, 2013, p. 139; Olsen, 2002, p. 243). For companies offering factory tours, customers' willingness to pay higher entrance fees represents a further important loyalty behavior (Nowacki, 2013, p. 24).

This section is divided into two behavioral attitudes: purchase and repurchase behavior on the one hand and revisit and recommendation behavior on the other.

#### **Purchase and Repurchase Behavior**

Customers' attitudes towards the company influence their purchase decisions, in particular, a positive attitude towards a company significantly enhances product purchases (Dodd, 1994, p. 69). A visit to a factory itself represents the tangible product. Factory tours also include an augmented product that offers the opportunity to purchase the industrial product (Frew, 2008, p. 34). The augmented product entails service or catering besides retailing (Cudny and Horňák, 2016, p. 29; Nowacki, 2013, p. 17). Customers' attitudes towards the company influence their purchase decisions; in particular, a positive attitude towards a company significantly enhances product purchases (Dodd, 1994, p. 69).

Several companies even offer visitors the opportunity to buy products in their own souvenir stores before or directly after a factory tour (Bregman, 2011, p. 11). In the study of O'Mahony et al. (2006) more than half of the visitors of a winery made post purchases directly after the factory visit onsite (O'Mahony et al., 2006, p. 134). Moreover, two-thirds of visitors increased

their product purchases five months after a visit. Accordingly, factory visits in this term winery tours have a positive effect on purchases not only immediately after the experience but also in the following months after the visit. Moreover, the average price of the product purchased increased for almost half of the visitors, indicating another financial benefit for companies offering factory tours (O'Mahony et al., 2006, p. 129).

During a factory visit, environmental attributes (cleanness, displays or attractiveness of the company) significantly influence the purchase behavior of customers (Dodd, 1994, p. 72). Additionally, the quality of the product is a further influential product feature for the purchase intention after a visit (Dodd, 1994, p. 76), while the attractiveness or labels of products are less important for post-purchase behavior (Mitchell, 2006, p. 99).

In addition, service attributes (service, friendliness, knowledge, entertainment, professionalism, credibility) as well as the involvement of customers during the visit were significantly related to purchases (Dodd, 1994, p. 72). The memory of the experience further influences the post-purchases of the manufactured products or the offered service (Mitchell, 2006, p. 100). The memory of the visit as well as the provided service count as influential variables, indicating positive views and high levels of satisfaction with both the product and the experience (including the service) on-site and post-visit (Mitchell, 2006, p. 106). Overall, customers' experiences with the supplier play an important role in their purchase decisions (Chen et al., 2010, p. 1013), more particularly, positive experiences from a factory visit lead to enhanced customer behavior, in this case future purchase intentions (Sun et al., 2022, p. 1314).

Furthermore, visitor characteristics such as age also influence purchases after participating in a company tour. The price of a product affects purchases of younger visitors, since they place more value on price than older people. In addition, older people, in contrast to younger visitors, emphasize more product-related attributes, including taste, quality, environmental, and service attributes. On average, older visitors spend more money on product purchases directly onsite and on purchases per month (Dodd and Bigotte, 1997, p. 49).

Accordingly, factory visits, in this term winery tours, have a positive effect on purchases not only immediately after the experience but also in the following months after the visit. The consumption behavior of customers also influences post-visit purchases. Customers or suppliers who use or replace the products infrequently tend not to buy them after the visit, whereas customers who need them regularly for further production usually make post-visit purchases and buy more per month than they would without the visit (Mitchell, 2006, p. 104).

### Trust and Risks of Purchases

There are also some factors that prevent customers from buying products after the factory visit. One of these reasons is the availability of the location and a lack of knowledge of buying options. Thus, distribution channels are important factors in post-visit purchase decisions (Dodd, 1994, p. 76; Mitchell, 2006, p. 106). Furthermore, trust and security are important determinants for shopping convenience. Consumer privacy concerns negatively influence the buying decision for tangible products and for intangible products such as services. If consumers feel secure and are involved with the product, this has a positive influence on purchase intention for both product types (Lian and Lin, 2008, p. ). Additionally, trust in salespersons or in provided information is a factor that influences customers in their buying decision. A lack of trust can have a detrimental effect on the buying process (Lee and Tan, 2003, p. 883). However, there is a positive relation between trust and perceived value. Perceived value indicates that a consumer is willing to buy a product, a service or a good that is offered at maximum value. This is consistent with the concept of rational consumer behavior, which means they decide based on cost minimization and use maximization (Ba and Pavlou, 2002, p. 255). Thus, trust influences perceived value, which in turn has a positive impact on purchase intentions (Kim et al., 2012, p. 248). Therefore, customers' purchase and repurchase behavior are strongly related to the degree of trust in the product or service (Cohen et al., 2014, p. 888). In addition, consumer privacy concerns negatively influence the buying decision for tangible and for intangible products (i.e., such as services).

A further important factor that influences the buying process of customers is the perceived risk, which indicates the risk a customer has when purchasing a product. Hence, risk plays a major role in the decision to buy a product (Lee and Tan, 2003, p. 883), with each customer perceiving the risk at an individual level, leading to different purchasing behavior (Schoenbachler and Gordon, 2002, p. 47). There is a significant negative correlation between perceived risks and purchase intentions (Chen et al., 2010, p. 1013).

By providing customers with information, this negative relation can be eliminated. The more information is provided, the more likely the consumer is to be willing to buy a product, as more information reduces security concerns and the risk of purchase (Chen et al., 2010, p. 1013).

Consumers perceive the risks during the purchase decision differently for different product categories (Bhatnagar et al., 2000, p. 99). Therefore, different types of products or product attributes influence the buying decision. Regarding the distinction between convenience and specialty goods, convenience goods are products that people buy on a regular basis, like food or cosmetics. This implies that individuals do not require to conduct extensive research before

making a purchase, thereby reducing the associated risks. Because consumers can clearly describe the quality of convenience products, they perceive lower risks in this product category. As perceived lower risk leads to higher trust, this in turn leads to higher purchase intentions. Specialty goods, such as industrial products, imply an individual and unique use for customers, and the purchase expects an after-sales service by sales representatives. Additionally, industrial products require more information due to their complexity and technical features or scope of application. In a B2B context, where industrial products are more complex, customers therefore need more information during their purchase decision, which can be provided by factory tours and a competent tour guide to reduce the risk when buying goods (De Figueriedo, 2000, p. 43).

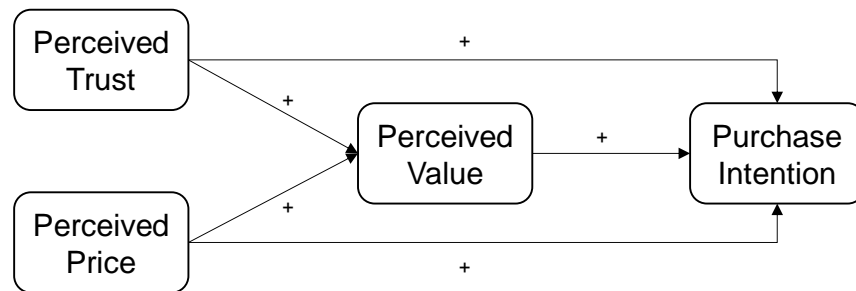
Trust and security are important determinants in the buying process. If consumers feel secure and are involved with the product, this has a positive influence on the purchase intention for both product types (Lian and Lin, 2008, p. 63). In addition, trust also has a direct positive effect on purchase intentions (Kim et al., 2012, p. 247). Trust is an attitude or belief regarding behavioral intentions and is essential for building customer relationships (Cohen et al., 2014, p. 888). Perceived value indicates that a consumer is willing to buy a product or a service that is offered at maximum value. This is consistent with the concept of rational consumer behavior, which states that consumers make their decision on the basis of minimizing costs and maximizing benefits (Ba and Pavlou, 2002, p. 255).

### Price Perception

While the risk of buying complex products is considered higher than that of simple products due to information or service issues, the risk is also higher due to higher prices (Bhatnagar et al., 2000, p. 99). Thus, another important factor influencing purchasing decisions is the price of a product. The perceived price of a product influences perceived values and purchase intentions either directly or indirectly (Kim et al., 2012, p. 243). Perceived high prices for a product have a negative impact on the perceived value and negatively influence purchase intentions (Ba and Pavlou, 2002, p. 255). High prices are associated with a higher level of trust in the supplier due to higher risks (Ba and Pavlou, 2002, p. 255). Lower prices or a secure purchase in turn lead to a lower perceived risk, which has a positive effect on perceived value and purchase intentions (Bhatnagar et al., 2000, p. 100).

The following figure illustrates the direct and indirect relations between the mentioned influences of perceived trust, price perception, and perceived value on purchase intention.

**Figure 2: Influences on Purchase Intention**



(Kim et al., 2012, p. 243).

The price of a product is negatively related to perceived price fairness, which has a positive influence on purchase intention. Furthermore, transparent reasons for pricing have a positive effect on perceived price fairness. In turn, perceived price fairness influences customer satisfaction and loyalty (Han and Ryu, 2009, p. 501). Overall, price fairness positively affects customer satisfaction and thus on attitude towards the products, which in turn directly affects their purchase behavior (Han and Ryu, 2009, p. 502).

### Revisit and Recommendation Behavior

Important loyalty behaviors toward attractions or companies providing factory tours include revisit intentions or positive WOM recommendations from customers (Nowacki, 2013, p. 24). One explanation for revisiting is a person's general interest in that attraction, company or product, if a person keeps visiting the same company (Frew, 2000, p. 193). Another explanation for revisitation encompasses the frequently changing products, such as seasonal product adaptation or offering a greater variety of products. Hence, the revisitation behavior of visitors is based on the purchase of new products and the desire for a new experience (Frew, 2000, p. 193).

Besides new products, further reasons include changes in the production process or even completely new processes, as well as technological changes in modernity and automated

processes. Visitors are interested in technical elements of manufacturing. Furthermore, they want to learn more about the process or, due to time restrictions on the first visit, revisit the site for more detailed insights (Frew, 2000, p. 195).

Another explanation is a person's general interest in that attraction, company or product. For instance, if a person keeps visiting the same company, it can be affiliated to their general interest in the products, brands, or company (Frew, 2000, p. 194). Further drivers for revisitation and for increased purchases are good and positive experiences in the past, indicating a perceived positive attitude as a result of the factory visit (O'Mahony et al., 2006, p. 131). Past experiences influence the attitude toward the company and, in turn, also the duration of the visit and the frequency of visits (Dodd, 1988, p. 89).

Revisiting the company through factory tours influences the purchasing behavior of repeat visitors. Participants who have visited the company more than once made purchases in the six months following the visit, indicating a high degree of loyalty among repeat visitors. The more often customers visit the company per year, the higher the purchases after the visit (Mitchell, 2006, p. 104). Thus, long-term visitors are preferred over short-term visitors, while revisitors are preferred over one-time visitors (Lew, 1987, p. 561).

Furthermore, experiences significantly and positively affect not only revisit behavior but also recommendation behavior (Harrison and Shaw, 2004, p. 30). Positive experiences from a factory visit lead to enhanced customer behavior, in this case to positive WOM (Sun et al., 2022, p. 1314). Thus, a factory tour has a direct impact on strong WOM recommendations to friends and family (O'Mahony et al., 2006, p. 131).

The author Dodd (1988) investigated that WOM is the most important source for information searches (Dodd, 1988, p. 86). People participating in another study said that WOM recommendations were very persuasive during the information search phase for visiting an attraction (Lee, 2015, p. 268). Additionally, perceived services influence the intention to revisit and recommend a company (Harrison and Shaw, 2004, p. 30). As revisitation and recommendation can represent a potential source of income, companies should ensure that they provide good customer service during the visit to encourage repeat visits and positive WOM (Frew, 2000, p. 201).

### 1.7.3 Attitudinal Effects of Factory Tours

Emotions and experiences are closely related concepts, with emotions being a decisive factor for positive experiences, even in B2B. Emotions in B2B are less obvious compared to B2C, but they are still an important aspect. Emotions entail, for example, the appreciation of the visitor by the operating company or communication at eye level. Visitors who associate positive emotions after visiting a B2B experience memorize and understand the information and content provided more easily, which leads to enhanced relationships with the brand and its employees (Österle et al., 2018, p. 84). This section provides an overview of the effects of factory tours on attitudinal loyalty, including satisfaction and affective commitment.

#### Satisfaction

Satisfaction is a central construct of customer attitudinal loyalty. The level of customer satisfaction influences companies in terms of profits, image, and market share (Cohen et al., 2014, p. 888). Snepenger et al. (2006) define satisfaction as a measure of psychological outcomes after an experience (Snepenger et al., 2006, p. 141). Satisfaction is not only a cognitive perspective, emotions also play an important role (Ryu and Han, 2011, p. 602). Tourists' satisfaction is regarded as an attitude or an emotional attachment that emerges after the experience. Another definition of satisfaction states that the emotional reaction follows a positive experience (Harrison and Shaw, 2004, p. 24; Nowacki, 2013, p. 18). With regard to factory visits, definitions of overall satisfaction include the experience after assessing the factory, the production process, and service, or product (Chen et al., 2008, p. 2). Satisfaction is thus formed based on prior expectations and the experience itself (Harrison and Shaw, 2004, p. 24).

According to Nowacki (2013), two main groups of factors determine visitor satisfaction: subject- and object-related factors. Subject-related factors are visitor characteristics such as motives, experiences, or interests, while object-related factors encompass attraction features, such as authentic exhibits, service, or infrastructure. Visitors who have already had a positive experience have more extensive knowledge of the products or production processes, which indicates a higher level of satisfaction compared to other visitors (Nowacki, 2013, p. 121).

The motives of people referring to subject-related factors play an important role in evaluating their expectations and experiences and, finally, their satisfaction after their visit. Thereby, both personal factors and situational characteristics influence the satisfaction of visiting a site. Personal factors are goals and beliefs that prevail prior to the visit. In contrast, situational factors encompass contextual beliefs and situational incentives that can be observed during

the factory tour itself. These motivational factors influence the desired outcome such as satisfaction, achievement, or personal growth (Packer and Ballantyne, 2002, p. 185).

Object-related factors, such as perceived service characteristics, including service quality and interactivity during the visit, significantly influence satisfaction (Chen et al., 2008, p. 7). Interactivity increases positive attitudes, while high service quality meets visitors' expectations and needs. Hence, both factors, interactivity and service quality, enhance customer satisfaction after a visit (Chen et al., 2008, p. 4; Nowacki, 2013, p. 81). The service quality is influenced by the attraction's surroundings, the reception area, the catering and services, and the availability of retailing opportunities and facilities (Nowacki, 2013, p. 30). Perceived quality, as an evaluation of attribute performance, correlates strongly with satisfaction, which reflects the influence of performance on people's emotions. Thus, quality is an indicator to predict consumer's feelings and, in addition, their purchase behavior (Olsen, 2002, p. 242).

Perceived value, defined as the customers' evaluation of the utility of a product or service and the ability to meet their expectations, also significantly affects overall satisfaction (Chen et al., 2008, p. 4). Furthermore, perceived performance that exceeds visitors' expectations leads to higher satisfaction, while negative experiences, conversely, lead to dissatisfaction (Ryu and Han, 2011, p. 602). In turn, satisfaction is a crucial factor for the quality of the visit and for the attraction, which is influenced by the service provided (Nowacki, 2013, p. 18).

### **Affective Commitment**

The customer attitude toward a company is of crucial importance, as it can both enhance and worsen marketing activities (Cohen et al., 2014, p. 884). Positive brand experiences, including positively perceived factory tours, evoke strong emotional responses in customers that can lead to satisfaction or affective commitment (Iglesias et al., 2011, p. 572). Visitor satisfaction is not the only factor to be considered when measuring attitudinal loyalty intentions (Harrison and Shaw, 2004, p. 30).

Affective commitment originates from identification, common values, attachment, and involvement. Affective commitment describes the positive intentions to develop and strengthen a relationship with a company that is based on familiarity, friendship, and trust and is built over time through interpersonal interaction (Cater and Cater, 2010, p. 1322). Affective commitment also refers to an emotional attachment to the company that results from the customer's physical investment in the production process or product (Atakan et al., 2014, p. 400).

Participation in factory tours enhances identification with the company, which in turn influences affective commitment, leading to an increase in positive product evaluations. Beside this indirect path, there is also a direct and positive relationship between participation in the production process and affective commitment of customers with a product or brand (Atakan et al., 2014, p. 401). The more comprehensively customers perceive a brand experience, the higher their affective commitment to this brand (Iglesias et al., 2011, p. 578). Therefore companies should also strategically plan and promote the affective dimension within the overall experience to effectively build loyalty of their customers (Iglesias et al., 2011, p. 580).

In terms of factory tours, several factors influence the relationship between factory tours and affective commitment. While the emotional attachment to a brand or company primarily focuses on intangible phenomena or brands and does not strictly refer to a physical product the quality of a product also positively influences the level of affective commitment (Pedeliento et al., 2016, p. 198). The higher the perceived quality, the higher the affective commitment to the company (Cater and Cater, 2010, p. 1329). Furthermore, affective commitment mediates the relationship between participation in the production process and product evaluation (Atakan et al., 2014, p. 401). Moreover, trust in the company, knowledge transfer and cooperation positively influence the level of affective commitment (Cater and Cater, 2010, p. 1329). Consequently, companies need to focus on employee engagement to the company and the products to create positive experiences and thus increase customers' affective commitment (Iglesias et al., 2011, p. 580). Affective commitment, in turn, has a direct and positive effect on customer loyalty (Rather et al., 2019, p. 213).

#### **1.7.4 Behavioral and Attitudinal Effects of Factory Tours**

This section provides an overview of existing studies that address both behavioral and attitudinal loyalty of factory tours. Thereby, satisfaction and affective commitment are constructs for attitudinal loyalty behavior, while repurchase, recommendation, and revisiting are examples of behavioral loyalty indicators. The influence of service quality on loyalty is also presented.

#### **Tourism Destination Image**

The image of a company differentiates one destination from another, which in turn influences consumer behavior, i.e., the current decision and future intentions to visit a destination (Bigné et al., 2001, p. 607; Elliot et al., 2011, p. 520; O'Brien and Sung, 2004, p. 165). Tourism

destination image (TDI) refers to the perception of potential visitors to a region or destination. Both functional or cognitive factors ( i.e. attractions or facilities, quality, or technology) and psychological or affective factors (i.e., friendliness, trustworthiness, atmosphere) affect consumers' travel and visiting behavior (De Nisco et al., 2015, p. 305). Elliot et al. (2011) investigated that familiarity or experience, thus visitors' knowledge of the destination, or satisfaction of the products positively influence the affective image (Elliot et al., 2011, p. 530). Therefore, experiences have a positive and significant influence on the cognitive and affective dimensions of a destination image for first-time and repeat visitors (Elliot et al., 2011, p. 524). A positive TDI increases the likelihood that tourists will return in the future and recommend the location (Bigné et al., 2001, p. 608). Thus, the TDI plays an essential role in attracting loyal customers (Bigné et al., 2001, p. 613).

Bigné et al. (2001) researched the effects of TDI on tourists' behavior and on the post-consumption evaluation of their stay. Behavior includes the intention to return and the willingness to recommend the destination. The evaluation consists of variables for perceived quality and satisfaction. In addition, the researchers investigated the effects of perceived quality on satisfaction and on behavioral intentions (Bigné et al., 2001, p. 607). In this context, satisfaction is a general judgment and depends on price and previous purchases, while perceived quality involves a specific attribute that can be evaluated without buying the product and is independent of price. Moreover, perceived quality refers to a cognitive, and satisfaction to an affective evaluation of the experience, so both indicate a post-purchase judgment (Bigné et al., 2001, p. 609). The study confirms the positive and direct effects of TDI on perceived quality and on tourists' satisfaction. In addition, perceived quality has a positive influence on tourist satisfaction and a direct positive effect on the intention to return. Thus, the higher the perceived quality of the product, the more likely it is that the visitor will recommend it to others and return in the future (Bigné et al., 2001, p. 609). Furthermore, satisfied tourists of the experience are more likely to return in the future and to recommend it (Bigné et al., 2001, p. 610). Overall, improving the destination's image enhances perceived quality, which affects satisfaction, and this in turn impacts post-purchase behavior, i.e., visitors' intention to return and to recommend the destination in the future (Bigné et al., 2001, p. 613).

De Nisco et al. (2015) measured the intention to revisit a destination after the visit and the intention to repurchase products after the visit by using global measures instead of specific products or destinations. These measures were derived from Cronin et al. (2000), Bigné et al. (2001) and Elliot et al. (2011) (De Nisco et al., 2015, p. 312). The findings show that when customers have a positive view of the destination or a positive experience, they are satisfied and more likely to revisit and recommend to others (De Nisco et al., 2015, p. 306). In addition,

the authors showed that the higher the level of satisfaction is, the more likely it is that customers will revisit, repurchase, and recommend (De Nisco et al., 2015, p. 313). Thus, a TDI resulting from the travel experience affects the relationship between satisfaction and post-visit behavior (De Nisco et al., 2015, p. 314).

Therefore, companies should consider the importance of destination images and actively develop beneficial ones. Furthermore, a company's brand recognition should also focus on positive images of the destination (O'Brien and Sung, 2004, p. 168).

### **Effects of Satisfaction on Loyalty Behavior**

Customer characteristics can influence the relationship between satisfaction and behavioral loyalty (e.g., repurchases). The characteristics include satisfaction thresholds and response bias. Satisfaction thresholds indicate that customers have different levels of tolerance for repurchase or that they consider a next best alternative to repurchase (Mittal and Kamakura, 2001, p. 132). Customers with a low satisfaction threshold are more likely to repurchase than a person with a higher satisfaction threshold and better alternatives (Paulssen and Birk, 2007, p. 984). Another characteristic that influences the relationship between satisfaction and loyalty is response bias, meaning that responses analyzed in a survey may not reflect the actual satisfaction rating (Mittal and Kamakura, 2001, p. 132). Customer characteristics, such as different participation rates in a survey category, can influence response bias in satisfaction ratings. The response bias is higher among women, older people, and those with less education than among men, younger people, or those with more education. Hence, a change in the satisfaction level influences the repurchases of women less than those of men (Mittal and Kamakura, 2001, p. 133; Paulssen and Birk, 2007, p. 984).

