

CHAPTER II

LITERATURE REVIEW

2.1 Solo Technopark

Solo Technopark was established to become a national role model for innovation and talent development centers. It was built to solve the challenges of low competitiveness, such as the lack of relevant skills in the workforce and limited entrepreneurial capacity. These issues contribute to high unemployment rates, a shortage of educated workers, slow business growth, and underdeveloped Micro, Small, and Medium Enterprise (MSME/UMKM) potential (Solo Technopark, 2025).

2.1.1 History of Solo Technopark

Solo Technopark (STP) is a technology and human resource development institution in Surakarta City. The origin of Solo Technopark began with the establishment of the Surakarta Competency and Technology Centre (SCTC) in 2002. SCTC was established to become an international standard human resource development center capable of driving economic growth through various innovative activities. In 2009, the Surakarta City Government officially launched Solo Technopark as a *Unit Pelaksana Teknis (UPT)* under the auspices of the local government. This inauguration was carried out by the then Mayor of Surakarta, Ir. Joko Widodo, as a form of commitment to strengthen the ecosystem of innovation, technology, and entrepreneurship in the Surakarta area. Then, in 2010, there was an institutional change with the repositioning of STP into part of the *Badan Perencanaan Pembangunan Daerah (BAPPEDA)*. STP began to implement a financial management pattern based on the *Badan Layanan Umum (BLUD)*, thus gaining greater flexibility in operational and financial management (Solo Technopark, 2023).

Efforts to strengthen regulations were made in 2014 through the establishment of the Surakarta Mayor's Regulation on the *BLUD* Governance Pattern of *UPT* Solo Technopark within *BAPPEDA*. This step aims to clarify the governance structure and improve institutional accountability. In 2019, Solo

Technopark successfully achieved the title of *Kawasan Sains dan Teknologi (KST)* with a classification of Madya, signifying national recognition of its capacity for innovation, research, and technology development. As part of its long-term vision, Solo Technopark aims to become a major category Science and Technology Park with international competitiveness by 2025. This target provides a strategic foundation for future innovation and global collaboration (Solo Technopark, 2023).

2.1.2 The Role and Functions of Solo Technopark

Solo Technopark has been assigned a strategic role as a center for developing innovation, technology, and human resources in Surakarta and the surrounding area. The primary functions of Solo Technopark encompass technology-based workforce competency development, innovation-based business incubation, facilitation of research and development, and strengthening synergies between industry, government, and educational institutions. Furthermore, the Solo Technopark is a catalyst in accelerating technology-based economic growth through training programs, startup mentoring, and the provision of appropriate technology facilities. The various programs with which Solo Technopark is involved play a significant role in the establishment of a sustainable innovation ecosystem.

a. Vision

To become an integrated area of industry, higher education, research and technology, and entrepreneurship based on technology and innovation for small and medium enterprises to increase competitiveness and regional economic growth. The role of the media is to support all activities in Solo Technopark.

b. Mission

1. Carry out efforts to improve the welfare of the community through increasing the competence of human resources and mastery of science and technology.
2. Developing technology-based start-up companies, especially those that support local potential.

3. Building an innovative culture, technology transfer, entrepreneurial spirit, and quality standards to improve competitiveness.
4. Develop economic potential and increase the attractiveness of investment.

2.1.3 Organization Structure in Solo Technopark

Solo Technopark operates as a *Unit Pelaksana Teknis Daerah (UPTD)* under the *Badan Perencanaan Pembangunan Daerah (BAPPEDA)* Surakarta City and holds the status of a *Badan Layanan Umum Daerah (BLUD)*. Its organizational structure is managed professionally and reports directly to the local government, in accordance with applicable regional regulations. Based on information from the official Solo Technopark website, key structural positions include the Head of *BLUD UPTD* Solo Technopark (Yudit Cahyantoro, NS, S.T., M.T.), Head of *UPTD* (Rony Widjanarko, S.H., M.H.), Head of *Sub Bagian Tata Usaha* (Wahyu Hermawan, S.Si, M.T.), *Pejabat Teknis Layanan dan Pengembangan* (Susilo Budi Arianto, S.T.), and *Pejabat Teknis Umum* (Untung Priyohananto, S.E.) (Solo Technopark, 2023).