In addition to customer characteristics, various company characteristics influence customer satisfaction in a B2B context. In relation to an industry, small companies with a specific demand have fewer alternatives than a larger company with less specified requirements, resulting in lower satisfaction among smaller companies. Higher expectations of a product lead to stricter ratings for manufacturers with high quality. For customers searching for high quality or good service, alternatives are rare, while they are more likely to be available for a medium quality manufacturer because low prices are the predominant search criterion. Customers who purchase from a high-quality manufacturer are therefore more likely to repurchase because their satisfaction is high (Paulssen and Birk, 2007, p. 984). Additionally, there is a positive relationship between satisfaction after consuming or experiencing a product, service, or factory

tour and repurchasing this product or service (Frew, 2000, p. 17). Thus, customer satisfaction has a strong influence on post-purchase behavior, such as repurchases (Chen et al., 2008, p. 1). The more satisfied customers are, the more likely they repurchase and tend to be more loyal (Dick and Basu, 1994, p. 100; Lee and Lee, 2013, p. 144). Thus, there is a positive relationship between customer loyalty, repurchase behavior, and satisfaction (Olsen, 2002, p. 242). In addition to repurchases, overall satisfaction has a positive impact on customer loyalty behavior, such as the willingness to recommend the company to others (Chen et al., 2008, p. 7; Ladhari et al., 2011, p. 120; Ryu and Han, 2011, p. 603). More satisfied customers are more likely to recommend the product to friends and relatives. Furthermore, customers' post-purchase intention is dependent on a positive recommendation (Chen et al., 2008, p. 2). Therefore, overall customer satisfaction leads to post-purchase behavior, including recommendations as well as future purchase intentions (Chen et al., 2008, p. 3).

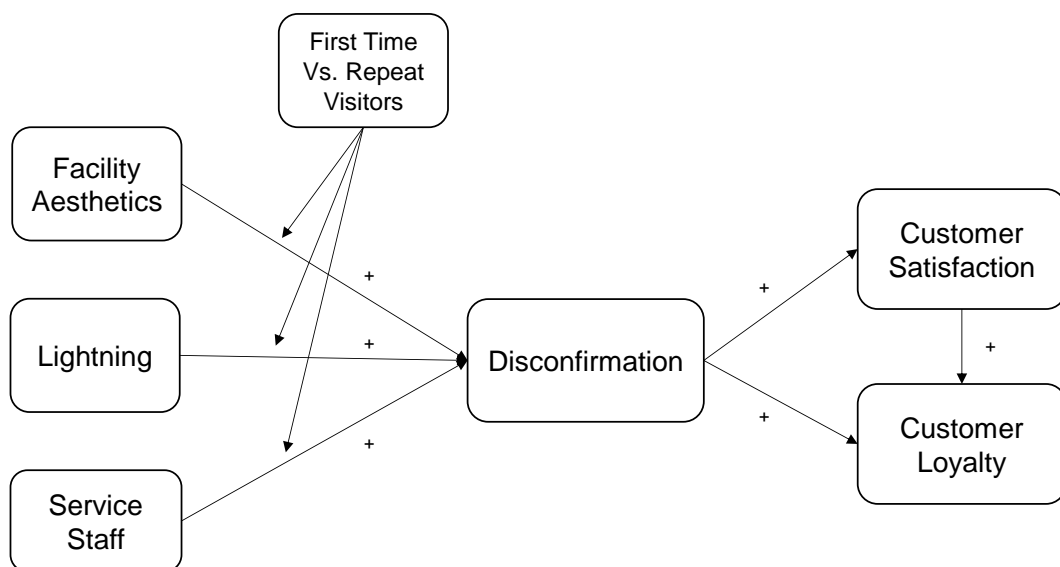
Ryu and Han (2011) researched the effects on customer loyalty and satisfaction and distinguish between first-time and repeat visitors. They include the antecedents of disconfirmation in their study.. The figure below displays these relations. The authors provided empirical evidence of customer loyalty enhancement through physical environments and customer satisfaction in the restaurant industry. The physical environment is an important factor of customer psychology (satisfaction) and behavior (loyalty and WOM). An appealing physical setting, such as the aesthetics of the interior design or lighting, as well as friendly service staff, has a positive and significant influence on customer disconfirmation, with the facility aesthetics having the greatest influence among the factors mentioned (Ryu and Han, 2011, p. 608).

Perceived disconfirmation has a significant impact on customer satisfaction and customer loyalty. Additionally, perceived disconfirmation mediates the relationships between the aesthetics, the staff, the lighting, and customer satisfaction. Furthermore, the results of the study show that the facility aesthetic, the lighting, and the staff significantly influence customer loyalty through perceived disconfirmation and satisfaction. Thus, both perceived disconfirmation and customer satisfaction mediate the effect of these three variables on customer loyalty. Satisfaction, in turn, acts as a mediator in the relationship between disconfirmation and customer loyalty (Ryu and Han, 2011, p. 606).

The results also showed that the direct effect of customer satisfaction on customer loyalty was statistically significant. Satisfied customers remain loyal by repeat usage of the service or product, through positive WOM recommendation, and by spending more money (Ryu and Han, 2011, p. 603). An increase in satisfaction leads to customer loyalty regarding repurchases and price tolerance (Ryu and Han, 2011, p. 606).

Visiting a company or attraction has an influence on revisitation, just as a product's purchase has an influence on repurchasing. The repeat visit or repurchase reflects, to some extent, a loyal customer (Frew, 2000, p. 15). As visiting a touristic destination can be for different reasons, revisiting implies that tourists perceive the destination has met all their needs, including familiarity, relaxation, or personal congruence (Frew, 2000, p. 17). As the physical environment is crucial for satisfaction, a pleasant atmosphere can improve the likelihood of revisiting (Ryu and Han, 2011, p. 608). Therefore, atmosphere is a further key factor in attracting and satisfying customers and improving financial prospects through increased revenue and market share (Ryu and Han, 2011, p. 599). For repeat visitors, the perceived quality of the physical environment was a greater predictor of perceived disconfirmation than for one-time visitors. Consequently, repeat customers establish their perceptions based on the feeling evoked by the atmosphere they experience, such as the facility aesthetics, the lighting, or the service staff. This highlights that repeat visitors tend to create their perceptions of the physical surroundings based on previous experiences, whereas first-time visitors constitute their expectations of the physical environment based on information obtained through WOM or advertising. Thus, first-time visitors have higher expectations of an attraction than repeat customers who are already familiar with the quality of the physical surroundings and have more realistic expectations (Ryu and Han, 2011, p. 608).

**Figure 3: Effects on Customer Satisfaction and Loyalty**

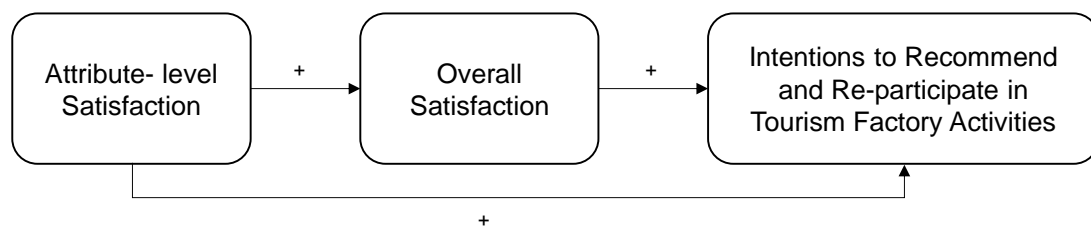


(Ryu and Han, 2011, p. 604).

In industrial tourism, specific attributes of the destination generate a different level of satisfaction among tourists. As factory visits are a complex marketing strategy, different aspects of the destination influence the quality of a factory tour experience and the possibility that visitors will revisit and recommend the company (Otgaar, 2010, p. 57).

Lee (2015) examined the relationships between attribute-level satisfaction, overall satisfaction, and post-visit behavioral intentions for different attributes. The attributes examined were accommodation or food facilities, internal and external accessibility, nearby attractions, provision of safety and emergency systems, information services, on-site attractions and loyalty (Lee, 2015, p. 273). According to the study of Lee (2015), the following model displays the relations between tourist satisfaction, overall satisfaction, and the intention to recommend or re-participate in factory tours.

**Figure 4: Model of Tourist Satisfaction with Factory Tourism Experience**



(Lee, 2015, p. 266).

All the examined attributes have a significant influence but vary in their rankings. The most influential attributes for satisfaction are walkways, accessibility to attractions, and safety and emergency systems, followed by the cleanliness of the site. Attributes with a moderate influence on satisfaction are souvenir shops, visitor centers, entrance fees, or on-site regulations. Less impact on satisfaction is due to dining facilities or parking spaces (Lee, 2015, p. 269). The provision of safety and emergency systems influences overall satisfaction, but not directly the intention to revisit and recommend (Lee, 2015, p. 273). As overall satisfaction impacts the intention to revisit and to recommend, the attributes indirectly influence behavioral intentions. In summary, tourists are more likely to recommend and re-participate in factory tours if they are satisfied with their overall experience. Thereby, the relationship between overall satisfaction and intention to re-participate is greater than the intention to recommend.

Consequently, satisfied tourists are more likely to re-participate in factory tours than to recommend their experiences (Lee, 2015, p. 270).

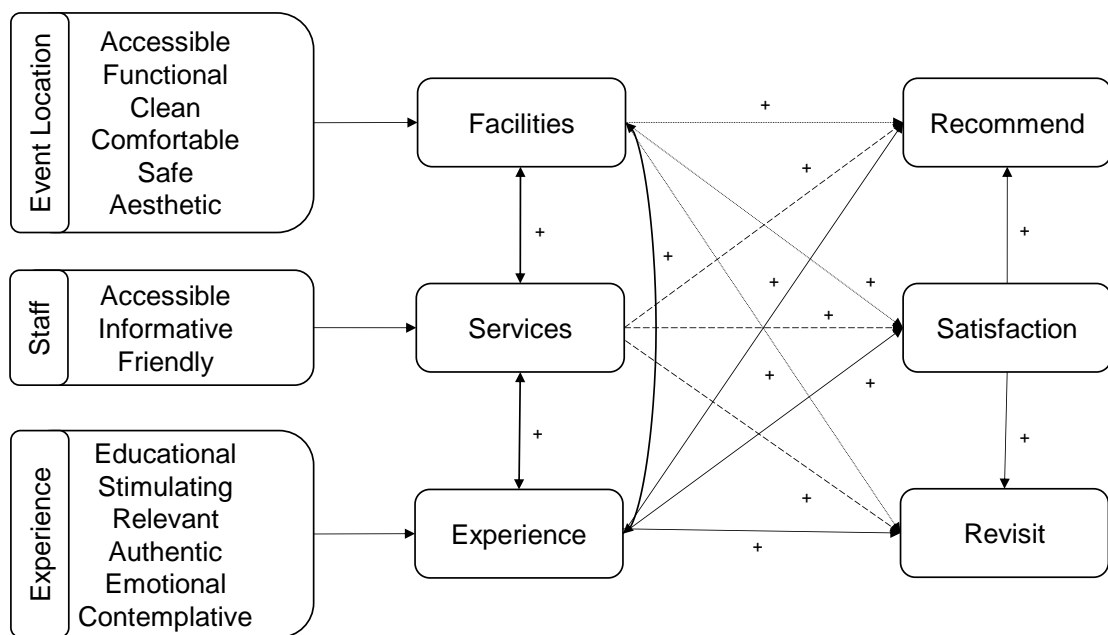
Moreover, researchers found a negative correlation between dissatisfaction with the visit and the intention to recommend it. Accordingly, dissatisfied tourists are more likely to make recommendations than satisfied tourists, which is consistent with the assumption that negative communication spreads faster than positive communication. WOM is also a convincing method of information searching to decide which company to visit. This result emphasizes the relevance of improving tourists' satisfaction with on-site attractions to avoid negative WOM among potential visitors (Lee, 2015, p. 272).

It is imperative that companies offer industrial tourism to improve and enrich their on-site attractions. This indicates an improvement of both their tangible and intangible assets, which leads to positive WOM and customer recommendation behavior. Tangible assets are showrooms; intangible assets are services, the opportunity to observe the production process, and the surrounding experiences (Lee, 2015, p. 273).

Harrison and Shaw (2004) examined the effects of behavioral and attitudinal loyalty, in particular, on satisfaction, recommendations, and revisiting a museum. Museums used to focus on their exhibitions, but today they emphasize consumer needs and satisfaction as a successful marketing strategy (Harrison and Shaw, 2004, p. 23). The first analyzed factor influencing loyalty behavior is facilities, which include cleanness, accessibility, functionality, safety, aesthetics, or comfort. The second factor is services, which include friendly, informative, or accessible staff. The final factor is experiences, which are educational, stimulating, relevant, authentic, contemplative, or emotional (Harrison and Shaw, 2004, p. 27). Providing an experience adds value for visitors and leads to WOM among friends and relatives, playing an important role in the promotional efforts of a company (Coles, 2004, p. 386). According to the expectancy theory, experiences that meet or even exceed customer expectations have a positive impact on visitors' memories (Cohen et al., 2014, p. 884). Additionally, experiences contribute to the level of satisfaction. The provided services also positively influence satisfaction, while the facilities have no influence on loyalty behavior (Harrison and Shaw, 2004, p. 30). More specifically, higher evaluations of tangibles (physical product), and intangibles (service and experience), positively enhance the level of satisfaction (Nella and Christou, 2010, p. 9). This in turn confirms a significant positive relationship between satisfaction and the intention to return and recommend. Thus, the visitors' experience influences satisfaction, leading to either revisiting behavior or WOM recommendation (Harrison and Shaw, 2004, p. 23). Loyal behavior is not

only the result of satisfaction with one aspect but of overall satisfaction with the experience (Harrison and Shaw, 2004, p. 24). Experiences and services are stronger indicators of loyalty behavior than satisfaction (Harrison and Shaw, 2004, p. 29). The following figure displays the relationships between these variables.

**Figure 5: Conceptual Model of the Relationship Among Service Elements, Satisfaction and Future Behavior Intentions**



(Harrison and Shaw, 2004, p. 27).

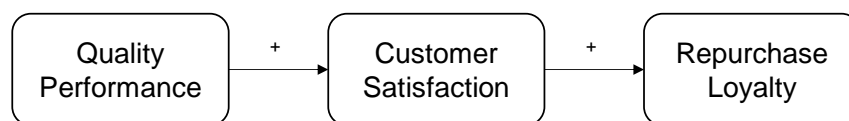
### Effects of Service quality on Loyalty Behavior

Perceived service quality is a key factor in loyalty behavior and refers to customers' judgment of a service after comparing the experience with their own expectations (Ladhari et al., 2011, p. 114). Parasuraman et al. (1988) clustered perceived service quality into five dimensions. The first is the tangible dimension, which entails the appearance of a company's physical facilities, equipment, and personnel. The second dimension is reliability, which indicates the ability to properly deliver the promised service. Responsiveness, i.e., the willingness to help customers as part of the service, is the next dimension, followed by the assurance dimension,

which includes the knowledge of employees and the ability to inspire confidence. The last dimension is empathy, which means that the company or employees pay individual attention to their customers and interact in a friendly manner (Parasuraman et al., 1988, p. 23). All five dimensions have a direct and positive influence on perceived service quality. Perceived service quality, in turn, has a positive and direct influence on the willingness to recommend the company to others, thus on customer loyalty (Ladhari et al., 2011, p. 120).

The customer satisfaction loyalty model states that quality performance influences customer loyalty indirectly through satisfaction (Olsen, 2002, p. 242). Repurchase loyalty is measured by repeat purchase behavior and attitude towards the product, with repeat purchases having a greater influence on loyalty than attitude (Olsen, 2002, p. 247). The relation between satisfaction and customer loyalty, in this case repurchase behavior, is positive and independent of the type of product (Olsen, 2002, p. 244). All in all, the more satisfied customers are, the more loyal they become and the higher the repurchase loyalty is (Dick and Basu, 1994, p. 100; Lee and Lee, 2013, p. 144). Loyal customers can lead to higher sales of the company's products or services. Whether a factory tour is successful or not depends on several factors. An effective way to positively impact brand attachment is excellent customer service, friendly staff, and customer education. The relationship between quality performance and loyalty is lower than between satisfaction and loyalty, as satisfaction acts as a mediator of the relationship between quality and loyalty (Olsen, 2002, p. 242). The following figure shows these relations.

**Figure 6: Satisfaction- Loyalty Model**



(Olsen, 2002, p. 242).

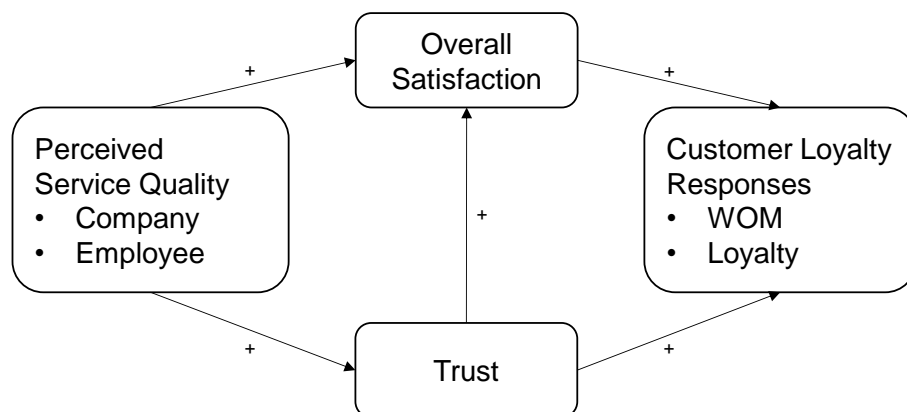
Chiou et al. (2002) studied the effects of service quality, trust, and satisfaction on loyalty behavior. Perceived service quality measures cognitive evaluations of the company (operating hours, accessibility) and the employees (speed, courtesy). Trust indicates that the company is reliable, competent, and trustworthy. Satisfaction relates to overall experiences and not to a one-time transaction (Chiou et al., 2002, p. 114). Loyalty responses represent customer

attachment to the company, measured in terms of WOM and loyalty (Chiou et al., 2002, p. 115). WOM includes positive recommendations and encouraging friends or relatives to do business with the company. Loyalty involves choosing the company first and continuing to do business with it in the future (Chiou et al., 2002, p. 118).

The authors confirmed the positive effect of perceived service quality (factors of the company and its employees) on customers' overall satisfaction and trust in the service provider (Chiou et al., 2002, p. 119). A positive attitude toward perceived service quality therefore leads to higher trust in the company (Chiou et al., 2002, p. 115). Trust in the company positively affects overall satisfaction (Chiou et al., 2002, p. 120). Long-term relationships have a positive influence on overall satisfaction due to trust and social benefits. This effect results from reduced anxiety and lower risks, as well as the knowledge of what to expect (Chiou et al., 2002, p. 115).

Customer loyalty is therefore a result of trust. Satisfied customers are more likely to repurchase the same product or service, to resist the competition, and to create positive WOM recommendations. Finally, trust and overall satisfaction with the service provider positively impact the loyalty responses of WOM and repurchase intentions (Chiou et al., 2002, p. 116). Indeed, quality has an indirect influence on repurchase behavior through satisfaction (Olsen, 2002, p. 242). Figure 7 displays the model and the assumed relations.

**Figure 7: Conceptual Model of the Relationship between Service Quality, Overall Satisfaction, Trust and Customer Loyalty**



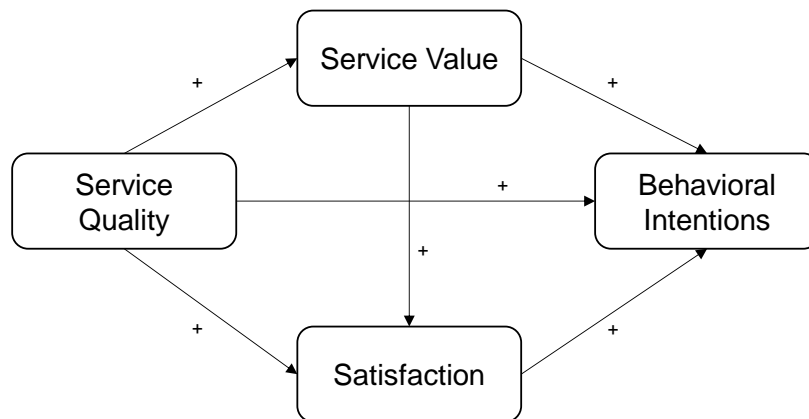
(Chiou et al., 2002, p. 114).

Furthermore, Chiou et al. (2002) examined the moderating effect of customer knowledge on the relationships between perceived service quality, trust, satisfaction and customer loyalty. Regardless of the customers' level of knowledge, service quality attributes such as physical facilities or the responsiveness and empathy of employees are important for building trust and satisfaction (Chiou et al., 2002, p. 116). Customers with low knowledge rely more on the quality of the service than customers with high knowledge, as they are not able to assess the performance and are influenced by the advice they receive (Chiou et al., 2002, p. 117). Trust also positively and directly affects WOM recommendations for both low- and high-knowledge customers, but the relationship is weaker for low-knowledge than for high-knowledge levels. Furthermore, trust has a positive effect on loyalty with regard to repurchase intention, but only for customers with a high level of knowledge. Thus, customers with a high level of knowledge are more sensitive to levels of trust compared to customers with a low level of knowledge. Therefore, the influence of trust on loyalty rises with increasing knowledge. A higher level of knowledge has a positive effect on the relationship between trust, satisfaction and loyalty. However, the relationship between overall satisfaction and loyalty is independent of the visitors' knowledge level. Therefore, satisfied customers are more likely to engage in loyalty behavior regardless of their knowledge level. All in all, service quality related to employee-related factors has a greater influence on trust and satisfaction in both knowledge groups than service quality concerning company-related factors (Chiou et al., 2002, p. 120).

Cronin et al. (2000) researched the effects of satisfaction, service quality, and service value on behavioral intentions in different service industries, including sports, entertainment, healthcare, long-distance carriers, and fast food (Cronin et al., 2000, p. 199). Perceived value comprises customers' overall assessment of the convenience and perception of a product (Cronin et al., 2000, p. 204). The construct for behavioral intentions entails three items: the probability to revisit or reuse the service, to recommend the service provided to a friend, and finally to make the same choice again, i.e., to repurchase (Cronin et al., 2000, p. 213). The relationship between service value and behavioral intentions is significant for all industries. Satisfaction directly influences behavioral intentions in five industries, except for healthcare organizations. Service quality directly impacts consumers' behavioral intentions in four of the six industries, with the exception of healthcare and long-distance carriers. The indirect relationship between service quality and behavioral intentions via service value and satisfaction is significant in all six industries. In five of the six industries, except for healthcare, there is a significant indirect relationship between service value on behavioral intentions via satisfaction (Cronin et al., 2000, p. 207).

The following figure displays the conceptual model.

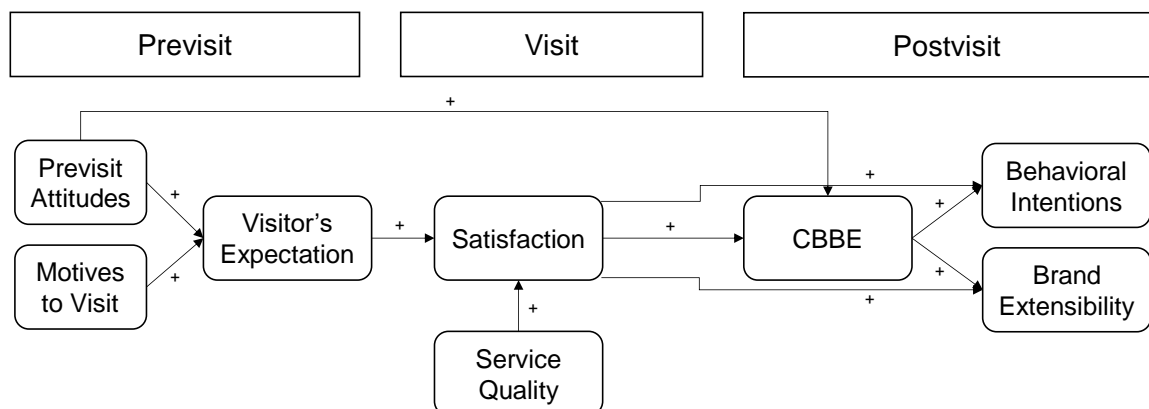
**Figure 8: Relationship between Service Quality and Behavioral Intentions**



(Cronin et al., 2000, p. 207).

Nella and Christou (2014) examined the effects of satisfaction and service quality in the wine industry on brand equity and behavioral intentions after the visit. The following figure presents the conceptual model.

**Figure 9: Conceptual Model Service Quality and Brand Equity**



(Nella and Christou, 2014, p. 12; Nella and Christou, 2010, p. 10).

Customers' motives to visit and their previsit attitudes towards a company influence their expectations of the experience. Both are generated before a customer visits the company. The main motives for a visit are to gather information about specific products, make purchases, taste the product, or experience the atmosphere, the company facilities or the production area (Nella and Christou, 2014, p. 709). Previsit attitudes are developed through personal needs and previous experiences, which significantly influence visitors' expectations of a service or visit. Visitors' expectations of the visit impact their overall satisfaction with the visit and previous experiences (Nella and Christou, 2010, p. 8). During the visit, the service quality on site has a direct influence on satisfaction with the experience (Nella and Christou, 2010, p. 9). Service quality includes staff knowledge, helpfulness, individual attention, understanding of visitors' needs, and solving customer problems (Nella and Christou, 2014, p. 711).

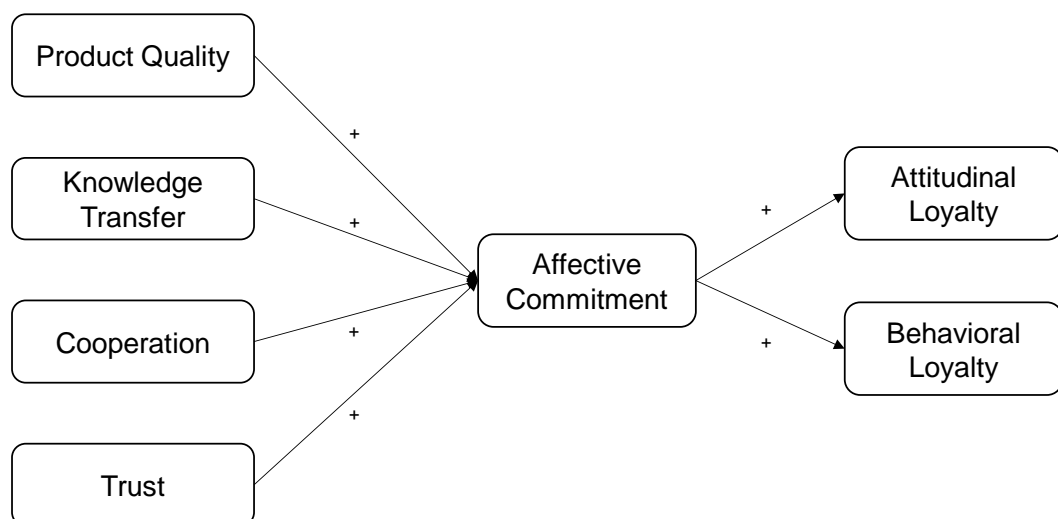
Positive previsit attitudes towards the company and its brands also directly enhance consumer-based brand equity (CBBE) for a given level of satisfaction from the experience (Nella and Christou, 2014, p. 706). CBBE and behavioral intentions as well as brand extensibility result after the customer has experienced the visit. The higher the level of satisfaction with the experience, the higher the level of CBBE. Additionally, satisfaction positively influences behavioral intentions by increasing positive WOM and revisit intention, with CBBE strongly mediating these relations. Furthermore, CBBE directly influences behavioral intentions and brand extensibility (Nella and Christou, 2014, p. 706). Higher levels of CBBE lead to more price-flexible customers and positive brand extension (Nella and Christou, 2010, p. 10). Therefore, experiences, and thus factory visits, influence the building of brand equity through service quality and visitor satisfaction (Nella and Christou, 2014, p. 713).

### **Effects of Affective Commitment on Loyalty Behavior**

In industrial marketing, the company's ability to create emotional bonds with customers is an important and challenging marketing strategy, because strong customer bonds generate brand loyalty (Pedeliento et al., 2016, p. 198). Rather et al. (2019) indicate that affective commitment is a crucial predictor of loyalty, established through the development of emotional bonds with customers. Customers with greater affective commitment to a company consider that company their first choice and recommend it to others (Rather et al., 2019, p. 213). As feelings of attachment and identification with the brand or company contribute to a strong relationship between the customer and the brand or company, these feelings have a direct impact on customer loyalty (Evanschitzky et al., 2006, p. 1209).

The two constructs, affective commitment and loyalty, are related but distinct, and moreover, affective commitment is an antecedent to loyalty. Reflecting the difference, Cater and Cater (2010) define affective commitment as a motive and attitude to continue a relationship, while loyalty is a mixture of attitude and behavior, often defined as repeat patronage (Cater and Cater, 2010, p. 1325). Customers' perceived product quality, knowledge transfer, cooperation during the visit, and finally trust in the company or the contact employee are all antecedents of affective commitment and thus influence level of affective commitment that customers have after visiting a company. Affective commitment in turn positively influences both attitudinal and behavioral loyalty (Cater and Cater, 2010, p. 1329). The following figure illustrates the corresponding model.

**Figure 10: Antecedents and Consequences of Affective Commitment in B2B Relationships**



(Cater and Cater, 2010, p. 1329).

Furthermore, the emotional attachment that comes with affective commitment leads to strong customer attitudinal loyalty in a B2B relationship in manufacturing (Cater and Cater, 2010, p. 1325). Thereby, emotional attachment to a brand or company focuses on intangible phenomena or brands and does not refer to a physical product. Brand attachment also includes different product variants or product categories for the same brand. Thus, an individual can develop an emotional attachment to a brand, which can influence emotional reactions to the entire range of products of the same brand, regardless of previous product experiences (Pedeliento

et al., 2016, p. 198). Besides purchase behavior, the identification that the customer feels toward the brand or company often leads to positive feelings that are communicated to others about the respective organization (Cater and Cater, 2010, p. 1325). Thus, the attachment to a brand or company positively influences customers behavioral loyalty in terms of purchase and recommendation behavior (Pedeliento et al., 2016, p. 202). Overall, the degree of affective commitment has a positive effect on both the degree of attitudinal loyalty and on the degree of behavioral loyalty (Cater and Cater, 2010, p. 1329).

### **1.7.5 Tour Guide**

Tour guides play a crucial role in factory visits, as they maintain personal contact with visitors and act as representatives and promoters of the company (Bildat and Schaal, 2013, p. 2). In addition, tour guides represent an indispensable service that influences the overall customer experience of a factory visit (Lew, 1987, p. 557). Direct personal experiences during factory tours offer the opportunity to touch and test products, experience the production process, interact with company's employees, or create experiential marketing activities. These experiences in turn lead to a deeper impression of the visitor about products or processes and create more knowledge than information materials (Österle et al., 2018, p. 84).

Visitors' search for information is one of the strongest indicators of true psychological attachment to the product or company, with customers wanting to learn about the company itself, the products, or the production processes. Searching for information about a product or brand can result in a company visit, where sales representatives, tour guides or employees are an expected source of further information, (O'Mahony et al., 2006, p. 134). Information is not only searched by customers but is also provided by tour guides. For example, enhancing the technical quality of visitors by providing information or networking opportunities in advance can lead to more accurate expectations and thus to greater satisfaction. Therefore, the exchange of information by employees or tour guides has a significant influence on customer behavior (Kelley et al., 1990, p. 319).

For marketing activities, this means that these respondents seek information about products and are receptive to the marketing message if the promotional material or the factory visit is informative, which is then considered in customers' purchase decision. The more involved and informed customers are, the higher their level of education, and, in turn, the higher their purchases (O'Mahony et al., 2006, p. 134).

The role of the tour guides is not just to provide information. Visitors ranked friendliness, overall service, and knowledge as important indicators of tour guides' performance during and after a visit (O'Mahony et al., 2006, p. 131). As company employees can have a significant influence on customer loyalty, especially on the purchase, the employees should be trained or receive guidelines to fulfil customers' needs during the visit. Tour guides should therefore have experience and expertise in their own products or production processes, where knowledge and interaction are an important prerequisite for meeting visitors' expectations (O'Mahony et al., 2006, p. 134).

During a company visit, customers compare their expectations of service quality and their tour guides with their previous perceptions of the service provided. The results influence the level of satisfaction of the customers and their post-visit behavior (Kelley et al., 1990, p. 319). Reliability and the interaction between staff and customers positively enhance the level of satisfaction. Contact mainly encompasses the interaction between staff and customers and is derived from the SERVQUAL model, which includes responsiveness, empathy, and assurance dimensions (Nella and Christou, 2010, p. 9). The ability of employees to interact with customers by behaving empathically or dominantly is positively related to enhanced sales, interpersonal, and technical skills (Rentz et al., 2002, p. 20).

Österle et al. (2018) found that when operating companies that offer interactive product experiences facilitate knowledge transfer. This type of knowledge transfer involves the creation of knowledge through the transformation of experience (Österle et al., 2018, p. 84). Beside information trading, a positive encounter with employees during the tour increases the visitors' involvement with the company or brand (Österle et al., 2018, p. 74).

Further aspects of a positive factory tour experience are that visitors with an interest in technology are emotionally attached, entertained, or enthusiastic when they can interact and get involved during the production tour. Interaction with employees, in this case with the tour guide, can therefore lead to positive emotional responses if the factory tour meets the visitor's expectations, if the tour guide is sympathetic and professional, or if the content provided is relevant to the visitor (Österle et al., 2018, p. 84).

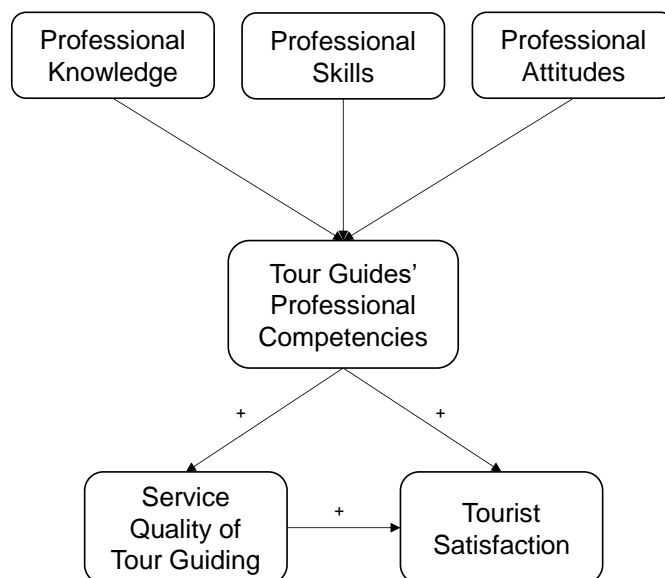
Otto and Ritchie (1996) investigated the effects of satisfaction with the service experience in various tourism industries. The individual cognitions and feelings of the visitor in relation to the experience are important (Otto and Ritchie, 1996, p. 166). Interpersonal connections are an emotional process that influences the evaluation of an experience; thus, a tour guide is of crucial evidence (Otto and Ritchie, 1996, p. 168). Visitors ranked involvement, referring to the production or service process of the company, and being educated and informed by company

employees, as an important indicator of a positive service experience. Moreover, the tour guide's consideration of visitors' feelings of importance and self-confidence is evident (Otto and Ritchie, 1996, p. 170).

Lin et al. (2017) examined important characteristics of tour guides profession on service quality and tourist satisfaction. Tour guides are crucial for factory tours because customer-perceived services are mainly influenced by the professional competencies of the tour guides (Lin et al., 2017, p. 4). Professional competencies include knowledge, skills, and attitudes, with skills being the most important dimension of tour guides' competencies (Lin et al., 2017, p. 13). Service quality consists of both technical (knowledge, information, technical equipment used, or technical solutions implemented) and functional qualities (interpersonal contribution, friendliness, and respect) (Kelley et al., 1990, p. 317).

The authors found a significant positive relationship between tourists' satisfaction, professional competencies, and the service quality of tour guides (Lin et al., 2017, p. 12). The figure below displays these relationships.

**Figure 11: Tour Guide' Professional Competencies**



(Lin et al., 2017, p. 6).

Service quality, in particular friendliness, was the most important criterion for respondents to visit (O'Brien and Sung, 2004, p. 167). Customers value technical skills, which makes

competent tour guides crucial for a successful factory tour (Ghingold and Johnson, 1997, p. 272). The technical knowledge of employees is therefore a strong predictor of behavioral loyalty. Highly competent and technically knowledgeable tour guides can provide more detailed and systematic information, which in turn reduces uncertainty in the customers' buying process and long-term decision-making (Ghingold and Johnson, 1997, p. 276). Higher levels of technical and functional quality are necessary for companies to achieve higher levels of service quality and loyal customers (Kelley et al., 1990, p. 327).

More frequent communication between the salesperson and the customer facilitates the salesperson to develop a deeper understanding of the customer's needs. Moreover, frequent communication reduces the possibility of coercion and enhances the perception of communication quality. Finally, it helps both to identify common ground. All these factors contribute to achieving positive results in the relationship (Hossain and Chonko, 2018, p. 224).

The relationship enhancing role of frequency of communication is more pronounced in customers' interactions with individual salespeople than in their interaction with the company. Personal interactions enable the salesperson to determine the ideal frequency, as more frequent communication fosters bilateral understanding. However, communicating too frequently can be a disadvantage, as it can lead to an overload of information and annoyed customers. These negative consequences can be reduced by personal interaction with a salesperson rather than with information provided directly by the company (Hossain and Chonko, 2018, p. 224).

More frequent communication therefore has a positive effect on customer loyalty towards the salesperson but has no impact on customer loyalty towards the company (Hossain and Chonko, 2018, p. 227). In addition to the exchange of information, bidirectional communication, i.e., two-way communication between companies or salespersons and customers, has a positive effect on loyalty to the personal contact and the company. Therefore, stronger bidirectional communication has a positive influence on customer loyalty, as it increases the degree of knowledge transfer and mutual trust (Hossain and Chonko, 2018, p. 224).

In addition to these results, loyalty to a company has a significant positive impact on the company's performance (Hossain and Chonko, 2018, p. 227).

## 1.8 Conclusion

The summarized literature on industrial tourism, especially factory tours, has several advantages. Besides the improved image and financial benefits, loyalty behavior is also enhanced. Behavioral loyalty leads to further purchases or recommendations, while attitudinal loyalty strengthens the customer-company relationships. Nevertheless, there are also disadvantages to industrial tourism, for example, additional costs, possible downtime of production, and security and espionage concerns. For manufacturing companies in a B2B context, it is therefore difficult to find a balance between production (market orientation) and providing factory tours (tourism orientation).

### 1.8.1 Contributions to Theory

The paper provides evidence regarding the effects of factory tours on loyalty behavior. Some authors (e.g., Chen and Morrison, 2004; Österle et al., 2018) have already recognized the importance of factory tours for improved purchase behavior, brand image, product promotion opportunities, and the use of experiential marketing techniques (Mitchell, 2006; Nella and Christou, 2010).

The paper contributes to the literature by distinguishing between consumer and industrial tourism. Furthermore, the effects of factory visits on loyalty are presented. While existing research has shown that factory tours are beneficial for companies because they enhance brand loyalty, factory visits are advantageous for both attitudinal and behavioral loyalty. Thereby, factory tours positively influence attitudinal loyalty by increasing attachment to the company and behavioral loyalty by encouraging purchase and recommendation behavior. In addition, factory tours positively impact satisfaction and affective commitment.

Therefore, visiting a company can have many positive effects, but there is little research in a B2B context about the impact on attitudinal loyalty (Nella and Christou, 2010, p. 4) as well as on behavioral loyalty (Richards, 2002, p. 1058).

In addition, the paper contributes by considering the role of the tour guide. For B2C settings, there are several authors and literature concerning factory visits, but customer relations in a B2B setting face different challenges due to more complex products and different reasons for customer visits. Some authors (Bildat and Schaal, 2013; Dolen et al., 2002) found positive effects of tour guide characteristics or customer interactions with contact employees on

customer satisfaction in a B2C environment. Again, no literature deals with the influence of tour guides in a B2B industry.

### **1.8.2 Managerial Implications**

Companies can benefit from factory tours by generating financial sales from visitors. Thus, marketers should focus on promoting their company as a visitor destination (O'Mahony et al., 2006, p. 134) to maximize the financial benefits of these tours in the form of future purchases or direct sales on site.

Furthermore, hosting visitors is not only a potential source of revenue but also an opportunity to communicate with stakeholders (Frew, 2000, p. 200; Mitchell et al., 2004, p. 9). For companies, factory tours can be a strategic marketing tool to improve transparency and CSR measures (Otgaar, 2010, p. 63). For customers, transparency indicates trust, which reduces risk in purchasing processes or business decisions. Companies can therefore use factory tours as a marketing strategy and take advantage of these benefits to build a trusting relationship with customers.

Company tours not only provide companies with advantages, threats and risks should also be considered. The disadvantages show the other side of industrial tourism that companies have to deal with. In addition to security and safety issues, companies must protect their knowledge and process development from espionage. The possible negative impact on their own employees and the risks that can arise from this also pose a challenge for managers when making decisions.

Thereby, the company shifts their focus from a non-tourism-oriented manufacturing company to a company providing industrial tourism. Overall, if the company succeeds in finding the right balance between market orientation and tourism orientation of the business activity or between production and reception of visitors, the offer of industrial tourism activities can represent added value. This depends on the industry, location, and size of the company (Bregman, 2011, p. 25).

The following table displays a short overview of opportunities and risks for companies offering factory tours, as outlined by Bregman (2011).

**Table 5: Opportunities and Threats of Industrial Tourism for Companies**

<b>Opportunities of Industrial Tourism</b>	<b>Threats of Industrial Tourism</b>
Opportunity of extra benefits	Safety Risks
Marketing tool	Risks of spying by business visitors
Enhancement of the attractiveness as a potential employer	Difficult to find the balance between market and touristic orientation
Enthusiastic employees becoming more proud of their work due to industrial tourism	Risk of negative influence on employees are negatively influenced due to industrial tourism activities on the workplace
Industrial tourism has a positive effect on the perception of a company in terms of CSR and PR	Extra costs like wage costs or investment costs for organizing company tours

(Bregman, 2011, p. 25).

The summarized advantages and disadvantages show both sides of factory tours as a possible marketing strategy. Managers are therefore faced with the choice of either offering tours and reaping the benefits or deciding for a non-tourist destination and protecting their company from the dangers that industrial tourism can bring.

### **1.8.3 Limitations and Future Research**

This paper presents the topic of industrial tourism in a B2C and B2B context. Furthermore, it also summarizes the advantages and disadvantages to help companies decide whether they should offer guided tours. Additionally, various theories and models on the topic of factory tours are presented. This research shows the importance of distinguishing between different characteristics of the customers visiting the company. Furthermore, the research highlights the

different effects of the visit on customer satisfaction or customer involvement. Factory tours influence customer behavior and their loyalty to the company. Based on these theories, future research should therefore analyze the effects of factory tours on the individual success of the visit.

Some authors (Bildat and Schaal, 2013; Dolen et al., 2002) found positive effects of tour guide attributes or interaction with contact employees on customer satisfaction in a B2C setting. Customer involvement and personal interaction are important drivers for loyalty and should also be considered in further research in a B2B context. Therefore, research on factory tours in an industrial environment should provide deeper insights into the advantages and benefits for companies that open their site to visitors.

Finally, the effects of factory tours on customer loyalty behavior and the role of the tour guide in a B2B context should be further investigated. Thereby, a distinction should be made between behavioral and attitudinal loyalty among customers.

This paper also introduces costs as a negative consequence of factory tours. Further research should therefore focus on these costs in a real-world setting in a B2B company. A deeper insight into the costs and benefits of companies offering factory tours should provide managers with a more nuanced basis for deciding whether the opportunities outweigh the disadvantages of factory tours. Further studies should also examine the short- and long-term effects of factory tours.

## **2. Paper 2: “Come and Visit Us!”: The Effects of Factory Tours on Customer Loyalty**

### **2.1 Abstract**

As part of B2B manufacturers effort to attract and retain customers, companies regularly invite them for factory tours. Despite its widespread use, however, there is little research on the economic consequences and the underlying perceptual processes. This paper presents the results of two studies conducted in collaboration with an industrial manufacturer that provide detailed analyses of the effects of factory tours on customer loyalty. Based on an analysis of sales data from 23 years, the paper shows customer participation in a factory tour leads to an increase in revenue. A second study examines the mediating role of attitudinal loyalty as well as customers' perceptions of the tour guide. The results confirm the positive effects of factory tour participation on behavioral loyalty (i.e., purchases) and attitudinal loyalty (i.e., affective commitment). Moreover, the paper shows evidence for the effects of the tour guides' perceived competence on customers' loyalty.

## **Additional Notes**

- The following publication is based on this dissertation paper:

Schaefers, T.; Hülsebusch, D;. and Cziehso, G. (2025). "Come and visit us!": The effects of factory tour participation on customers, *Industrial Marketing Management*, (125) 169-178, DOI: 10.1016/j.indmarman.2025.01.004, (VHB3 Ranking: B).

- An earlier version of this paper was presented at the 7th Industrial Marketing Management (IMM) Summits, Leeds, GB, January 2024.

## 2.2 Introduction

B2B purchasing processes often involve some form of personal contact between the manufacturer and the customer, as products are more complex and technical compared to B2C products and therefore need more intensive personal interaction and consulting (Österle et al., 2018, p. 72). A very common way to facilitate this personal interaction with existing and potential customers is through factory tours, which can be understood as organized tours through the production of a company (Chen and Morrison, 2004, p. 119; Upton and Macadam, 1997, p. 98). Factory tours are often led by tour guides, who can be current or retired employees as well as professionally trained guides. These visits give representatives of B2B customers an intimate insight into the inner workings of their suppliers. Manufacturers use these personal experiences at the production site to establish or intensify business relationships (Österle et al., 2018, p. 84).

Factory tours provide opportunities for the exchange of information, especially when contact and exchange between customer and producer are challenging at a distance (Gertler, 1995, p. 16; Goodson, 2002, p. 7). In contrast to traditional meetings or (video) calls, factory tours allow customers to experience a production process or a product first-hand or to participate in hands-on training (Gertler, 1995, p. 19). The personal experience is based on the idea that there is “no substitute for seeing things happen in practice” (Upton and Macadam, 1997, p. 99). As a result, factory tours are widespread, and visits during the business transactions between customers and manufacturers can be a significant advantage if successfully implemented by the company (Gertler, 1995, p. 16).