2.1.4 Solo Technopark Program Service

a. Technical Services

Solo Technopark provides a range of technical training services designed to improve the competence of human resources to match the needs of the industrial world. Technical programs include training in Manufacturing Mechanics, Manufacturing Design, Manufacturing Welding, Automation, and Underwater Wet Welding, as well as training in oil and gas through the Oil and Gas Skill Center Indonesia. Each program offers industrial practice-based training, competency certification, and job placement support through cooperation with various national companies (Solo Tecnopark, 2023).

b. Technology Services

In supporting innovation and product development, Solo Technopark also provides technology-based services. These services include prototype development,

product testing, technical consultation, and research and development (R&D) for various industrial sectors. Through the provision of engineering laboratory facilities, precision machine-based manufacturing, and support from experts, Solo Technopark encourages the acceleration of technological innovation from the idea stage to commercialization (Solo Tecnopark, 2023).

c. **Business Incubation Services**

The incubator provides mentoring, training, access to business networks, working facilities, and seed capital for innovative startups. The aim is to accelerate the growth of new businesses based on technological innovation. The program also nurtures tenants in aspects of product development, market validation, and business expansion preparation, thus supporting the creation of a sustainable startup ecosystem in Surakarta (Solo Tecnopark, 2023).

d. **Supporting Services**

To complement the technical, technological, and incubation services, Solo Technopark offers supporting services aimed at strengthening the innovation ecosystem. These services include leasing office space, meeting rooms, co-working spaces, training rooms, and event spaces. These facilities are available to support various training activities, business development, seminars, workshops, and networking events. The provision of these support services allows businesses, innovators, and creative communities to thrive in a collaborative environment (Solo Tecnopark, 2023).

2.1.5 Building and Area Facilities

Solo Technopark consists of three buildings that can be visited during an industrial tour. These buildings are the Research and Development Building, the Solo Trade Center Building, and the Sembrani, Gumarang Building. Each building has two floors and serves different functions. The descriptions of these buildings are as follows:

a. Research and Development Building (R&D)

The R&D Building is designated for research and development activities, particularly in the manufacturing sector. The building consists of two floors. The first floor functions as the administrative offices of Solo Technopark, while the second floor is utilized for various manufacturing activities. This facility is frequently used by vocational students to carry out industrial work practices (internships), during which they produce spare parts and other products. Moreover, the building also accommodates production services for private sector clients, thereby providing students with direct exposure to real industrial environments.



Figure 2. 1 Research and Development Building

b. Solo Trade Centre Building (STC)

The Solo Trade Center building, also known as the Blue Building, functions as a co-working space that is free for the general public. The Solo Trade Center has various facilities spread across two floors. On the first floor, for students or professionals, the Shopee Co-Working Space located in the Shopee Creative & Innovation Hub provides a productive environment for various activities. Visitors can also hold discussions or deliver presentations with colleagues, as the building offers a free-to-use meeting room. In addition, the Mandiri Digipreneur Hub is available for online classes or Work From Anywhere (WFA) activities. Oil and gas industry enthusiasts can explore a miniature model of a mining area, along with several machines and equipment used in the sector. Other facilities include the Indosat AI Experience Center, Tokopedia Room, GoTo Room, prayer room (mushola), and restrooms. Beyond indoor facilities, Solo Technopark also offers

outdoor spaces, including a sports area with basketball and futsal courts, which can be reserved free of charge through an online booking link. A Foodpark is also available, selling a variety of snacks and main dishes. For beverages, visitors do not need to go far, as drinks are available at *Kopi Satu Tujuan* and the Foodpark at affordable prices.

On the second floor, for gamers, movie enthusiasts, influencers, and community groups, the Garena Gaming & Community Hub offers a dedicated space for joint gaming sessions, movie screenings, and broadcasts. The hub is equipped with ring lights, projectors, microphones, and other supporting equipment that can be borrowed. Children visiting the facility can play and learn at the Solo Science Center, which features a wide range of interactive educational exhibits. Moreover, the Mandiri Digital Box serves as a smart branch for technology-based digital transactions. Here, visitors can easily, securely, and quickly perform various banking transactions, from opening accounts to cash withdrawals.



Figure 2. 2 Solo Trade Center Building

c. Sembrani Building and Gumarang Building

These two buildings serve as business incubation centers for Micro, Small, and Medium Enterprises (MSME) and startups. The Gumarang Building serves as the operational office of Shopee, supporting the company's business and service activities. The first floor of the Sembrani Building functions as an office space for the Solotechno Incubator, which focuses on fostering innovation and supporting the growth of startups. Meanwhile, the ground floor operates as a tech hub, providing facilities and resources that can be accessed and utilized by the residents of Solo to support technological development and community engagement.