Manufacturers consider factory tours to be an important marketing instrument (Farrell, 2021, p. 2; Mooney, 2018, p. 4), regularly invite customers and even invest in facilities for visitors. For instance, the agricultural machinery manufacturer Fendt recently announced plans to open a customer experience center at its U.S. factory in Jackson, MN, to offer factory tours and dealer meetings (Businesswire, 2023). Factory tours are beneficial for attracting and retaining customers (Littmann, 2003, p. 73; Nella and Christou, 2010, p. 3).

Despite the common practice of factory tours in B2B marketing, however, the existing literature has largely neglected this phenomenon. A few studies have investigated factory tours in B2C settings, in which consumer brand manufacturers engage directly with consumers. These studies show that positive experiences of attending a factory tour increase behavioral intentions, such as the willingness to recommend a brand, or to revisit the site, as well as they increase attitudinal loyalty, such as satisfaction (Harrison and Shaw, 2004; Mitchell, 2006; Nella and

Christou, 2014; Sun et al., 2022). The findings from B2C factory tours may not be directly transferable to B2B contexts, as purchasing processes and decisions are more complex. B2C and B2B factory tours are also hardly comparable due to the differences on the customer side and the intended use of the products. Consumers in a B2C context are end users, while B2B customers use the product in a business context for further production. In addition, B2C consumers are more leisure-oriented and focus on entertainment, while B2B customers are more information- and knowledge-oriented (Frew, 2000, p. 53). Thus, B2B customers expect more professional and rational interactions during a factory tour. Not only the purchase decision is more complex, but B2B products are more complex in manufacturing and technology. The industrial market typically consists of a smaller number of customers and a more important role of relationships, interpersonal communication, and personal sales interactions (Österle et al., 2018, p. 74). These differences between B2C and B2B factory tours indicate that existing research findings have limited transferability. This implies that further investigation is necessary to fully understand the impact of B2B factory tours.

The paper fills the outlined research gap by investigating the economic effects of factory tours in a B2B manufacturing environment, specifically the effects on customers' attitudinal and behavioral loyalty. Additionally, the study examines the role of the tour guide in influencing customer reactions. Therefore, results of two empirical studies conducted in collaboration with a manufacturing company in the construction industry are presented.

The first study, based on an analysis of 23 years of sales data, supports the assumption that factory visits increase sales. To better understand this effect and the role of tour guides in influencing customer behavior, a survey-based field study was conducted with 70 customer companies that participated in a factory tour. These analyses allowed more detailed hypotheses to be tested regarding the influence of factory tours on attitudinal and behavioral loyalty, as well as the effects of tour guide perception. The results show that factory tours have a positive effect on both constructs and that customers' perception of a tour guide's competence impacts their loyalty behavior.

## 2.3 Factory Tours

In this chapter, factory tours are defined and explained in more detail. In addition, the role of the tour guide during factory visits is presented. Relevant research findings on factory tours and the role of the tour guide are summarized, including an overview of existing research results in B2C and B2B marketing.

### 2.3.1 Definition and Delineation

On a broader conceptual level, factory tours in the manufacturing industry can be regarded as a part of industrial tourism, also known as factory tourism, industrial attractions, or business tourism (Mitchell and Orwig, 2002, p. 31; Mitchell et al., 2004, p. 2; Sun et al., 2022, p. 1308; Swarbrooke, 1995, p. 51). Factory tours therefore form a subcategory of industrial tourism (Chen and Morrison, 2004, p. 120). The general concept of industrial tourism describes visits to operational industrial sites that are open to the public for touristic experiences. The main business of the company is producing goods or providing services, so the focus is non-tourism oriented (Frew, 2000, p. 20). These visits to industrial companies can include several stops in different departments, the factory cafeteria, employee rooms, or the production area (Chen and Morrison, 2004, p. 113; Littmann, 2003, p. 73).

A factory tour is defined as an in-person presentation of a production process to visitors who are not involved in that process but who may later use or consume the product (Frew, 2000, p. 27; Yale, 1991, p. 142). Hence, a factory tour includes a visit to the production area and an explanation of different production steps so that visitors can see parts of or the entire manufacturing process (Frew, 2000, p. 32; Littmann, 2003, p. 73). Each step adds new impressions to the experience (Littmann, 2003, p. 73). In manufacturing environments, factory tours take place in the plant or factory area itself, where tangible products are produced. Visitors can experience these production activities firsthand, thus receiving background information that is not available during regular product use (Chen and Morrison, 2004, p. 119; Upton and Macadam, 1997, p. 100). According to the definition provided, factory tours exclude customer visits to locations without manufacturing facilities, for example, general customer meetings (Chen and Morrison, 2004, p. 119).

In the context of B2B factory tours, getting a better and more detailed understanding of production processes, building trust, and having personal contact are more pronounced than in the B2C environment (Goodson, 2002, p. 7; Österle et al., 2018, p. 74). This is because B2B

customers value detailed information more than consumers do, who are more interested in entertainment (Frew, 2000, p. 53). This also leads to company representatives and especially the tour guide playing a more important role in the success of B2B factory tours. B2B customer representatives visit their existing and/or potential suppliers for a combination of business and personal knowledge purposes (Otgaar, 2010, p. 62). Visitors intend to get to know the company and receive information about the brand and products (Goodson, 2002, p. 7). A factory tour should address these motivations by providing relevant information while at the same time creating positive encounters during the tour. Therefore, the content of the tour should address customer expectations and encompass contextual and individualized information (Österle et al., 2018, p. 84). This also leads to company representatives, and especially the tour guide playing a more important role in the success of B2B factory tours (Otgaar, 2010, p. 62).

The tour guide who leads customers through the production process during the factory tour and serves as a point of contact for customers has a direct influence on the outcome of the tour, as personal interaction is a key motivation. Their roles are diverse as they also function as representatives and promoters of the company; they create face-to-face contact with the visitors and can directly promote products (Bildat and Schaal, 2013, p. 2; Littmann, 2003, p. 80).

Additionally, the interaction with employees, in this case the tour guide, can lead to positive emotional responses if the factory tour meets visitors' expectations and the tour guide is sympathetic and professional. Visitors who experience positive emotions after the tour are more likely to remember and understand the information and content provided, which can lead to an increased relationship building with the brand and its employees (Österle et al., 2018, p. 84). A factory tour therefore has the potential to lead to more loyal customers through firsthand interaction with employees (Mitchell and Orwig, 2002, p. 33).

### **2.3.2 Research on the Effects of Factory Tours**

The following sections summarize relevant research on factory tours and the role of the tour guide. The table at the end of this chapter provides a structured overview of existing research in B2C and B2B marketing and shows how this research contributes to existing studies.

Despite the limited focus on better understanding customer visits to factories, a few studies have explored this phenomenon in B2C settings. Mitchell (2006) investigated the purchase behavior of 358 consumers who had visited a winery. The results show that frequent visitors were more likely to make post-visit purchases (Mitchell, 2006, p. 104). Product price had only

a small impact on purchase behavior, while service and the memory of the visit were the most influential variables. This reflects the high relevance of satisfaction levels with both the product and the experience, including the service (Mitchell, 2006, p. 99).

In another study related to wine, Nella and Christou (2010) found that visitors' expectations of a visit influenced the level of overall satisfaction with the visit (Nella and Christou, 2010, p. 8). The quality of on-site service (i.e., staff knowledge, assistance, individual attention, and understanding of customer needs) had a strong impact on the level of satisfaction with the experience (Nella and Christou, 2014, p. 711). The study confirms the relationship between a positive evaluation of the factory visit and behavioral intentions towards the company or brand (Nella and Christou, 2010, p. 712). Behavioral intentions refer to increasing positive WOM recommendations and revisit intention (Nella and Christou, 2014, p. 706).

Dodd (1994), also in the wine context, found that environmental attributes (i.e., cleanliness, pleasant environment, perceived attractiveness) and service attributes significantly influence post-visit purchase behavior (Dodd, 1994, p. 69). Furthermore, visitor involvement during the visit significantly influences subsequent purchases. Thus, factory tours confirm a positive impact on behavioral loyalty (Dodd, 1994, p. 73).

Dolen et al. (2002) showed that the behavior of the contact employee plays a crucial role in shaping customers' perceptions of the interaction. Specifically, customers' perceptions of the tour guide's competence in relation to visit-related tasks and social interactions influence their level of satisfaction (Dolen et al., 2002, p. 266).

While the studies summarized above do not explicitly consider the effects of the tour guide, Bildat and Schaal (2013) provide an overview of the competencies of a tour guide in the tourism sector. Personal skills (i.e., being friendly, empathic, service-oriented) provide a professional foundation for working as a tour guide but are not the only source of performance. Besides personality, cognitive skills (i.e., analysis and interpretation) play an important role in the work performance of tour guides (Bildat and Schaal, 2013, p. 8).

Chen and Morrison (2004) investigated a framework for factory tours as interest in participating in industrial tourism increased in the United States. They examined the positive effects of industrial tourism, which led to improved brand image and brand loyalty (Chen and Morrison, 2004, p. 126). Additionally, the authors identified benefits for the hosting brand, such as improved staff morale and an overall improvement in the company's physical facilities due to higher investment (Chen and Morrison, 2004, p. 125).

In contrast to studies in a B2C context, research on factory tours in a B2B context provides initial insights into the significance of factory tours for customer behavior. Österle et al. (2018) examined brand worlds in a B2B context. Emotions and experiences are closely related concepts and that feelings are also a determining factor for positive experiences in the B2B environment, even if they are less noticeable than in the B2C environment. Emotions include, for example, the appreciation of the visitor by the operating company or communication at eye level. The authors' findings show that by providing interactive product experiences in brand worlds, manufacturers enable a transfer of knowledge through the transformation of experiences. Direct personal experiences, such as the opportunity to touch and test products or factory tours that showcase a company's production process, leave a deep impression on visitors and create more knowledge than conventional information material (Österle et al., 2018, p. 84). This paper shows evidence for the advantage of factory tours not only in B2C but also in B2B environments.

Overall, while existing research provides first insights into the benefits of factory tours, there is a lack of hard evidence on the economic consequences. Moreover, the role of personal interaction with a tour guide during a factory visit remains unclear. Therefore, this study addresses a relevant research gap by examining the influence of factory tours on attitudinal and behavioral loyalty. Additionally, the effects of B2B visitors' perceptions of the tour guide are investigated, controlling for several customer-related characteristics to exclude alternative explanations.

Table 6: Overview of Studies on Loyalty Behavior

Publication	Findings for the effect of factory tour participation	Behavioral measures*	Attitudinal measures**	Effects of tour guide on behavioral and attitudinal measures
<i>B2C focus</i>				
Bildat and Schaal (2013)	The authors propose a model based on psychological studies indicating that besides personality, cognitive abilities of a tour guide in the field of tourism are an indicator for job performance	x	x	Personal and cognitive skills of a touristic tour guides on job performance
Chiou et al. (2002)	Perceived service quality influences trust and overall satisfaction, which both positively influence customer loyalty (WOM and repurchases), knowledge as a moderator has no influence on loyalty	x	✓	x
Dodd (1994)	Product characteristics (e.g., quality, smell) and attitude towards a company directly influence purchase intentions in a wine context. Environmental and service attributes positively influence purchase behavior as well as customer involvement during the tour.	✓	x	x
Dolen et al. (2002)	Customers' perceptions of social and task competence of the employee performance influence satisfaction	x	✓	Employee's social and task competencies on satisfaction, no tour guide
Chen and Morrison (2004)	Benefits of industrial tourism to companies include improved company image, reinforced brand loyalty, product promotion and staff morale	x	✓	x
<i>B2B focus</i>				
Österle et al. (2018)	Investigated brand worlds as an instrument of branding that employs experiential marketing techniques in a B2B context.	x	x	x
<b>This study</b>	Effects of B2B customers' factory visit on behavioral and attitudinal loyalty. Moreover, the influence of tour guide characteristics (perceived sympathy and competence) is examined after a factory visit.	✓	✓	Examines sympathy and competence of tour guides in a B2B Context

\* Behavioral measures include actual purchases, purchase intention, purchases, repurchases, revisiting and recommend

\*\*Attitudinal measures include loyalty, affective commitment and satisfaction

## 2.4 Hypotheses Development

Companies use factory tours as a marketing instrument to strengthen customer relationships or loyalty. Loyalty is a key indicator of the success of a company's marketing activities, as companies with loyal customers can develop a strategic competitive advantage (Dick and Basu, 1994, p. 99). Customer loyalty includes both an attitudinal and a behavioral dimension. Behavioral loyalty can be understood as the customer's willingness to repurchase the product and to continue a relationship with the supplier. Attitudinal loyalty is the measure of the customer's psychological attachment to the supplier and the supplier's attitudinal endorsement (Cater and Cater, 2010, p. 1325). Therefore, an attitudinal measure refers to the specific desire to continue a relationship with a company, while the behavioral perspective refers to the concept of repeated patronage. Thus, customer loyalty incorporates both revisit or repurchase behavior as well as emotional bonds or relationships (Chen et al., 2008, p. 3; Harrison and Shaw, 2004, p. 25; Rather et al., 2019, p. 204).

Loyalty behavior is strongly influenced by educational, stimulating, relevant, and authentic experiences that customers have (Harrison and Shaw, 2004, p. 24; Iglesias et al., 2011, p. 578). Positive experiences during a factory visit lead to enhanced customer behavior, in this case positive WOM and future purchase intentions (Sun et al., 2022, p. 1312). Therefore, it is assumed that factory visits, which represent personal and direct experiences of customers, also influence the behavioral component of customer loyalty. The underlying idea is that factory tours provide customers with firsthand information about product quality, the materials used, or the production process, which helps to reduce risk when making purchasing decisions (Otgaar, 2010, p. 46). Thus, the hypothesis derived from this indicates that factory tours enhance customers' behavioral loyalty in the form of purchases:

**H1: Customer participation in a factory tour leads to increased purchases.**

In addition to behavioral loyalty, it is assumed that factory tours also influence attitudinal loyalty. Affective commitment is a variable that is often used to operationalize attitudinal loyalty (Cater and Cater, 2010, p. 1325; Iglesias et al., 2011, p. 578). It measures the emotional attachment that customers establish with a company and that develops through personal involvement that a customer has with a company (Rather et al., 2019, p. 202). Customers with strong affective commitment are more emotionally attached to the brand or organization (Evanschitzky et al., 2006, p. 1208). The more extensive a customer's brand experience is, the

higher their affective commitment to that brand is (Iglesias et al., 2011, p. 578). Therefore, a factory visit represents an intensive experience with the brand and the company. Additionally, interacting with company representatives onsite should directly affect customers' emotional attachment to the company and thus also their overall affective commitment. It is therefore assumed that factory visits increase customers' affective commitment to the company as an indicator of attitudinal loyalty.

**H2: Customer participation in a factory tour leads to increased affective commitment to the supplier.**

As a link between attitudinal and behavioral loyalty, affective commitment has been confirmed to affect customer patronage in several studies (Dean, 2007, p. 169; Evanschitzky et al., 2006, p. 1209; Rather et al., 2019, p. 209). Positive emotions lead to higher behavioral loyalty (Dick and Basu, 1994, p. 104). Feelings of attachment and identification with the brand or company also contribute to a strong relationship between the customer and the brand, which explains an increase in customer patronage (Evanschitzky et al., 2006, p. 1209). Thus, the effect of affective commitment on behavioral loyalty is positive and significant (Cater and Cater, 2010, p. 1329). Affective commitment represents a process variable that mediates the relationship between brand experience and purchase behavior. It is therefore expected that the effects of factory tours on purchases (i.e., behavioral loyalty) are explained by an improvement in customers' attitudinal loyalty (i.e., affective commitment):

**H3: Affective commitment to the supplier mediates the positive effect of a factory tour participation on purchases.**

As factory tours are an experience that a supplier offers to its customers, it is important to understand how the supplier can influence and control the. A common approach is to use tour guides to lead customers through a visit, provide explanations, and thus ensure personal interaction that influences customers' overall experience. This personal contact is highly important because tour guides leading customers through the production process function as an important point of contact and as representatives and promoters of the company (Bildat and Schaal, 2013, p. 2; Littmann, 2003, p. 80). Communication between a supplier representative and a customer enhances the ability to fulfill customers' needs by providing a deeper understanding of their demands and requirements. Moreover, communication enhances the quality

of interaction and helps identify similarities with each other. All these factors contribute to creating stronger bonds between suppliers and customers, as they increase knowledge transfer and trust in each other (Hossain and Chonko, 2018, p. 224). Personal one-on-one interactions with company representatives promote bilateral understanding and thus positively impact customer loyalty (Hossain and Chonko, 2018, p. 227).

Employees contribute to the customer's experience with the company and thus impact the customer's perception, attitude, and behavior throughout the entire factory visit. When evaluating employees, customers assess the task and interaction competencies of the employees. Task competence refers to the product knowledge of the employees, their ability to communicate this knowledge, and their ability to assist customers in their buying decision. Interaction competence encompasses employees' social and communication capabilities. Both can lead to informational and emotional added value during the factory tour, which in turn increases customers' intention to return and to recommend, as well as to repurchase, which increases sales and loyalty (Dolen et al., 2002, p. 274; Lucia-Palacios et al., 2020, p. 2). Similarly, Harrison and Shaw (2004) found a strong influence of service staff characteristics (i.e., friendly, informative, or accessible) on the intention to return and to recommend (Harrison and Shaw, 2004, p. 29). Perceived service quality, regarding the employee's ability to solve the problem, explain the steps of the process, and be empathic, is positively related to customer loyalty and affective commitment (Dean, 2007, p. 169). Several determining factors are therefore relevant for a successful factory tour. An effective way is to positively impact loyalty through excellent customer service, staff friendliness, and customer education (Olsen, 2002, p. 242).

It is therefore expected that customers' perceptions of the tour guide's task competence and sympathy will positively influence both attitudinal and behavioral loyalty. This research separates the two main factors that influence customer loyalty during factory visits: perception of task-related abilities (i.e., perceived competence of the tour guide in terms of product knowledge) and interaction abilities (i.e., perceived sympathy of the tour guide in terms of social and communication capabilities).

**H4: The perceived sympathy of a tour guide positively influences purchase intention (H4a) and affective commitment (H4b).**

**H5: The perceived competence of a tour guide positively influences purchase intention (H5a) and affective commitment (H5b).**

## 2.5 Study 1: Economic Effects of Factory Tours

This chapter presents the first study based on sales data from a medium-sized industrial company. The study's framework and data are presented, followed by the results. Finally, a short discussion is provided.

### 2.5.1 Setting, Measures, and Data

To examine the economic consequences of existing customers participation in a factory tour at a supplier, customer-level revenue data of a medium-sized German industrial manufacturer (approx. 500 employees) is analyzed. The company produces components used in high-temperature industrial manufacturing processes (e.g., cement or steel kiln parts). In 2021, the company's sales amounted to around 550 million Euros. Annual total revenues per customer were provided for the years 1996 to 2018 for German customers, who participated in at least one factory tour during this period. In total, employees from 49 different customers visited the factory within the 23-year period and were deemed suitable for the analysis.<sup>1</sup> Of the 49 customers, 17 generated revenue in each of the 23 years. The average annual revenue per customer was EUR 199,000 (SD = 144,280), ranging from EUR 85,000 to EUR 700,000.

To examine the potential economic effects of participating in a factory tour, the sales of each customer were compared before and after the visit. This analysis is based on equal-length time windows (e.g., three years before vs. three years after the factory tour). Moreover, several analyses were conducted with different time periods: Of the 49 customers in the data set, 28 had generated sales in the three years before and the three years after the factory tour; for 27 customers, revenues were available within the four years before and after the visit; for the five-year time windows, revenues were reported by 16 customers. These time intervals were chosen because the products sold by the manufacturer usually last for two years before a replacement purchase is necessary. Thus, in this industry segment, most purchases are made every two years.<sup>2</sup>

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<sup>1</sup> *These 49 customers who participated in a factory tour represent about half of the manufacturer's German customer base.*

<sup>2</sup> *As a robustness check, we also analyze revenues within two-year windows, available for a total of 42 customers.*

The manufacturer under investigation consistently offered factory tours toward the end of each year. This was a notable peculiarity. Because the data did not indicate which part of the annual revenue was billed before or after the visit, the year in which the factory visit took place was excluded from the analysis. Instead, for a robust assessment, the year prior to the year in which a factory visit took place was used as the baseline period for a solid assessment and compared it with the revenue generated in the years following the year of the tour.

### 2.5.2 Results

To analyze the effects of within-customer revenue, a one-sided t-test on paired samples is conducted. This test helps figure out if sales generated in the time windows of 3 to 5 years before a customer participated in a factory tour are significantly different from sales generated in the respective following time windows. Depending on the respective time window, different samples are available for analysis. For 28 customers, revenues were available three years before and after the factory tour. For the time windows of four years after the factory tour, revenues were available for 27 customers, and for five years after the visit for 16 customers. The following table summarizes the results.

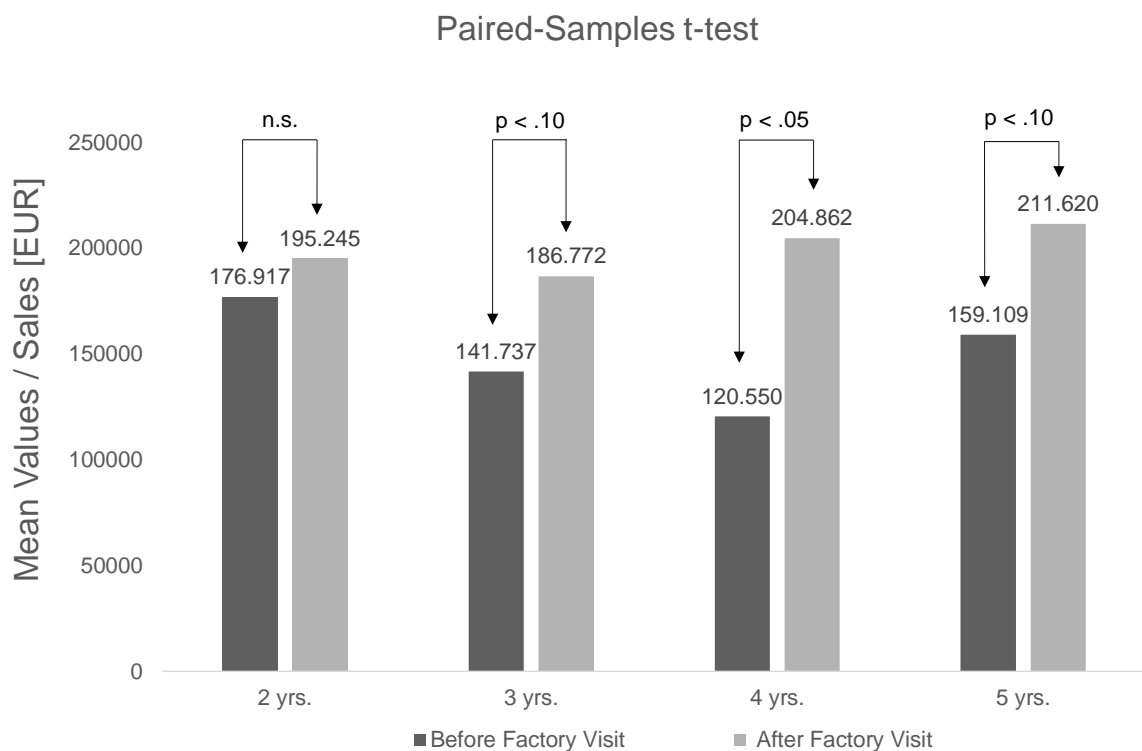
**Table 7: Study 1: Paired-samples T-test Results**

Time windows	Average annual revenue per customer in EUR (SD)		<i>n</i>	<i>p</i>
	Before factory tour	After factory tour		
3 years / 3 years	<b>141,737</b> (166,032)	<b>186,772</b> (213,912)	28	0.06
4 years / 4 years	<b>120,550</b> (128,994)	<b>204,862</b> (255,523)	27	0.04
5 years / 5 years	<b>159,109</b> (226,837)	<b>211,620</b> (280,063)	16	0.06

The comparison of the three-year time window showed that the average annual sales before the factory tour ( $M = 141,737$  EUR,  $SD = 166,032$  EUR) were significantly lower than those in the three years after the visit ( $M = 186,772$  EUR,  $SD = 213,912$  EUR,  $p = 0.06$ ). This indicates that each customer made an extra EUR 45,035 each year. These results are consistent with the assumptions of the hypothesis H1.

Similar findings are evident for the two longer time windows, which in turn supports H1. Within a four-year period, annual revenue per customer increased on average by EUR 84,311 ( $p = 0.04$ ). Five years after a factory tour, annual revenues were on average EUR 52,511 higher ( $p = 0.06$ ) than during the five years before a visit.<sup>3</sup> The following figure shows the increase in sales for the respective time windows before and after the visit.

**Figure 12: Study 1: Increase in Sales Before and After Factory Visit**



When interpreting these findings, it should be noted that a possible general increase in revenues per customer over time (e.g., due to inflation or overall industrial growth) may represent a source of random errors. However, as the factory tours of the different customers took place at very different times within the observed 23 years, it is unlikely that such a trend would systematically distort the findings of the analysis.

<sup>3</sup> For the two-year time windows, capturing data from 42 customers, within-customer differences amounted to, on average, 18,328 EUR higher revenues. However, as expected due to the lengthy replacement intervals, these differences do not reach statistical significance ( $p = 0.28$ ).

### **2.5.3 Discussion**

Based on observed sales data, the results from Study 1 support the hypothesis that participating in a factory tour leads to a subsequent increase in revenue. Importantly, these findings appear to be robust over various time periods. However, one limitation of the analysis is that the data do not reveal insights into the processes underlying these positive economic benefits of factory tours. Moreover, the assumed influence of customers' perception of the tour guide requires survey data. Therefore, an additional survey-based study is conducted to examine the hypothesized mediating effects of customers' affective commitment (H2-3) as well as the effects of perceived sympathy and competence of a tour guide (H4-5).

## **2.6 Study 2: Factory Tours and the Role of the Tour Guide**

The second study involves additional analyses regarding the assumed hypotheses. First, the setting and data based on data from the same industrial company are presented. The results of factory tours on customer loyalty are presented as well as the influencing effects of the tour guide on these relations. A short discussion concludes this section.

### **2.6.1 Setting, Measures, and Data**

Study 2 was conducted in cooperation with the same B2B company that was used for Study 1. Over a period of three years, from 2020 to 2023, two questionnaires were distributed to each customer who participated in factory tours provided by the company. One questionnaire was handed out before and the other one after the factory tour. The two questionnaires each took between 5 and 8 minutes to complete. To be relevant to the study, a participant had to complete both questionnaires; otherwise, the answers were excluded. Participation was voluntary, and the answers were recorded anonymously. Participants completed the first questionnaire one day before visiting the factory. The same participants filled out the second questionnaire immediately after the tour through the production building and seeing the production process.

Open-ended questions, which aim to obtain information about the problems, wishes, or needs of the participants, are avoided. The study employs closed questions to obtain participant opinions, facilitated by the use of scales or semantic differentials. In addition, when formulating the questions, it was important to avoid long and complex sentences. Furthermore, the questions should encompass the necessary information to enable the participants to evaluate the

statements in the survey (Daumenlang, 2006, p. 139). In both questionnaires, the core variables were the same; however, the second questionnaire included additional questions about the perceived impression of the tour guide (i.e., a company employee leading the customers around and explaining the production steps and details about the products), the perceived level of automation of the machines of production (not part of this study) and perceived closeness or spatial proximity to the production process (not part of this study).

All constructs rely on a multi-item measurement to ensure higher reliability and validity. All the statements or questions applied in the study were measured using either a Likert scale or a semantic differential. The Likert scale provides the participants with the opportunity to accept or reject the question or statement using a scale ranging from extremes such as 'I do not agree' to 'I agree' (Kotler et al., 2007, p. 173). The seven-point Likert scale provides participants with the opportunity to be neutral or undecided between the extremes by rating the scale a four (Dolnicar et al., 2011, p. 2). Two exceptions are the constructs for sympathy of the tour guide and involvement from the company, which are based on a semantic differential of -3 to 3.

The questionnaire then requests demographic aspects and personal information. It is important to place demographic questions at the end of the questionnaire because participants hesitate to provide private information. This order should avoid the necessity of having to disregard a large amount of the questionnaire (Kirchhoff et al., 2008, p. 23).

In total, 78 customers participated in the survey, of which two had to be excluded due to straight-line response patterns (i.e., identical response for all items in more than five constructs). Accordingly, the data set to analyze pre-visit attitudes and intentions consisted of 76 participants, of whom 70 completed the second, post-visit questionnaire. Participating customers came from around the world and had customer relationships ranging from one to 25 years. Respondents were almost exclusively male (94.3%) and between the ages of 25 and 55 (Mean = 36.3 years, SD = 6.98). The average length of the business relationship between the customer and the manufacturer amounted to 6.82 years (SD = 6.47).

The data for the constructs affective commitment and purchase intention were analyzed before and after the factory tour. However, the data for the competence and sympathy of the tour guide could only be collected and analyzed after the factory tour. A confirmatory factor analysis including these main variables of the questionnaire was conducted using JASP, an open-source statistics program. It is generally agreed that the measurement of latent constructs meets certain criteria when factor loadings are above  $\lambda = 0.5$  and coefficient alpha is above  $\alpha = 0.7$  (Nunnally, 1978).

Average variance extracted (AVE) values measure the amount of variance captured by a construct compared to the variance caused by measurement error. Values close to or above the criterion of 0.50 support the measurements employed (Fornell and Larcker, 1981). All values comply with the criteria, except for affective commitment. The average variance extracted is 0.358, which is below the recommended level of 0.5. However, since the values for the factor loadings and Cronbach's Alpha are above the recommended value, the internal reliability of the measurement items is acceptable (Lam, 2012, p. 1332).

The values for the corrected item total correlations (CITC) measure the association of the item with the total score on the other items. A correlation value of less than 0.2 means that the corresponding item is not very well correlated with the overall scale and must therefore be excluded. Ferketich (1991) recommends that values for a good scale should be greater than 0.30 (Ferketich, 1991, p. 167). As all values are close to or above 0.5, the items correlate well with the overall scale.

The chi-square value is a traditional measure for assessing overall model fit (Hu and Bentler, 1999, p. 2). For a good or acceptable model fit, the ratio of  $X^2$  and df should be between two and three (Schermelleh-Engel et al., 2003, p. 33). The results for this model show a lower value of Chi-square  $X^2(98) = 175.107$ ,  $p < 0.001$ , with a ratio of 1.8.

This index is dependent on the sample size; another index for model fit is the comparative fit index (CFI), which is less affected by the sample size. The CFI ranges from zero to one, with higher values indicating better fit. For an acceptable fit, values should be above  $CFI \geq 0.90$  (Hu and Bentler, 1999). Recent studies recommend CFI values greater than .97 for a good fit, and values greater than .95 may be interpreted as an acceptable fit (Schermelleh-Engel et al., 2003, p. 42). According to Hu and Bentler (1999), this model indicates an acceptable fit with a comparative fit index of  $CFI = .94$ . With regard to the study of Schermelleh-Engel et al. (2003), the model is close to the required criterion of  $CFI \geq 0.95$  but does not meet it.

The main variables of the questionnaires used for this study are listed in the table below, together with the Cronbach's Alpha values and the factor loadings of each item.

Table 8: Study 2: Main Constructs and Measurement Items

Constructs and Items	Cronbach's Alpha	AVE	Factor Loadings	CITC	Mean (SD)
<b>Purchase Intention<sup>a</sup></b> (Maxham and Netemeyer, 2002)	0.907	0.777			
1. In the future, I intend to buy products of the company XY.			0.871	0.816	5.83 (1.223)
2. If you need Z products in the future, how probable is it that you will use products of the company XY?			0.795	0.759	5.76 (1.131)
3. In the near future, I will use the company XY as a provider for XY products.			0.963	0.873	5.83 (1.156)
<b>Affective Commitment<sup>a</sup></b> (Evanschitzky et al., 2006)	0.713	0.358			
1. I feel that I can trust the company XY.			0.564	0.457	6.20 (1.012)
2. I identify with the company XY.			0.999	0.716	5.56 (1.265)
3. I feel emotionally attached to the company XY.			0.604	0.530	4.61 (1.782)
<b>Competence of Tour Guide<sup>a</sup></b> (Dolen et al., 2002)	0.954	0.814			
1. The tour guide fully understands the explained steps and details of the production processes.			0.874	0.862	6.04 (1.135)
2. The tour guide was efficient.			0.892	0.868	5.99 (1.070)
3. The tour guide was well-organized during the visit.			0.911	0.887	5.90 (1.287)
4. The tour guide was thorough.			0.790	0.775	5.59 (1.479)
5. The tour guide met my needs.			0.915	0.884	5.91 (1.294)
6. The employee performed as I expected.			0.950	0.916	5.94 (1.295)
<b>Sympathy of Tour Guide<sup>b</sup></b> (Whittler and DiMeo, 1991)	0.907	0.679			
I perceived the tour guide as:					
1. cold / warm			0.832	0.794	2.37 (0.871)
2. unlikeable / likeable			0.912	0.859	2.66 (0.587)
3. unsincere / sincere			0.874	0.816	2.51 (0.654)
4. friendly / unfriendly			0.859	0.822	2.76 (0.550)

<sup>a</sup> Measured on seven-point scales (1 = "totally disagree," 5 = "totally agree").

<sup>b</sup> Measured on a seven-point semantic differential (-3 to +3).

Abbreviation: AVE, average variance extracted

Abbreviation: CITC, corrected item total correlation

To control for possible alternative explanations, several covariates were captured in the questionnaire, which are listed in the following table. The covariates included in the analysis are age, gender, number of employees in the customer company, years of cooperation with the supplier, prior personal contact with an employee of the supplier, plans for future orders within the next 12 months after the visit, and travel distance to the company.

The further covariates were excluded from the analysis for various reasons, such as inconsistency, identical responses, or control items. Inconsistent data indicates that not every respondent completed the question, which explains the covariates 'job position', 'number of orders within the last five years' and 'travel alone or in group'. Another reason for the disclosure of the following covariates is that all participants gave identical answers, which is the case for the 'reason for participation'. Moreover, all companies have already purchased products from the visiting manufacturer, as they are already among the current customers, indicating identical responses for the covariate 'products bought'. Additionally, as all participants took part in the factory tour and subsequently completed the questionnaire, the question 'already took part in a factory tour' was answered in the affirmative by all participants. The covariate 'order placed this year' was excluded because it is a similar control question to 'future order within the next 12 month', which was included as a covariate in the analyses.

Table 9: Study 2: Covariates

Covariate	Incl.	Comments
<b>Age</b>	✓	
<b>Gender</b> (1 - male; 2- female)	✓	
Job (1-prod. worker; 2-prod. manag., 3-admin., 5-manag.)	-	Inconsistent data
<b>Number of Employees</b>	✓	
<b>Years of Cooperation with the Company</b>	✓	
<b>Personal Contacts</b> (0-no; 1-yes)	✓	
Products Bought (0-no; 1-yes)	-	Same answers
Number of Orders (within the last 5 years)	-	Inconsistent data
Already Took Part in a Factory Visit (0-no; 1-yes)	-	Same answers
Order Placed this Year (0-no; 1-yes)	-	Similar covariate
<b>Future Order (within the next 12 month)</b> (0-no; 1-yes)	✓	
Reason for Factory Visit (quality issues, seminar, other)	-	Same answers
Travel (1- alone, 2- group)	-	Inconsistent data
<b>Travel Distance</b> (1<100km, 2<200 km, 3<300km, 4>400km)	✓	

## 2.6.2 Results

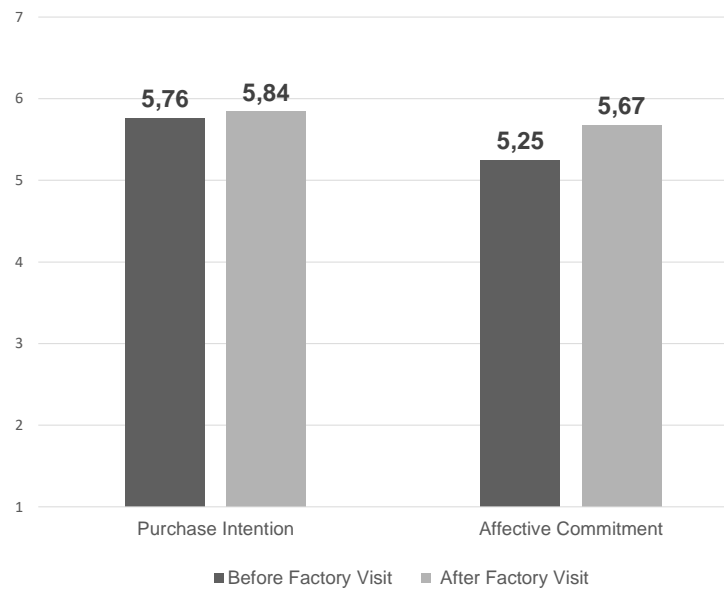
This section is divided into two parts. First, the effects of factory visits on loyalty are analyzed, followed by the analysis of the effects of tour guide attributes on loyalty.

### Effects of Factory Visits

To test the if factory visits have an influence on customer loyalty (i.e., purchase intention and affective commitment) a paired samples t-test is conducted to analyze the mean values before and after the visit. Comparing the mean values before the factory tour with those reported afterwards, there is a significant increase in the purchase intention of the participants ( $M_{\text{before}} = 5.76$ ,  $SD = 0.95$  vs.  $M_{\text{after}} = 5.84$ ,  $SD = 1.19$ ,  $p < 0.05$ ), which supports H1.

A comparison between affective commitment before and after the factory tour shows a significant increase ( $M_{\text{before}} = 5.25$ ,  $SD = 1.21$  vs.  $M_{\text{after}} = 5.67$ ,  $SD = 0.96$ ,  $p < 0.01$ ), which supports H2. The following figure displays the mean values.

**Figure 13: Study 2: Mean Values Before and After Factory Tour Participation**



Two repeated-measures analyses of covariance (ANCOVA) were conducted to evaluate the influence of factory visits on customers' behavioral (H1) and attitudinal loyalty (H2). The variable 'factory visit' comprises the time factor (t) resulting from the two separately completed questionnaires. The dependent variable therefore consists of two values and contains the participants' assessments before (t = 0) and after (t = 1) the factory tour. The data set with n = 70 participants was used for the analysis, summarizing each participant's answers before and after the factory tour in a single row. Thus, in the example of purchase intention, the dataset encompasses the answers for their intention to purchase before the factory visit and their answers for their purchase intention after the factory visit.

The results show a significant effect of participation in the factory tour on purchase intention ( $F(1, 62) = 4.5, p < 0.04$ ), while controlling for respondents' age, gender, the customer company's number of employees, years of cooperation with the visited manufacturer, respondents' personal contacts, travel distance, and planned future orders. To calculate the effect sizes for this relation, a partial eta squared ( $\eta^2$ ) is used from the repeated ANCOVA. The partial eta squared is defined as the ratio of the variance of the effect to the variance of the effect plus measurement errors. The partial eta squared is therefore a measure of the variance that a factor explains after isolating the effects of all other factors. The values of partial  $\eta^2$  can be interpreted as follows:  $\eta^2 < 0.06$  indicates a small effect,  $\eta^2 > 0.06$  indicates a moderate effect,

and  $\eta^2 > 0.14$  indicates a large effect (Richardson, 2011). Thus, with a partial  $\eta^2 = 0.07$ , participation in a factory tour has a moderately strong effect on purchase intentions.

The second repeated measure ANCOVA shows that the effect of factory visits have a significant effect on affective commitment is also significant ( $F(1, 62) = 4.2, p = 0.05$ ), while controlling for the same set of covariates (i.e., age, gender, number of employees, years of cooperation with the company, personal contacts, travel distance, and future orders within the next 12 months). With an eta squared value of  $\eta^2 = 0.06$ , participating in a factory tour has a moderately strong effect on affective commitment. The mean values are displayed in the following table shows the results of the two repeated-measures ANCOVAs.

**Table 10: Study 2: Effects of Factory Visits on Loyalty Behavior**

	Affective Commitment			Purchase Intention		
	F	<i>p</i>	$\eta^2$	F	<i>p</i>	$\eta^2$
Time	4.197	.045	.063	4.501	.038	.068
Covariate 1 Gender	4.352	.041	.066	.161	.689	.003
Covariate 2 Age	1.976	.165	.031	5.031	.028	.075
Covariate 3 Number of Employees	2.643	.109	.041	.059	.808	.001
Covariate 4 Years of Cooperation	1.218	.274	.019	.929	.339	.015
Covariate 5 Personal Contact	.000	.990	.000	2.259	.138	.035
Covariate 6 Future Orders	.888	.350	.014	.534	.468	.009
Covariate 7 Travel Distance	6.386	.014	.093	.089	.766	.001

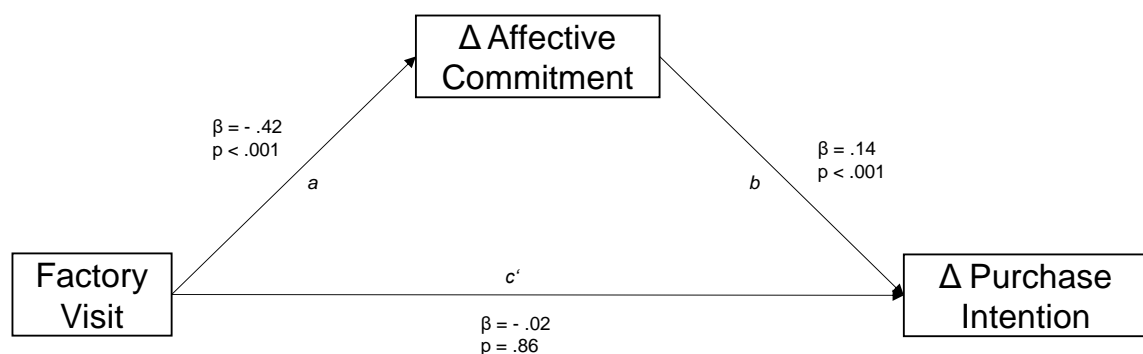
### Mediating Role of Affective Commitment

Furthermore, hypothesis H3, the mediating role of affective commitment, is analyzed. Therefore, a repeated measures mediation analysis is conducted using the macro MEMORE established by Montoya and Hayes (2017). This macro called, MEMORE (Mediation and Moderation for Repeated Measures), estimates mediation, moderation, and moderated mediation models for designs with two instances within subjects or repeated measures. For this analysis, the data set with  $n = 70$  was used so that the responses of each participant before and after the factory tour are clustered in one row.

The results indicate that visiting the factory significantly predicted the change in the mediator ( $a: b = -0.42$ ,  $SE = 0.093$ ,  $t(69) = -4.498$ ,  $p < 0.001$ ), which in turn significantly predicted changes in purchase intention ( $b: b = 0.14$ ,  $SE = 0.147$ ,  $t(69) = .955$ ,  $p < 0.001$ ). While accounting for affective commitment, the direct effect of factory tour participation and purchase intentions is not significant ( $c': b = -0.022$ ,  $SE = 0.123$ ,  $t(69) = -0.182$ ,  $p = 0.86$ ). These results would lead to the assumption that affective commitment mediates the relationship between factory visits and purchase intentions. The indirect effect, on the other hand, shows that affective commitment does not play a role in the relationship between factory tour participation and purchase intention ( $ab: b = -0.059$ ,  $95\%-CI [-0.202, 0.087]$ ). Thus, this study shows that affective commitment does not mediate the relationship between factory tour participation and purchase intention ( $ab: b = -0.059$ ,  $95\%-CI [-0.202, 0.087]$ ).

Thus, this study disproves the idea that affective commitment mediates the relationship between factory tour participation and purchase intention, which neglects the hypothesis of the mediating nature of affective commitment (H3). The following figure displays the results.

**Figure 14: Study 2: Repeated Measure Mediation Effect of Affective Commitment**



In sum, the findings show that participating in a factory tour enhances the purchase intention as well as affective commitment. Additionally, purchase intention is influenced by factory tour participation through affective commitment, but affective commitment does not act as a mediator. Therefore, the assumed mediating role of attitudinal loyalty between factory tour participation and behavioral loyalty could not be confirmed.

### Effects of Tour Guide Attributes

In this section, the effects of tour guides' attributes as potential influencers on affective commitment and purchase intentions are analyzed. Therefore, two repeated measures analyses of covariance (ANCOVA) are conducted to evaluate the influence of tour guides' attributes after the factory visit on customers' behavioral and attitudinal loyalty.

The constructs for the perception of the tour guide were questioned only in the second questionnaire, as customers can evaluate the tour guide only after participating in the factory tour. The data set consists of data from  $n = 70$  participants.

For perceived sympathy of the tour guide, neither significant effects on purchase intentions ( $F(8, 54) = 0.924, p = 0.51$ ) nor on affective commitment ( $F(8, 58) = 1.754, p = 0.11$ ) were found. These results indicate that hypotheses H4a and H4b should be rejected. The following table lists the results.

**Table 11: Study 2: Effects of Sympathy of the Tour Guide**

	Affective Commitment			Purchase Intention		
	F	$p$	$\eta^2$	F	$p$	$\eta^2$
Time	10.47	.002	.162	31.749	< .001	.370
Sympathy of the Tour Guide	1.754	.107	.206	.924	.505	.120
Covariate 1 Gender	.011	.918	.000	.023	.880	.000
Covariate 2 Age	.418	.521	.008	1.538	.220	.028
Covariate 3 Number of Employees	.544	.464	.010	.185	.669	.003
Covariate 4 Years of Cooperation	1.997	.163	.036	1.226	.273	.022
Covariate 5 Personal Contact	.276	.602	.005	1.410	.240	.025
Covariate 6 Future Orders	.078	.782	.001	.356	.553	.007
Covariate 7 Travel Distance	3.045	.087	.053	1.455	.233	.026

In contrast, the perceived competence of the tour guide was found to have a significant positive influence on purchase intention ( $F(20, 42) = 4.240, p < 0.001$ ) as well as on affective commitment ( $F(20, 42) = 2.764, p = 0.003$ ). The results show that hypotheses H5a and H5b are supported. The partial eta squared value of  $\eta^2 < 0.57$  for affective commitment and a partial

eta squared value of  $\eta^2 < 0.67$  for purchase intention indicate a large effect. The results are shown in the following table.