Figure 2. 3 Sembrani and Gumarang Building

2.2 Tour Guide

2.2.1 Tour Guide Definition

A tour guide is a professional who serves as a cultural mediator and an information provider at tourist destinations. They convey cultural values, historical narratives, and local attractions while facilitating two-way educational and interactive communication, as described by Waskito et al. (2023). Complementing this, Pratama et al. (2022) highlight that adequate technical competencies—including destination knowledge and up-to-date operational information—are essential to tour preparation. Furthermore, Dewi et al. (2024) emphasize that training based on the Indonesian National Work Competency Standards (*SKKNI*) and standard operating procedures ensures professionalism and service quality among prospective trekking tour guides in Sentul. Therefore, a tour guide can be conceptualized as a professional tourism companion who integrates interpretive, communicative, technical, and ethical competencies to support the overall visitor experience.

2.2.2. Requirements to Become a Tour Guide

In Indonesia, the requirements to become a tour guide are regulated in (*Undang-Undang No. 10 Tahun 2009*) concerning the requirements to become a tour guide, including being able to speak Indonesian well, being able to master one of the foreign languages, being able to tell the cultural values of a region, historical places, tourist objects, and other general knowledge. This requirement is an important competency value in the tour guide profession. From a global

perspective, Nazli (2020) emphasized the importance of technological adaptability, such as using digital guiding applications and crisis management, as additional requirements in the modern era.

2.2.3 Attitudes of Being a Tour Guide

Being a tour guide is not merely about delivering information; it also requires proper attitude, behavior, and presentation. Attitude plays a crucial role in shaping tourists' impressions and experiences during their visit. According to Fitriani et al. (2020), a tour guide must not only possess sufficient knowledge and communication skills but also demonstrate a professional and pleasant demeanor throughout the tour. A professional tour guide is expected to maintain a positive attitude, which includes being cheerful, polite, and respectful toward all tourists regardless of their background. In addition, a guide should be patient and attentive, especially when dealing with tourists from diverse cultural backgrounds. Tour guides must also avoid controversial topics, such as politics or religion, and refrain from discussing their personal problems with tourists, as this can damage the tour experience.

Physical appearance and body language also reflect a guide's attitude. Clean and modest appearance, controlled gestures, steady posture, and appropriate eye contact are recommended to ensure that tourists feel comfortable and respected (Fitriani et al., 2020). Good health is another essential factor, as tour guides are expected to maintain their stamina, speak clearly, and accompany tourists without showing signs of fatigue. Lastly, a tour guide should show honesty, humility, and responsibility. They should be willing to admit if they do not know certain information and promise to find accurate answers later. This kind of integrity builds trust and credibility in the eyes of tourists. In essence, proper attitude is what transforms a good tour guide into an excellent one, capable of providing both information and meaningful interaction throughout the travel experience.

2.3 English Language in Tourism

2.3.1 Definition of English Language Skills

English language skills refer to the ability to use English effectively in the context of oral and written communication. Richards and Rodgers (2018) divide this competence into two aspects: linguistics (mastery of grammar and vocabulary) and pragmatics (ability to interact according to the situation). Celce-Murcia (2019) expands this definition by emphasizing four core skills: listening, speaking, reading, and writing. Meanwhile, the Common European Framework of Reference for Languages (CEFR, 2020) classifies English proficiency levels on a scale of A1 (beginner) to C2 (advanced), which has become a global reference in competency assessment.

2.3.2 The Importance of English in Tourism Aspects

English plays a crucial role in the tourism sector, particularly in bridging communication between local tourism actors and international tourists. According to Yoestara et.al. (2021), most tourism practitioners in Banda Aceh acknowledge the importance of English proficiency in various service aspects, ranging from tour package creation to providing information for foreign visitors. In line with this, Pratiwi et al. (2023) emphasizes that English proficiency not only facilitates direct interaction but also contributes to building the image and branding of tourism destinations in the global market. Furthermore, Putri and Imansari (2024) highlight the need for innovative approaches in teaching English for tourism, such as the utilization of artificial intelligence technologies and social media, to enhance speaking skills that are relevant to industry demands. Therefore, strong English proficiency serves not only as a communication tool but also as a strategic asset in developing a competitive tourism sector.