**Table 12: Study 2: Effects of Competence of the Tour Guide**

	Affective Commitment			Purchase Intention		
	F	<i>p</i>	$\eta^2$	F	<i>p</i>	$\eta^2$
Time	7.204	.010	.146	33.622	< .001	.445
Competence of the Tour Guide	2.764	.003	.568	4.240	< .001	.669
Covariate 1 Gender	.034	.854	.001	.403	.529	.010
Covariate 2 Age	2.455	.125	.055	.020	.889	.000
Covariate 3 Number of Employees	.064	.801	.002	.452	.505	.011
Covariate 4 Years of Cooperation	4.334	.043	.094	2.694	.108	.060
Covariate 5 Personal Contact	.417	.522	.010	1.257	.269	.029
Covariate 6 Future Orders	1.013	.320	.024	.119	.732	.003
Covariate 7 Travel Distance	3.977	.053	.086	6.140	.017	.128

The results show that the relationship between participating in a factory tour and being loyal is influenced by the competence of the tour guide for both, purchase intention and affective commitment. The findings further show that the sympathy of the tour guide has neither a significant effect on behavioral loyalty, nor on attitudinal loyalty.

### 2.6.3 Discussion

The findings of Study 2 show that factory tours increase behavioral and attitudinal loyalty, thus supporting H1 and H2. Furthermore, as hypothesized in H3, affective commitment was not found to mediate the effect of factory tour participation on purchase intention. Regarding the potential influence of the tour guide, the assumed relevance of perceived sympathy (H4a) on behavioral loyalty needs to be rejected. Moreover, no impact of perceived sympathy on attitudinal loyalty was found, rejecting also H4b. The competence of the tour guide was found to strengthen behavioral and attitudinal loyalty. Thus, the results support the assumed hypotheses of the influence of the competence of the tour guide on purchase intention (H5a) and affective commitment (H5b).

## 2.7 Additional Analyses

This section contributes to the results of Study 2 by analyzing further constructs of the questionnaires, including alternative constructs for both attitudinal and behavioral loyalty.

An alternative construct for behavioral loyalty is customer recommendation. Important loyalty behavior towards companies providing factory tours is beside purchase or revisit intentions, also customer recommendations (Nowacki, 2013, p. 24). Positive experiences from a factory visit lead to enhanced customer behavior, in this case to customer recommendation (Sun et al., 2022, p. 1314). Thus, a factory tour has a direct impact on strong WOM recommendations to friends and family (O'Mahony et al., 2006, p. 131). Therefore, this construct is analyzed in the next section.

Additional constructs of the questionnaire on attitudinal loyalty are overall satisfaction and affective responses. Satisfaction is a central construct of consumer attitudinal loyalty (Cohen et al., 2014, p. 888). There is a positive correlation between satisfaction after consuming or experiencing a product, service, or factory tour and repurchasing that product or service (Frew, 2000, p. 17). Moreover, overall customer satisfaction leads to post-purchase behavior, including recommendations as well as future purchase intentions (Chen et al., 2008, p. 3). Since factory tours influence customers' overall satisfaction, which in turn has a direct influence on behavioral loyalty, a mediation effect is of interest in this analysis.

Additionally, the influence of involvement with the company on purchase intention is analyzed. The construct is derived from the involvement theory, which states that people who experience a factory visit are more loyal due to the visual presentation of a brand, a product, or a production process (Mitchell and Orwig, 2002, p. 31). Therefore, a moderating effect of involvement with the company on the relation between factory tours and loyalty is analyzed.

### 2.7.1 Setting, Measures, and Data

In this further analysis, the same covariates were considered as in the previous analyses (age and gender of the participants, number of employees, years of cooperation with the manufacturer, prior personal contact to an employee, plans for future orders within the next 12 months after the visit and travel distance to the company). Again, the variable factory visit comprises the time factor (t), therefore, it entails the participant's assessments before (t = 0) and after the factory tour (t = 1).

A confirmatory factor analysis including these variables of the questionnaire was conducted using JASP, an open-source statistics program. The factor loadings are all above  $\lambda = 0.5$ , and the coefficient alpha is above  $\alpha = 0.7$  for all constructs. According to Nunnally (1978) this means that the measurement of the latent constructs meets the standard accepted criteria (Nunnally, 1978). The values for average variance extracted (AVE) are all above the criterion of 0.5, which supports the measures employed (Fornell and Larcker, 1981). The corrected item total correlations (CITC) values are all above 0.7 and correspond to the recommended criterion level of 0.5 (Ferketich, 1991, p. 167). Moreover, the CFI index is analyzed because it is less dependent on the sample size. The results show a value for CFI = 0.91, indicating an acceptable fit, with a value above the criterion of CFI  $\geq 0.90$  (Hu and Bentler, 1999). The following table lists the results for the constructs, along with the values for Cronbach's Alpha and the corresponding factor loadings.

Table 13: Further Constructs and Measurement Items

Constructs and Items	Cronbach's Alpha	AVE	Factor Loadings	CITC	Mean (SD)
<b>Overall Satisfaction<sup>a</sup></b> (Bhattacharjee, 2001)	0.934	0.830			
1. I am satisfied with the products of XY.			0.955	0.896	5.99 (1.066)
2. I am satisfied with the service offered by XY.			0.870	0.838	6.18 (1.034)
3. Overall, the products of XY meet my expectations.			0.901	0.860	6.06 (1.044)
<b>Customer Recommendation<sup>a</sup></b> (Srinivasan et al., 2002)	0.872	0.699			
1. I say positive things about XY to other people.			0.875	0.786	6.15 (1.150)
2. I will do more business with XY in the next few years.			0.749	0.701	5.41 (1.330)
3. I would recommend XY to relatives and friends.			0.889	0.789	5.94 (1.321)
<b>Affective Response<sup>a</sup></b> (Beatty and Ferrell, 1998)	0.915	0.732			
I perceived XY as:					
1. enthusiastic.			0.881	0.828	5.75 (1.176)
2. excited.			0.839	0.796	5.49 (1.289)
3. inspired.			0.905	0.845	5.66 (1.245)
4. proud.			0.796	0.761	5.66 (1.191)
<b>Involvement with the Company<sup>b</sup></b> (Zaichkowsky, 1994)	0.892	0.693			
To me the company XY is:					
1. Unimportant / Important			0.772	0.726	2.39 (1.023)
2. Boring / Interesting			0.852	0.786	2.00 (1.368)
3. Not relevant / relevant			0.869	0.802	2.16 (1.315)
4. Mundane / Fascinating			0.806	0.760	1.89 (1.194)

<sup>a</sup> Measured on seven-point scales (1 = "totally disagree," 5 = "totally agree").

<sup>b</sup> Measured on a seven-point semantic differential (-3 to +3).

Abbreviation: AVE, average variance extracted

Abbreviation: CITC, corrected item total correlation

## 2.7.2 Results

First, the construct customer recommendation is analyzed, followed by the mediating role of affective response and overall satisfaction. Finally, the moderating effect of involvement with the company is analyzed.

### Customer Recommendation

As an additional construct for behavioral loyalty, customer recommendation is analyzed before and after the factory visit. Comparing the mean values of the construct before and after the factory tour, the results of a paired samples t-test show an increase in the values for customer recommendation, even if this is not significant ( $M_{\text{before}} = 5.77$ ,  $SD = 1.08$  vs.  $M_{\text{after}} = 5.89$ ,  $SD = 1.19$ ,  $p = 0.29$ ).

For the direct influence of customer recommendation, the dataset of  $n = 140$  was considered. The same set of covariates were included as in the studies before. Thereby, factory visits as the independent variable in these relations encompasses the time values 0 (before the visit) and 1 (after the visit). Two ANCOVAs are processed to analyze the direct influence of the construct on loyalty behavior. The results show that customer recommendation has a direct positive effect on purchase intention ( $b = 0.82$ ,  $SE = 0.048$ ,  $t(128) = 15.955$ ,  $p < 0.001$ ), as well as on affective commitment ( $b = 0.63$ ,  $SE = 0.066$ ,  $t(128) = 9.402$ ,  $p < 0.001$ ). But this analysis ignores the effects of customer recommendation before and after the visit, as only mean values are analyzed.

### Mediating Role of Overall Satisfaction and Affective Response

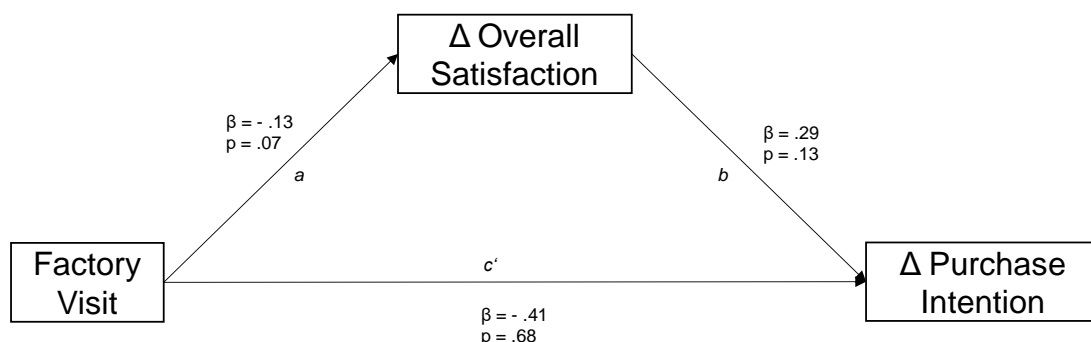
As previously shown, attitudinal loyalty (affective commitment) does not mediate the relationship between factory tours and behavioral loyalty. To verify this result, affective response and overall satisfaction as mediating constructs of attitudinal loyalty are analyzed.

A paired samples t-test is conducted and a comparison of the mean values of perceived customer satisfaction before and after the factory tour shows a significant increase in overall satisfaction with a significance at the 10% level ( $M_{\text{before}} = 6.01$ ,  $SD = 1.03$  vs.  $M_{\text{after}} = 6.14$ ,  $SD = 0.95$ ,  $p = 0.07$ ). Two repeated-measures ANCOVA tests show that overall satisfaction has a positive and significant influence on both the purchase intention ( $F(8,130) = 13.408$ ,  $p < 0.01$ ) and the affective commitment ( $F(8,130) = 11.694$ ,  $p < 0.01$ ).

A mediation analysis was conducted using the MEMORE tool, developed by Montoya and Hayes (2017) to analyze the mediating role of overall satisfaction on factory visits and purchase intention. For the analysis, the dataset with  $n = 70$  was used; that means all responses before and after the factory visit are in one row.

The results of the mediation analysis show that a visit to the factory has an effect at a 10% level on overall satisfaction ( $a: b = 0.13, SE = 0.160, t(69) = 0.069, p = 0.07$ ). There is no significant direct effect of overall satisfaction on purchase intention ( $b: b = 0.29, SE = 0.185, t(69) = 1.545, p = 0.13$ ). The direct effect of factory visits on purchase intention while accounting for overall satisfaction is also not significant ( $c': b = -0.04, SE = 0.108, t(69) = -0.41, p = 0.68$ ). With values for the indirect effect ( $ab: b = -0.037, 95\%-CI [-0.129, 0.026]$ ), overall satisfaction does not mediate the relationship between factory visits and purchase intentions. The figure below displays the results.

**Figure 15: Repeated Measure Mediation Effect of Overall Satisfaction**

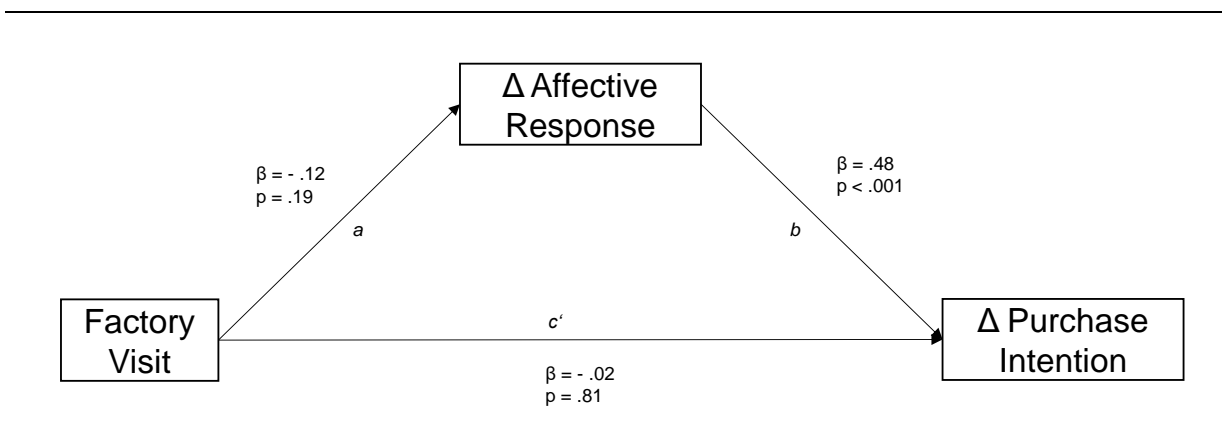


For the construct affective response, the results of a paired samples t-test show a slight but not significant increase in mean values before and after a factory tour ( $M_{\text{before}} = 5.58, SD = 1.05$  vs.  $M_{\text{after}} = 5.70, SD = 1.15, p = 0.19$ ). Even though the mean values do not show a significant result, they do show a tendency towards higher values for the customers' affective response after the factory visit compared to prior to the visit.

For the mediating role, a mediation analysis was conducted using the MEMORE tool developed by Montoya and Hayes (2017). The affective response directly and significantly influences the purchase intention ( $b: b = 0.48, SE = 0.121, t(69) = 3.975, p < 0.001$ ). However, factory visits don't have a significant effect on either affective commitment ( $a: b = -0.12, SE =$

.093,  $t(69) = -1.311$ ,  $p = 0.19$ ) or the direct effect on purchase intention ( $c'$ :  $b = -0.022$ ,  $SE = .094$ ,  $t(69) = -0.239$ ,  $p = 0.81$ ). The indirect effect is also not significant ( $ab$ :  $b = -0.059$ , 95%-CI [-0.132, 0.037]). Therefore, also, an affective responses do not mediate the relationship between factory visits and purchase intention. The relationships are displayed in the following figure:

**Figure 16: Repeated Measure Mediation Effect of Affective Response**



### Involvement with the Company

Perceived involvement with the company is analyzed as a moderator in the relationship between factory tours and customer loyalty (i.e., affective commitment and purchase intention).

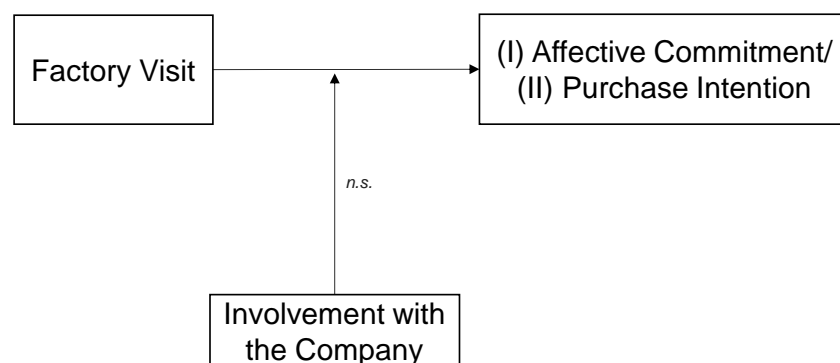
The results of the paired samples t-test show a slight but nonsignificant decrease in means before and after a factory tour ( $M_{\text{before}} = 2.15$ ,  $SD = .96$  vs.  $M_{\text{after}} = 2.06$ ,  $SD = 1.18$ ,  $p = 0.35$ ).

For the direct influence of involvement with the company, the dataset of  $n = 140$  was taken into account. Thereby, factory visits as the independent variable in these relations encompasses the time values 0 (before the visit) and 1 (after the visit). The same set of covariates were included. The results of the two repeated-measure ANCOVA show a significant direct effect of involvement with the company on purchase intention ( $b = 0.34$ ,  $SE = 0.085$ ,  $t(128) = 4.011$ ,  $p < 0.001$ ), as well as on affective commitment ( $b = 0.42$ ,  $SE = 0.085$ ,  $t(128) = 4.989$ ,  $p < 0.001$ ).

Two separate moderation analyses were conducted to determine whether the relationship between involvement with the company and a factory visit significantly predicts affective

commitment or purchase intention. Therefore, an analysis using the PROCESS tool, developed by Hayes (2022), shows further moderating effects (involvement with the company) on the relationship between participation in factory tours and loyalty behavior. Thereby, the mean values of the constructs are considered, including the ratings before and after the factory tour. Moreover, the same covariates were taken into account as in the previous studies (i.e., age, gender, number of employees, years of cooperation, personal contacts, future orders, and travel distance). The analyses show that being involved with the company does not change the relationship between factory visits and either affective commitment (I:  $F(1, 128) = 0.31, p = 0.58$ ) or purchase intention (II:  $F(1, 128) = 0.17, p = 0.68$ ). The following figure displays the relationships between these variables.

**Figure 17: Moderating Effect of Involvement with the Company**



Note: included covariates are respondents' age, gender, the customer company's number of employees, years of cooperation with the visited manufacturer, respondents' personal contacts, travel distance from the customer to the visited manufacturer and planned future orders

Thus, the perceived positive assessment of a company by customers, in this case their involvement with the company, has a direct effect on their loyalty. However, involvement with the company does not moderate the influence of factory tours on the behavioral and attitudinal loyalty of participating customers. Furthermore, the chosen dataset ignores the different evaluations of involvement with the company before and after the factory tour.

### 2.7.3 Discussion

The additional analyses show further links between factory visits. Besides affective commitment as an attitudinal loyalty construct, affective response and overall satisfaction were analyzed. Neither has a mediating effect on loyalty behavior. Thus, the results for both constructs do not support the assumptions for H3's mediating role of attitudinal loyalty between factory visits and behavioral loyalty.

In addition, further analysis revealed that behavioral constructs, in this case customer recommendation, also influence purchase intention and affective commitment. To better understand the relationships between the constructs of behavioral loyalty and customer recommendation, more research should look at customer recommendation as a dependent variable instead of purchase intention.

Finally, factory visits do not increase the involvement with the company, although the results were not significant. Moreover, customers' perceptions of their involvement with the company have no moderating effect on the relationship between participation in factory tours and loyalty behavior. Further studies should investigate whether the construct acts as a mediator in the relationships between factory visits and loyalty.

## 2.8 Conclusion

Due to the complex nature of B2B products and services, personal contact between suppliers and customers is essential in these settings. According to Österle et al. (2018), economic success relies on direct communication between the involved parties, transparency, and trust. A common form of such personal interaction in the B2B domain is inviting customers to visit the supplier's factory, where tour guides show and explain the product and the product development and manufacturing processes. However, extant research in industrial marketing has not sufficiently examined the relational and economic consequences of factory tours. This research therefore aims to better understand the outcomes of participation in factory visits based on two empirical studies.

Using secondary data on 49 customers who participated in a supplier's factory tour over a 23-year period, Study 1 provides strong evidence of economic benefits. Specifically, the results show a significant increase in customer-level revenue after the factory visit.

For more detailed insights into the underlying perceptual and attitudinal processes, Study 2 employed a survey-based within-subjects design. By analyzing the responses of 70 customers before and after the factory tour, the effects on behavioral and attitudinal loyalty were assessed, along with the role of the perception of the tour guide. The results again show positive effects of factory tour participation on behavioral loyalty. Moreover, positive effects on affective commitment and effects of the perceived competence of the tour guide were evident. Neither the mediating results of affective commitment nor other constructs of the questionnaire (affective response, overall satisfaction) could provide support for this relationship. After factory tours, an additional positive and direct effect of customer recommendations on attitudinal and behavioral loyalty was observed. Moreover, no significant moderating effects of involvement with the company on loyalty behavior were verified.

### **2.8.1 Contributions to Theory**

These findings add to the existing literature in four ways. First, the results from both studies show clear economic benefits of having customers participate in factory tours. Based on the results of Study 1 (i.e., customer-level revenues from actual orders), this research goes beyond the survey-based findings from prior studies (e.g., Chiou et al., 2002; Lee, 2015). While some authors (e.g., Chen and Morrison, 2004; Österle et al., 2018) have already recognized the importance of factory tours with regard to improved brand image, product promotion opportunities, and the use of experiential marketing techniques, this study also shows the relevance of factory tours for product purchases and customer loyalty.

Second, seeing the production process does not only influence purchase behavior in B2C companies (Mitchell, 2006; Nella and Christou, 2010), but also has a positive effect on purchases in the B2B industry. Thus, this study expands the existing literature on factory tours in a B2C context by providing results in a B2B setting.

Third, the paper contributes by distinguishing between behavioral and attitudinal loyalty. While existing research has shown that factory tours are beneficial for companies by enhancing attitudinal brand loyalty, the results provide a more differentiated examination. The results indicate that factory visits are an advantage for both attitudinal and behavioral loyalty.

Fourth, this study contributes by considering the role of the tour guide. In a B2C setting, Bildat and Schaal (2013) and Dolen et al. (2002) found that tour guide qualities improved customer satisfaction and interaction with contact employees. This study provides evidence that in a B2B

setting, the perceived competence of the tour guide also influences purchase-related attitudes and behavior.

Overall, this study shows the importance of factory tours in B2B companies and their impact on attitudinal and behavioral loyalty, while also emphasizing the role of the tour guide.

### **2.8.2 Managerial Implications**

The results of this research show that factory tours provide B2B companies the opportunity to create and increase customer loyalty at both the attitudinal and behavioral levels. The findings suggest that inviting customer representatives on a visit increases the likelihood of higher customer commitment as well as higher sales. At the same time, however, manufacturers should consider the costs associated with organizing a factory tour (e.g., travel costs of customers, working hours of tour guides). As a result, managers should not only track the attitudinal and behavioral customer-level consequences of factory tour participation, but additionally they should conduct cost-benefit analyses to ensure the economically viable utilization of factory visits.

When using factory tours as a targeted marketing instrument, manufacturers should also consider which customers they want to invite. One potential target group could be existing customers, with the aim of increasing purchase frequency as well as upselling and cross-selling. Another target group could be potential customers, for whom the factory tour is part of the acquisition process. Moreover, factory tours should be customized to the specific demands and needs of different target groups and the backgrounds of the customer representatives (e.g., production workers, sales agents, general managers) (Österle et al., 2018). Therefore, manufacturers must provide personalized visits to meet customers' needs (Rather et al., 2019).

Finally, the results show that the perceived competence of the tour guide influences the success of a factory tour. Thus, companies should focus on recruitment, training, and internal communication policies for tour guides if they want to deliver superior brand experience that leads to customer loyalty.

### 2.8.3 Limitations and Future Research

The present study provides evidence for positive effects of factory visits on affective and behavioral loyalty. At the same time, limitations should be considered when interpreting the results.

First, the findings from Studies 1 and 2 are based on within-customer analyses. For a more robust assessment of the identified positive effects, comparisons with customers who did not participate in factory tours should be added.

Second, conducting the investigation at a medium-sized manufacturer may limit the generalizability of the results. Future research should broaden the focus on other B2B companies, including other sizes, areas, settings, and environments. Also, the cost-benefit analyses for these customer factory tours should generalize the findings to other B2B companies, as the organization requires a considerable but varying amount of resource investments (e.g., scheduling the tour, training employees, ensuring safety, etc.).

Third, the study participants were already existing customers. Future investigations should therefore also include potential customers to gain deeper insights into customer acquisition processes.

Fourth, future research should also focus on the risks that factory tours may entail. Companies offering a factory tour could face disruptions of the production process, the risk of industrial espionage, or security concerns during the tour (Littmann, 2003). Future studies should explore what risks exist and how they might affect the positive results.

Based on the database of  $n = 140$ , the analyses show that the data are not compared per person. Therefore, the data before and after the factory visit do not belong to the same participant. Further analyses should include a method that displays a paired analysis of the moderating role of company's involvement and the effects of customer recommendations.

Finally, the actual purchase behavior of the customers could not be measured, but instead their behavioral intentions could be measured. Future research can investigate the actual behavioral changes of customers after a company tour to provide the results more credibility.

Despite these limitations, this research offers important insights for academics and practitioners about the economic potential of factory tours in a B2B context.

### **3. Paper 3: “Come and Visit Us!”: The Effects of Factory Tours on Economic Values**

#### **3.1 Abstract**

This paper presents the financial perspective of factory tours. Additionally, the paper introduces various metrics for assessing the performance of marketing efforts. Furthermore, the costs and revenues of factory tours are analyzed using the example of a medium-sized B2B company from Study 1 and Study 2. Thereby, factory tours are not considered in isolation but as part of an overall experience for customers. In addition to the factory tour, the entire visit includes evening events, seminars, and other marketing activities. In a first step, the costs of the last 10 years were evaluated and compared with the income from customer seminar fees. In a second step, the costs are analyzed in more detail using a representative example for 2019.

### 3.2 Introduction

One of the important determinants that marketing and brand managers have to deal with includes the decision and interaction between traditional and new sales, marketing, and communication styles. Thereby, the chosen marketing style influences the company's return on investment (ROI) in different ways. While 'old' marketing styles influence the short-term evaluation of a company's ROI, 'new' communication styles affect the company's long-term ROI.

The exclusive focus on direct sales implies that conventional marketing mix models only provide insight into short-term ROI. They therefore often lead to a one-sided allocation of marketing budgets for advertising activities (Cain, 2010, p. 94). Traditional brand valuation approaches, which focus on its functional aspects, tangible assets, and unique selling points (USPs), don't take into account integrated marketing communication budgets for different types of activities like promotions, events, or social media (Seddon, 2010, p. 17). Short-term sales are beneficial for promotions but less effective for media activities for established brands. This ignores the longer-term perspective, which focuses on the brand-building effects of successful media campaigns (Cain, 2010, p. 94).

These intangible values such as brand affiliation, customer relationships, know-how, or production processes are difficult to capture (Seddon, 2010, p. 13). Factory tours, as part of a long-term marketing strategy, belong to new and interactive communication styles, while personal interaction with customers is predominant for building long-term customer relationships (Gertler, 1995, p. 16). The following list shows the two marketing and communication styles.

**Table 14: Marketing and Communication Styles**

<b>Old / Traditional</b>	<b>New / Interactive</b>
Everything is outbound	Interactivity
Functional Focus	Processes
Tangible Assets	Intangible Assets
USP's	Customer Value
Corporate monoliths	Alliances & Affiliation
Brands and Branding	Branding absolutely

(Kitchen, 2010, p. 2).

Customer experiences and the interaction of the company with existing or potential customers develop and manage the perception of a brand. Therefore, as a marketing strategy, factory tours can lead to a relationship between the customer and the company, which in turn influences the buying behavior of customers (Seddon, 2010, p. 34). Hence, a positive attitude of customers towards a brand can directly impact direct sales of first-time purchases of the respective company. Thus, customers' increasing preference for a company's product or service led to a growing market share. The attitude of customers impacts the direct sale of first-time purchases. Moreover, the brand plays an even more important role in a customer's decision to make repeat purchases and become loyal. Loyal customers tend to make more purchases and can be persuaded to purchase other products associated with the brand. The bond that a brand creates with loyal customers therefore increases the security of future sales (Seddon, 2010, p. 35). In addition, brand image can also have a further positive impact on company's profit margins, as the company can charge higher prices for its products (Cain, 2010, p. 115; Seddon, 2010, p. 36). Therefore, the indirect effects of marketing include customer price sensitivity and the extent to which demand changes when the cost of a product or service changes (Cain, 2010, p. 116).

Despite all the efforts of factory tours, the company incurs additional costs, which are crucial for the decision to offer industrial tourism. Managers often lack accurate knowledge or suitable measures to determine how much profit is generated by a specific marketing investment. They have huge marketing expenditures, but no supporting evidence of profit margins associated with these activities (Baidya and Basu, 2008, p. 181).

To assess the effectiveness of marketing expenditures, both financial and non-financial indicators are needed. Financial indicators are sales, profits, and ROI measures, while non-financial indicators are customer satisfaction, customer awareness level, or purchase intentions (Baidya and Basu, 2008, p. 182).

The feasibility of factory tours depends, among other things, on the amount of transaction, production, and customer costs or the subjective effort required for participation (Song and Adams, 1993, p. 7). Factory tours as a marketing strategy imply several marketing expenditures, such as personnel costs, investment costs, costs for insuring visitors, or administrative costs for organizing the tour (Bregman, 2011, p. 25). Since the core intention of an industrial company is manufacturing, the provision of factory tours can incur investment costs that represent the costs of adapting or expanding the necessary facilities. Hence, companies need to invest in facilities for logistics and safety issues, as well as in infrastructure and general conditions, including the supply of sanitary facilities, a reception area, or sufficient car parking

spaces (Otgaar, 2010, p. 52). Companies with suitable existing buildings require lower investment costs compared to the construction of new communication centers or additional facilities (Bregman, 2011, p. 23). Inviting visitors generates variable costs by providing catering service, which depends on the number of people. In addition, the company incurs additional costs due to the need for one or more tour guides (Otgaar, 2010, p. 53).

### **3.3 Measure of Marketing Expenditures**

This chapter presents common marketing measures for short-term and long-term perspectives. Furthermore, the next sections mention methods that incorporate both perspectives.

#### **Short-term Perspective**

The most common measure used in marketing to calculate the profitability of marketing strategies is return on investment (ROI) or return on marketing investment (ROMI). ROMI is defined as the sales generated by marketing, subtracted by the investments the company spent on marketing, divided by the amount of money spent on marketing investments (Seddon, 2010, p. 50).

The short-term ROMI formula is calculated as follows:

$$\text{Short-term ROMI} = ((P - Z) / Z)$$

The marketing investments or marketing costs are designated as 'Z' for total efforts. Profits are labeled as 'P' and include the sales generated by the chosen marketing strategy (Seddon, 2010, p. 50).

This calculation helps compute the financial value of the company in terms of the short-term effects of marketing activities (Cain, 2010, p. 115). As the techniques for evaluating the financial return from marketing expenditures (e.g., advertising, direct mailings, sales promotion) focus on short-term measures, they are not reliable for deciding marketing strategies in general (Rust et al., 2004, p. 109). The use of the conventional marketing mix model is still prevalent, but it disregards long-term marketing effects (Cain, 2010, p. 115). This calculation for ROMI is based on financial values and represents only a short-term analysis of expenditure.

### **Long-term Perspective**

A better method for measuring brand valuation is the economic or internal use method, which accounts for the long-term effect of marketing activities. This method combines financial market approaches that involve hard financial numbers with brand valuation approaches that are based on research measurements of customer attitudes toward a brand (Seddon, 2010, p. 25). It can therefore not only be used as a financial tool to determine the actual value of the brand, but also as a management tool to identify the strategies that contribute most to increasing brand value (Seddon, 2010, p. 26).

One way to measure brand valuation is through brand equity, which indicates a brand proposition and set of attributes intended to differentiate company's products and services from competitors and create a bond with its customers (Seddon, 2010, p. 23).

Brand equity is based on measures of loyalty, perceived quality, association, and awareness. Loyalty measures include behavior, switching costs, satisfaction, or commitment. Perceived quality depends on customers' perception of the quality of the product or service. The quality of products is evaluated on their performance or features, while the service quality relies on the reliability, competence, responsiveness, and empathy of the service provided (Seggie et al., 2007, p. 839).

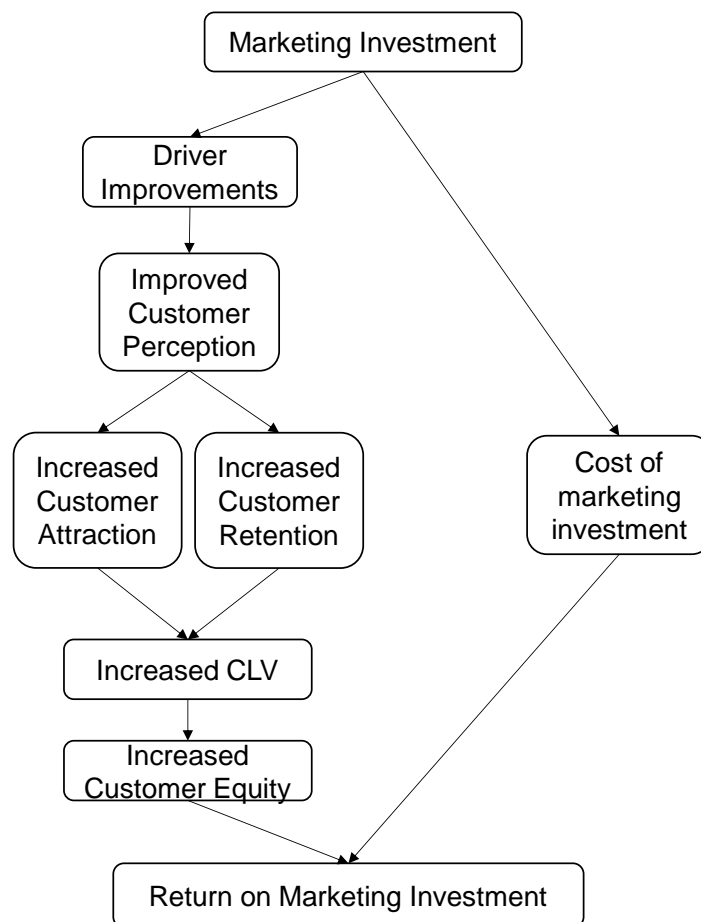
The next measure is brand association, which includes customers' associations with competitors, applications, and the relative price of products. The last one is brand awareness, which is the ability of customers to choose that brand as their first choice for a particular product (Seggie et al., 2007, p. 839).

These measures represent the long-term effects of marketing expenditures. A further way to measure long-term ROI includes direct sales from customer purchases and indirect sales from product price sensitivity, brand perception (product or service experience), marketing investment, and loyal customers (repeat visits) (Cain, 2010, p. 115).

Rust et al. (2004) use ROMI as an effective measurement for long-term profits as well as to compare companies' expenditures and investments. The authors state that "companies achieve this financial accountability by considering the effect of strategic marketing expenditures on their customer equity and by relating the improvement in customer equity to the expenditure required to achieve it" (Rust et al., 2004, p. 109). Customer equity is defined as the sum of the discounted lifetime values of all current and potential customers of the company. The shift from focusing on customers rather than products implies the need for an accompanying shift from a product-based to a customer-based strategy (Rust et al., 2004, p. 110).

Marketing is an investment that enhances the driver of customer perception, leading to better customer attention and retention. It also increases customer lifetime value, which, in turn, increases customer equity. Therefore, if a company wants to enhance its customer equity, it must improve these drivers (Rust et al., 2004, p. 115). The comparison of customer equity with the cost of marketing investments results in the return on marketing investments (Rust et al., 2004, p. 112). The next figure presents the concept for ROMI.

**Figure 18: Concept for Return on Marketing Investment**



(Rust et al., 2004, p. 112).

The formula for the long-term ROMI is calculated as follows:

$$\text{Long-term ROMI} = (\Delta\text{CE} - E) / E$$

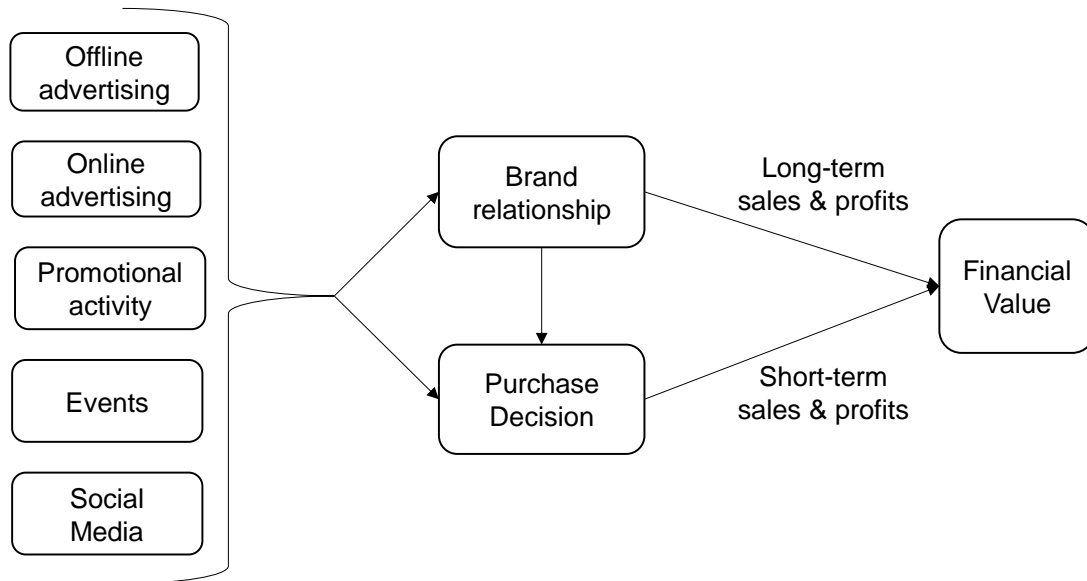
The expenditures are referred to as 'E', deducted by the cost of capital, and 'ΔCE' is the improvement in customer equity that results from the expenditures (Rust et al., 2004, p. 115).

The long-term ROMI enables a more accurate calculation of the value of a marketing strategy and allows companies to select marketing activities that are profitable in the long term (Seddon, 2010, p. 26). However, the necessity of long-term and historical data makes the application of long-term ROMI models rare. As a result, marketing expenditures are mostly seen as short-term costs rather than long-term investments (Cain, 2010, p. 115).

### **Short-term and Long-term Perspective**

Seddon (2010) includes both short-term profits and long-term measures as indicators of the financial value of company's marketing activities, displayed in the figure below. Integrated marketing communication tools include offline and online marketing activities, events such as factory visits, and social media activities. All these activities influence customers' purchase decisions, which are reflected in short-term profit, while customers' bonding with the company indicates the long-term effects (Seddon, 2010, p. 49). This method therefore takes both perspectives into account and allows marketers to evaluate the optimal marketing investment strategy to determine the exact financial value of the company, and thus, to derive marketing activities that improve its financial value.

**Figure 19: Effects of Marketing Investments on the Financial Value of the Company**



(Seddon, 2010, p. 49).

### 3.4 Cost Analysis

Beside the statistically shown positive effects of factory tours on the behavioral and attitudinal loyalty of the first two papers, this section focuses on the financial aspects of factory tours. Therefore, a cost analysis was carried out using data from the same medium-sized industrial company that has been evaluated in Studies 1 and 2. The company combined the factory tour with further promotional activities. Hence, as a marketing strategy of the manufacturing company, the factory tour is part of an overall experience for customers. The factory tour is led by company tour guides who explain the individual production steps. Moreover, this experience also includes seminar presentations and further activities such as several evening events, catering, overnight accommodation, and voluntary participation in a weekend excursion.

#### 3.4.1 Cost Analysis from 2010 to 2022

The experience provided includes a two-day seminar with lectures and practical activities, a factory tour, and other marketing activities such as evening or sports events. To obtain an overview of a company's total expenditures for conducting factory tours, the costs and revenues per year were calculated for a period of 13 years, except for 2020 and 2021. In these two

years the company's facilities and production area were closed to customers due to the regulations imposed by the COVID-19 pandemic and to protect its own employees from personal contact with customers and participants from outside the company. The following table shows the company's expenses from 2010 to 2022 for the entire duration of the visit, including all activities and experiences.

**Table 15: Study 3: Costs of Industrial Tourism**

<b>Year</b>	<b>n</b>	<b>Costs</b>	<b>Other Costs</b>	<b>Invoice</b>	<b>Total</b>
2010	44	€ 120,011	€ 24,168	€ - 126,900	€ 17,279
2011	46	€ 119,618	€ 24,168	€ - 74,532	€ 69,254
2012	47	€ 106,649	€ 24,168	€ - 96,110	€ 34,707
2013	47	€ 114,365	€ 24,168	€ - 107,600	€ 30,933
2014	45	€ 119,088	€ 24,168	€ - 107,600	€ 35,656
2015	44	€ 135,030	€ 24,168	€ - 83,085	€ 76,113
2016	37	€ 116,793	€ 24,168	€ - 66,645	€ 74,316
2017	50	€ 135,259	€ 24,168	€ - 77,060	€ 82,367
2018	49	€ 166,649	€ 24,168	€ - 112,250	€ 78,567
2019	50	€ 106,983	€ 24,168	€ - 107,000	€ 24,151
2020	-	COVID-19	-	-	-
2021	-	COVID-19	-	-	-
2022	35	€ 126,198	€ 24,168	€ - 74,015	€ 76,351
<b>Sum</b>	<b>494</b>	<b>€ 1,366,645</b>	<b>€ 265,848</b>	<b>€ - 1,032,797</b>	<b>€ 599,696</b>

The items listed under 'costs' cumulate all expenses incurred, including the costs of marketing materials, transportation and shuttle costs, costs for weekend and evening events, and finally, accommodation costs. These costs differ from year to year due to price changes and different types of activities being held in different locations with different transportation or shuttle costs.

The costs summarized under 'other costs' have been added to the calculation and amount to around EUR 24,000. These costs include the personnel costs of administration, the lecturer costs, and the costs of the applied tour guides. In addition, material and service costs as well as hygiene and safety costs and external services such as city or museum guides are included.

As no values are available for the period prior to 2019, it is assumed that these values will remain the same for all years.

Moreover, the company charges the customers a seminar fee that includes all activities, lecturers, and the factory tour. The total amount of customer payments is accumulated under 'invoice'.

One advantage is that the company does not have major investment costs for the provision of seminar rooms, parking spaces, service facilities, or reception areas for customers, as these buildings were already in place regardless of the visit.

On average, 45 participants visited the company each year. The maximum capacity of seminar participants is 50, limited by the size of the seminar room. In total, the company incurred costs of almost EUR 600,000 over eleven years, which corresponds to an average financial amount of around EUR 55,000 per year. The costs range from a minimum amount of EUR 17,000 in 2010 to a maximum of EUR 82,000 in 2017. The lowest income from the invoices was achieved in 2016 and amounted to EUR 67,000, while the highest income was achieved in 2010, the first year of the evaluated data, at almost EUR 127,000.

Over the past eleven years, the company has not been able to cover the costs of the factory tours and the surrounding experience of the two-day seminar. Finally, the overview of costs and income between 2010 and 2022 shows that the company has higher marketing expenditures than income and that the seminar and the factory tour do not cover the costs alone. Therefore, for this time consideration, the company must bear the costs and additional effort to provide customers with a unique experience.

#### **3.4.2 Cost Analysis on the Example of 2019**

The general overview of the evaluation between 2010 and 2022 provides a first impression of the costs that the company has invested in order to offer its customers a unique experience. The visit encompasses a factory tour, a two-day seminar, and offsite activities to build and enhance the bond with customers as a long-term marketing strategy. Subsequently, the specific year 2019 is analyzed to gain a better insight into the calculation of specific costs and income. This year is chosen because it is the last year before the closure of the company's production facilities for customers, which was regulated by the government due to the COVID-19 pandemic. Hence, the year reflects a more stable and representative year for the calculation of costs than the years following the closure.

The following table contains all costs and expenditures aligned with the factory tour, as well as the generated income. The number of participants is listed, along with the costs per participant.

**Table 16: Study 3: Cost Analysis of Factory Tours**

Type	Costs (€)	n	Costs/ part.
Administration	4,000	50	80
Tour Guide & Lecturer	4,200	50	84
<b>Labor Costs</b>	<b>8,200</b>		
Restaurant	5,891	60	98
Catering	908	70	13
Reception	3,858	60	64
<b>Catering Costs</b>	<b>10,657</b>		
Entertainment Program	1,750	60	29
Shuttle & Transport	1,280	50	26
<b>External Costs</b>	<b>3,030</b>		
Evening Events	970	50	19
Weekend Event	28,333	63	567
Advertising Material	5,014	50	100
<b>Marketing Costs</b>	<b>34,317</b>	<b>50</b>	
<b>Accommodation Costs</b>	<b>71,386</b>	<b>50</b>	<b>1,428</b>
<b>Material Costs</b>	<b>3,122</b>	<b>50</b>	<b>62</b>
<b>Safety Costs</b>	<b>440</b>	<b>50</b>	<b>9</b>
<b>Production Costs</b>	<b>0</b>		<b>0</b>
<b>Travel Costs</b>	<b>0</b>		<b>0</b>
<b>Subtotal Costs</b>	<b>131,151</b>		<b>2,580</b>
<b>Income</b>	<b>- 107,000</b>	<b>50</b>	<b>- 2,140</b>
<b>Total Costs</b>	<b>24,151</b>		<b>440</b>

All in all, the total costs amount to EUR 131,000, which corresponds to EUR 2,580 per participant. With revenues of EUR 107,000, the company has total costs of EUR 24,000, which corresponds to EUR 440 per participant.

In the following sections, a more detailed explanation of the individual costs, summarized in the table 16, is given:

### **Labor costs**

The total labor costs amount to EUR 8.200 and consist of administrative and personnel expenses.

Administration costs: These costs involve all expenses incurred in advance of the visit. The entire experience needs to be organized, contact with customers is required in advance, the events and hotel rooms have to be booked, and the necessary marketing material for the customers has to be created. Therefore, one employee of the company has a workload of one week prior to the event, which is not part of the employee's regular tasks.. Thus, 40 hours have been calculated as additional costs for the factory visit, accounting for EUR 4,000.

Personnel costs: These include the costs incurred by the tour guide during the factory visit and by the seminar lecturers. Both were employees of the company and are calculated with the same hourly rates of EUR 100. A total of 24 people with a cumulative working time of 42 hours amounts to total cost for two days of EUR 4,200.

### **Catering costs**

The company is also responsible for the catering during the visit, with a total of EUR 10,657.

Reception: The reception for the customers took place in a hotel room that had been reserved exclusively for the participants and company staff the evening before the seminar began. This kick-off event was planned so that the customers arriving at the hotel could get to know each other and the respective employees of the company responsible for the factory visit and the seminar days. The event was planned for 60 people, comprising 50 customers and 10 company employees. The reception included drinks and snacks in a hotel room reserved for customers and employees and cost the company EUR 3,900.

Catering: These costs encompass the expenses for drinks during the lectures as well as for coffee and tea for the short breaks between the presentations on two days for 70 people, provided in the seminar room. The corresponding expenditures amount to EUR 900.

Restaurant: These expenses include costs for two lunches and one dinner at a restaurant for all participating customers and an additional 10 of the respective contact employees, amounting to a total of almost EUR 6,000.

### **External costs**

Entertainment program: The company made additional expenditures for external services, including city tour guides, personnel caterers or museum guides, and entrance fees, amounting to a total of EUR 1,750. The costs for the tour guides participating in the events after their working hours are not calculated.

Transportation and shuttle: These costs include expenses for organized buses that were exclusively arranged to transport customers and company employees to the destinations for the evening events. Additionally, a shuttle was deployed to pick up the customers from the hotel each morning and return them after the seminar, costing EUR 1,280.

### **Marketing costs**

Advertising material: The company incurred expenses for a program booklet that provided a detailed schedule for each day. The company incurred additional costs for promotional gifts for its customers by considering the company's compliance regulations. Other expenses involve the costs of seminar materials, including pens or notepads with the company logo. The cost for this is EUR 5,014, which corresponds to EUR 100 per participant for 50 visitors.

Evening events: The company provided the factory visit with a whole unique experience and therefore planned activities outside the seminar schedule. Therefore, the company arranged a visit to a castle, for which there was an admission charge. Reserving a sports hall for a voluntary football match between employees and customers resulted in additional costs. In total, the costs amount to EUR 1,000.

Weekend event: After the two days of the seminar, the visitors had the opportunity to attend a weekend event organized by the company. These expenditures included hotel costs, bus transfers, and entrance fees for the event. Participation in this event was voluntary and amounted to around EUR 28,000.

**Costs for Accommodation**

Hotel costs: The company booked the hotel rooms for the 50 customers in advance. For logistical reasons, all visitors stayed in the same hotel to enable the planned daily transfer. The inviting company covered the costs of two nights' accommodation, including breakfast, amounting to EUR 71,000.

**Material costs**

Material costs: As part of the seminar, the company also offers a practical part where customers can see firsthand the correct use of the products, possible difficulties in installation, or even possible incorrect applications of the products. This results in the costs for the various raw materials and products used for the presentation. Further costs are calculated based on the use of the machines and the material costs for waste disposal. In total, the costs amount to around EUR 3,000.

**Safety costs**

Hygiene and safety costs: The company is responsible for ensuring the industrial safety of customers who visit the factory. Therefore, the provision of helmets and coats for participation in the factory tour is required. There are also costs for the subsequent cleaning of the safety products. Additionally, the company pays attention to hygiene measures, which implicates costs for hygiene protection material for disinfection. Due to COVID-19, hygiene concerns are important for both the company and customers to ensure their safety and that they feel protected during their stay. Overall, the costs for hygiene and safety amount to a total of EUR 440.

**Production costs**

The company assumes no production downtime, as the walkthrough of the tour does not interrupt the production process because it runs almost automatically. Furthermore, there is an additional path in the production area that leads customers close to the process, but not too close to the machines and machine operators. Any potential disruption to production performance due to disturbances to employees by visitors is difficult to measure and is not taken into account in this calculation.

### **Travel Costs**

The participants were responsible for booking their own travel, including flight and train or bus tickets from the airport or train station to the respective hotel. Therefore, the company had no expenses for customer travel costs.

### **Revenue**

The company charges a fixed price for the two-day seminar, which includes all activities and presentations, as well as a factory visit. However, there are discrepancies between the actual ticket price and the price paid by customers. This is up to the company's sales representatives, who can determine whether and how much their customers receive a discount on their invoice. This depends on previous customer experience, returns or complaints, or whether the company is seeking to extend a contract or acquire entirely new customers. Therefore, the seminar fees are not the same for all participants. The seminar consists of two modules over two days, with the first module costing significantly more at EUR 1,650 than the second module at EUR 490. The combined cost for both modules is EUR 2,140 per participant. With 50 participants, the company generates revenue of EUR 107,000, disregarding individual discounts.

### **3.4.3 Discussion**

Considering only the hard financial figures, factory tours or seminar days are not profitable in the short term for this type of tourism experience. Even if the company did not have to make any major investments, personnel, service, and material costs represent additional costs for the company to their core business. If the calculation is reduced by company's own personal costs and by offsite activities such as hotel costs as well as costs for evening events, the factory tour and seminar days would not lead to financial losses for the company. However, this distinction only pertains to short-term financial effects. If the marketing activities are removed from the visit and the entire experience focuses only on business-related topics, customers' interest in attending the event could change and even decrease, which could hinder long-term customer relationships.

### **3.5 Conclusion**

Short-term effects of company visits are not profitable using the example of this medium-sized industrial company. The costs of this experience are higher than the income from customers. Therefore, the focus for this company must be on the positive long-term effects rather than short-term sales. This aligns with Bregman's (2011) claim that the total costs of organizing company tours are relatively low compared to the benefits, especially when considering the non-monetary benefits in addition to the monetary ones (Bregman, 2011, p. 23). Customers learn about the company, its products, and its employees; they exchange information and establish personal connections. Positive experiences enhance relationships through more trust and increase brand equity and its dimensions (brand awareness, perceived quality, and loyalty) (Österle et al., 2018, p. 84). Companies that invest in building their brands can emerge with a sustainable competitive advantage (Seddon, 2010, p. 13). In summary, there is a decline in the focus on short-term sales, while long-term marketing or brand impacts are more important (Seddon, 2010, p. 12).

#### **3.5.1 Contributions to Theory**

First, the paper contributes by distinguishing between short-term and long-term ROI measures. While short-term measures focus on concrete financial figures, long-term measures focus on brand attachment or satisfaction. Long-term measures allow for a more accurate calculation for marketing expenditures than short-term metrics.

Second, this paper, along with the accompanying cost calculation, contributes to the theory by providing a practical example of the marketing expenses associated with factory tours, which are part of an overall customer experience. In addition, the paper presents the detailed costs of various marketing activities.

Third, the study contributes to and extends the literature by providing an analysis of factory tours from a financial perspective in a B2B context in two ways. On the one hand, financial data was analyzed over a long period of time, and, on the other hand, the costs were calculated based on a more detailed analysis of a company's costs in a specific year.

### **3.5.2 Managerial Implications**

The labor hours spent on tour guides or lecturers are the company's own employees, so the workload occurs during their regular workday. Therefore, managers have to distinguish the additional workload during the visit, compare it with the unfinished work of their actual tasks, and analyze the possible negative effects of the work distribution.

Furthermore, in this example, the company did not have to invest in new facilities, parking lots, reception areas, or seminar rooms, as all these buildings already existed. Therefore, managers need to calculate the additional costs of conducting factory tours and weigh them against the positive impact of customer visits.

Additionally, this company had no production downtime during the visit. Customers can observe the production process closely without interruption. Moreover, the production employees do not feel observed, which does not slow down or interfere with their work. Companies must therefore also consider these possible negative effects of providing factory tours.

The company expenses refer to one example of potential costs of providing factory tours within an entire experience. Managers have to decide whether their experience or factory visit should include all these external activities and the associated costs. Focusing only on business-related activities can minimize costs, but it can also lead to customer dissatisfaction. Offsite activities can lead to closer contact between customers and brand representatives, which can be beneficial for the future business.

Even if the company suffers financial losses of the factory tour, the long-term advantages outweigh the disadvantages. The positive effects of factory tours on the bond and relationship between customers and the company indicates a competitive advantage and successful marketing strategy. Customers interact with company representatives, get to know the product, and exchange know-how. These positive experiences during a factory tour enhance relations, increase brand awareness and customer loyalty. Managers should therefore focus more on long-term effects rather than short-term costs and investments.

### **3.5.3 Limitations and Future Research**

In this study, the tour guides and lecturers are company employees. Thus, future studies should analyze the effects and costs of external tour guides. Furthermore, the consequences for the unfinished work for their initial job as company-owned employees should be analyzed.

In addition, the study is based on a medium-sized company in the B2B sector in Germany. Future research should also include further companies operating in different industries. Moreover, to obtain validated results, companies of different sizes or based and located in different countries should be investigated.

Moreover, the seminar room's size limited the number of participants. Future studies should analyze factory tours with a larger group of participants to minimize or allocate the fixed costs of the visit per participant.

It was not possible to calculate the personnel costs precisely for each individual year. A standard amount was assumed that does not accurately reflect the actual costs and does not consider the increasing personnel and material costs over time. This aspect should be considered in future studies as well.

The company's advantage lies in the lower investment costs due to the available space, the existing parking lots, and the seminar rooms, which are not in the same location as other companies. Hence, further studies should include investment costs in their analysis to investigate the actual benefit of factory tours.

Furthermore, the calculation of factory tours was incorporated into an overall customer experience. Therefore, future studies should calculate the costs of factory tours themselves and analyze the effects of factory tours on customer behavior without leisure activities.

Finally, there is a growing acceptance that short-term metrics are insufficient, and brand valuation is important in capturing the total value created by marketing (Seddon, 2010, p. 13). Therefore, further studies should measure long-term metrics by incorporating customer satisfaction, customer equity, or other customer assessments. This will give companies a more validated measure to judge the effectiveness of a marketing strategy, such as offering factory tours.

## 4. Conclusion

This chapter addresses the theoretical contribution to existing literature and identifies the limitations of this study, as well as important facts for future research. Furthermore, the three papers offer managerial implications that are summarized in this chapter. Finally, this paper completes the research of industrial tourism with a short summary.

### 4.1 Contributions to Theory

Regarding theoretical contributions, this study helps to demonstrate the impact of customer behavior in a B2B context.

The first paper contributes by summarizing attitudinal as well as behavioral effects of factory tours. Moreover, it provides the benefits and risks for companies that offer factory tours. Furthermore, the paper helps summarize the motives for customers to visit a company. Moreover the crucial characteristics of services, especially the tour guide, that lead to positive experiences of factory tours, are presented. Most of the quoted current literature examines the effects of industrial tourism and the events or experiences surrounding it. Fewer are specialized in factory tours and their impact on the company or the brand.

The second paper expands the existing literature on factory tours in a B2C context by providing results in a B2B environment. Several authors (e.g., Österle et al., 2018) have recognized the importance of factory tours for improved brand image, product promotion opportunities, and the use of experiential marketing techniques. The empirical support of the proposed model emphasizes the importance of factory tours and their effects on loyalty behavior for industrial companies. The findings add to the existing literature, as both studies show clear economic benefits of customers participating in factory tours. Furthermore, the study distinguishes between behavioral and attitudinal loyalty. While existing research has shown that factory tours are beneficial for companies by enhancing attitudinal brand loyalty, this paper provides a more nuanced examination. The findings indicate that factory visits are of advantage for both product purchases and customer affective commitment. Thus, this study reveals the relevance of factory tours for attitudinal and behavioral loyalty. Additionally, the second paper addresses the role of the tour guide. Some authors (Bildat and Schaal, 2013; Dolen et al., 2002) found that tour guide attributes have positive effects on customer satisfaction in a B2C setting. This study

provides evidence that the perceived competence of the tour guide in a B2B context also influences purchase-related attitudes and behaviors.

The third paper complements the theory by providing practical data on the costs and benefits of a factory tour as part of an overall customer experience. First, a general overview of the last 13 years is analyzed. A closer look at the several costs provides a detailed insight into the specific marketing expenditures required for a factory tour. The paper also contributes to theory by analyzing the costs of factory tours as part of an overall experience. Hence, the financial analysis of Study 3 complements the existing literature with specific marketing expenditures for factory visits.

Overall, this research shows the importance of factory tours for B2B companies and their impact on attitudinal and behavioral loyalty while highlighting the role of the tour guide. Factory tours provide an opportunity to link industrial tourism and customer experience tourism to brand equity and market outcomes. Additionally, the experience influences customer satisfaction, brand awareness, and loyalty. A deeper understanding of customer behavior benefits the manufacturing tourism industry by providing the right overall experience, presenting products, improving service, and ensuring customer satisfaction and loyalty. Finally, factory tours can be linked to the future results of the experience and its impact on customer behavior, providing the success of this marketing strategy (Nella and Christou, 2010, p. 11).

## **4.2 Limitations and Future Research**

The present study was conducted at a medium-sized manufacturer in a B2B sector, which could limit the generalizability of the results. Thus, future research should analyze other industries that are more convenient for consumers and indicate lower risks. The results could differ if consumers were in the process of making a purchase. Therefore, general implications cannot be derived for all industries. Future research should extend the focus to other B2B companies, including different sizes, areas, industries, and environments. Hence, further industries need to be investigated to be able to draw general conclusions regardless of the sector or industry. Additionally, factory tours should be conducted in other countries to obtain more accurate results on customer behavior.

Furthermore, customers' purchase intentions and attitudes towards the product or company depend on their trust in the company and the supplier. As mentioned previously, this study considers influential factory tours and their post-visit consequences, while ignoring other

factors. In addition to the physical size of a product, there are various other possible reasons for choosing or rejecting a visit, such as the inconvenience of transportation. Further reasons need to be investigated.

Study 2 further limits its scope by collecting data via questionnaires as part of a seminar visit. Thus, the program of the seminar, which includes a factory tour as well as theoretical and practical parts for learning from the company, can affect participants' responses. Thus, future research should only administer one questionnaire during a factory tour. If researchers provide the questionnaire immediately after the visit, they need to examine the short-term influences. To investigate long-term effects, researchers should conduct interviews after a certain period of time following the visit.

Additionally, the specific demands and needs of different target groups during a company visit, as well as the background of the customer representatives, are important drivers for a positive outcome (Österle et al., 2018). As different customer characteristics and group constellations influence the outcome of an experience, researchers should investigate different customer groups more in detail in the future.

Finally, further studies should also include long-term metrics like customer satisfaction, customer equity, or other customer ratings into the cost calculation for factory tours. This would provide companies and managers with a more reliable way to evaluate the success of a marketing event such as a seminar or factory tour.

All in all, further future research should therefore verify the results for other industries and different product environments in order to be able to make a general statement.

### **4.3 Managerial Implications**

The literature review presents several managerial implications. The framework clearly identifies the factors that can foster or hinder industrial tourism. Implementing the strategy in a non-tourism company can be a tactical decision and provide another marketing opportunity to maximize the company's range and effectiveness. The potential of industrial marketing seems to align with the entire customer interface. On the one hand, industrial tourism as a marketing tool can strengthen the bond between the brand and consumers. On the other hand, applying the wrong strategy to tourist attractions will not yield any benefits. To reap the full advantages of the strategy, company management must consider several aspects.

First, companies that organize factory visits must pay attention to the visitors, especially their individual needs and the group constellation. However, it is important that managers develop different strategies for different visitor groups, as people have different perceptions, expectations, and needs prior to the visit. Companies should also distinguish and consider that there is a difference between the ages of visitors, as younger and older people have different perceptions of a factory tour. For older visitors, the site must be clean, and the tour can emphasize its strict cleanliness standards, whereas for younger visitors, the overall service is more important (Dodd and Bigotte, 1997, p. 50). Further differences within a group can result from customers' purpose for the visit. One potential target group could be existing customers, with the aim of increasing purchase frequency and up- or cross-selling. Another target group could be potential customers or customers who visit the site due to past quality issues. Therefore, factory tours should be customized to the specific demands and needs of the different target groups and the background of the customer representatives, for instance, production workers, sales agents, or managing directors (Österle et al., 2018). Further visitor groups can be investors, who are more interested in a company's efficiency and financial performance, while potential customers want to learn more about the production process or inventory (Farrell, 2021, p. 2). Additionally, visits also allow managers to recognize the performance potential of the site and its employees. Managers validate quality performance or share best practices. Employees at the factory can apply their knowledge to their own production process, and consultants can benefit from the knowledge of their customers for future business (Upton and Macadam, 1997, p. 98). Thus, manufacturers need to provide personalized visits to meet customers' needs (Rather et al., 2019). Therefore, managers should focus on identifying tourist attractions that make appropriate use of their customers' physical location. All in all, managers should develop a comprehensive marketing strategy to appeal to all visitors by focusing on different topics during the tour.

Second, the framework conditions of a factory visit are also important. Companies should not ignore the considerable resources required to change processes and the associated costs of introducing industrial tourism to a non-tourism company. Additionally, manufacturers should consider further costs associated with organizing a factory tour (e.g., travel costs of customers, working hours of tour guides). Managers should also focus on the investment costs incurred to provide customers with an adequate factory visit (Bregman, 2011, p. 25). During a factory tour, the production area should have an excellent air quality and a low noise level. Furthermore, the inventory or material storage and the entire facility should be clean and organized (Goodson, 2002, p. 106). Maintaining and cleaning even the machines demonstrates the company's commitment to its investments (Goodson, 2002, p. 111). Additionally, the company has

to offer pleasant facilities and sufficient parking spaces to satisfy visitors. As a factory tour is primarily for informational or educational purposes (Österle et al., 2018, p. 84), information and instructions for visitors should be visual, appealing, and simple for everyone to understand (Goodson, 2002, p. 107).

Third, the role of the tour guide is crucial for the success of factory tours. As factory tours are a useful tool for exchanging know-how, i.e., for imparting practical skills or expertise related to a product or process, tour guides must have specialized and competent skills to satisfy customers. The know-how in industry is often specialized and complex. A factory tour is therefore a beneficial alternative to expensive and time-consuming seminars (Hippel, 1986, p. 4). As this study confirms the success of a factory tour through the perceived competence of the tour guide, companies should focus on recruitment, training, and internal communication policies for tour guides if they want to deliver superior brand experiences leading to customer loyalty. Thereby, managers should not disregard the costs of training and improving the skills of a tour guide and the lack of time for the actual work (Bregman, 2011, p. 25). Hence, a company's responsible managers of a company must ensure that the employee is represented and appoint a deputy for the duration of the visit.

Fourth, managers should distinguish between the opportunities and risks of factory tours. Managers should consider security concerns and visitors' risk perceptions. Threats arise from potential safety risks as risks of espionage or theft by visitors (Bregman, 2011, p. 25). Companies should therefore take measures to prevent visitors from seeing technical details, prohibit photography, and implement other measures to protect the company from these risks. This implies the importance of developing security and safety systems and building trust, as reaching as many customers as possible is crucial. Secure information handling and emergency planning can form the basis for this.

Fifths, the more authentically the production tour and thus the brand and the company are presented, and the more the visitor's experience of the brand are fulfilled in their daily business, the more credible the factory tour is for the visitor (Österle et al., 2018, p. 84). A satisfying experience enhances customer loyalty, their willingness to maintain the relationship, strengthen the bond, and differentiate themselves from competitors. Managers have to ensure that the factory tour provides visitors with an authentic and unique experience. On-site factory tours with opportunities for interaction between customers and tour guides or company employees are crucial. However today's customers use technology for many consumer-related tasks, such as searching for information, buying processes, sharing opinions and experiences, or entertaining. Therefore, social media, websites, or online platforms have become one of the

most important factors influencing customer behavior. Social media offers the opportunity to share information and tourism experiences between customers (Cohen et al., 2014, p. 889). Managers should therefore ensure that customers have these opportunities for further interaction, knowledge transfer, or networking. Besides online information, with the rapid development of virtual reality (VR) and artificial intelligence (AI), virtual tours offer the potential to provide customers everywhere with vivid and impactful tour experiences (Sun et al., 2022, p. 1314). Therefore, the company should consider this option for future factory tours.

Even if factory tours result in financial losses for the company, the long-term benefits outweigh the risks. Customers get to know the company, the product, and the employees. They exchange information and establish personal contacts. All of this leads to higher customer loyalty to the company, which in turn can lead to more purchases and thus higher revenue, as Study 1 and Study 2 have already shown. All in all, the advantages of factory tours are significant. However, it is crucial for every company to weigh the costs and benefits of factory tours, as not all companies are equally suited or adaptable to factory visits.

Finally, company managers should consider the orientation of their organization when conducting factory tours. Successfully implemented company tours allows managers to link their product and pricing strategies to the factory tour. Furthermore, managers should view the factory tour as an opportunity to introduce, implement, and exhibit new products. Additionally, factory employees can apply their knowledge to their own production processes, and consultants can benefit from their customers' knowledge for future business (Upton and Macadam, 1997, p. 98).

#### **4.4 Summary**

Complex products and services in the B2B sector present companies with diverse marketing challenges. Personal contact between suppliers and customers is essential. In the B2B sector, inviting customers to visit the company as part of industrial tourism is a common strategy for personal interaction.. Tour guides lead the factory tour, explain the product and the various steps of the production process. Thereby, factory visits enhance direct communication between companies, knowledge transfer, and trust. Based on a literature review, two empirical studies, and a concluding cost analysis, this study contributes to a better understanding of the results of participating in factory visits.

Study 1 provides strong support for the economic benefits of factory tours. Specifically, the results show a significant increase in customer revenues after the factory visit. Study 2, which uses a survey-based within-subjects design, provides more detailed insights into the positive effects of factory tours. By analyzing the responses before and after the factory tour between 2020 and 2023, positive and significant effects on behavioral and attitudinal loyalty were confirmed. However, affective commitment was not found to mediate the effect of factory tour participation on purchase intentions. Furthermore, the perception of the tour guide, in particular the perceived competence of a tour guide, has an important influence on customer loyalty behavior. The results show positive effects of factory tour participation on purchases and, moreover, on affective commitment.

Study 3 provides detailed insight into the costs associated with offering customers a factory tour as an entire experience. The cost analysis shows that the marketing investment for a successful factory tour in a manufacturing company in the B2B sector can be very high. In the short-term analysis, even a seminar fee does not offset the revenue from the overall experience. However, short-term effects are less important than the impact of long-term marketing or brand activities, especially with regard to the non-monetary benefits of company tours in addition to the monetary ones. Companies that invest in marketing strategies such as industrial tourism can therefore build and strengthen brand attachment and loyalty, and benefit from sustainable competitive advantages. Finally, offering industrial tourism activities can create added value if the company finds the right balance between the market orientation (production) and tourism orientation (visitor reception) (Bregman, 2011, p. 25).

Overall, the results of this study demonstrate that factory tours offer B2B companies the opportunity to improve customer loyalty at both attitudinal and behavioral level. The findings suggest that inviting customer representatives to a visit increases the likelihood of higher customer commitment and, consequently, higher sales.

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