2.3.3 Advantages of Mastering English in the Tourism Sector

Mastery of English provides various strategic advantages in the tourism sector, especially in expanding market access and improving service quality to international tourists. UNWTO (2022) emphasizes that English language skills are important in supporting global economic recovery and growth through the tourism

sector, as they enable industry players to reach international markets more effectively. In line with this, the OECD (2022) report shows that foreign language skills, particularly English, are vital in improving the competitiveness of the tourism workforce and meeting the expectations of global travelers. In addition, a report from the World Travel and Tourism Council (2024) also confirms that communication skills, including mastery of English, contribute directly to improving the productivity, service, and overall economic contribution of the tourism sector.

2.4 Guidebook

2.4.1 Guidebook Definition

Guidebooks contain supporting, complementary, and supplementary materials for textbooks, which function as enrichment and reference materials in education and learning activities. This book is presented in a loose, creative, and innovative way, and can be used by readers from various levels of education or the general public (Center for Bookkeeping, Ministry of National Education, 2008). In tourism, guidebooks can also serve as a reference for tour guides to provide more in-depth information about destinations to tourists, as well as support cultural understanding and good travel ethics (Suprayitno, 2021).

2.4.2 Guidebook Components

A guidebook consists of several important elements that are arranged to convey information and instructions to its readers (Gorp, 2012). The parts include:

a. **Cover and Title Page**

Every guidebook generally begins with a title page and cover. The title serves to provide an overview of the contents of the book. Meanwhile, the cover page contains additional information such as the author's name, edition, and illustrations or graphics related to the main topic of the book.

b. **Table of Contents**

The table of contents contains an arrangement of the topics discussed in the book, accompanied by page numbers to make it easier for readers to

navigate the contents of the book. The numbering is arranged systematically in the order of discussion.

c. Chapters or Main Sections

Guidebooks are usually divided into chapters that discuss in depth each specific topic.

d. Descriptive Content

The main content in the guidebook is presented in a descriptive form that explains in detail the topic raised. This presentation aims to make it easier for readers to understand the information presented.

e. Visual Elements

Images, illustrations, and other graphic designs are also included in the guidebook to add visual appeal. The presence of these elements helps to increase reading interest and facilitate understanding of the contents of the book.

f. References and Additional Materials

Guidebooks are often equipped with additional information such as tables, diagrams, appendices, and bibliographies.

All of these parts form a comprehensive and informative guidebook structure. A well-designed guidebook will make it easier for users to understand and apply the information according to the topic discussed.

2.4.3 Advantages of Guidebooks

The use of guidebooks provides significant benefits for tour guides. Gretzel et.al. (2020) proved that standardization of content in guidebooks reduces misinformation by 60%. Guidebooks play a vital role in the tourism industry, particularly in standardizing information delivery and supporting the professional development of tour guides. One of the main advantages of using guidebooks is that they provide structured and consistent content, enabling tour guides to deliver uniform and accurate information across different tours and audiences. This consistency is especially important when guides are responsible for conveying cultural or historical facts that require precision (Putri and Imansari, 2024). In

educational contexts, guidebooks also serve as effective learning tools, helping novice tour guides learn key materials independently and at their own pace. The use of bilingual or multimedia-integrated guidebooks further enhances this function by offering support for pronunciation, vocabulary, and professional expressions, which are essential in guiding foreign tourists (Fitriani et al., 2020).

2.5. Previous Studies

To compile an English-language tourist guidebook for tour guides, the researchers conducted a review of several relevant previous studies. The aim was to explore references regarding the necessary information for guidebook compilation and to gain a more comprehensive understanding of the development process. Several previous studies served as references, including:

Wahyuningtyas et al. (2024) developed a bilingual guidebook to improve English-speaking skills in Wonocoyo Tourism Village. Using a Research and Development approach, the guidebook was designed to support local tourism practitioners in communicating with foreign visitors. The results showed that the media significantly improved participants' confidence and language skills within the context of tourism services. This study is highly relevant to the development of a bilingual guidebook for tour guides at Solo Technopark, particularly regarding content structure, bilingual presentation, and participatory development methods. While the user context differs—local tourism actors versus professional guides—the findings strongly support the use of bilingual guidebooks as effective tools for enhancing communication competence in tourism settings.

Similarly, Rochim and Taulina (2023) developed a digital tourism guidebook in Sebatu Village, Gianyar, by integrating digital features such as QR codes and Google Maps to present interactive information. Their study emphasizes the urgency of adopting technology-based guidebooks, aligning with Solo Technopark's identity as a technology and education-based destination. The similarity lies in the use of guidebooks as structured and interactive information tools, while the difference is in their focus on enhancing general visitor experience rather than guide performance.

From the user's perspective, Putri and Dewi (2021) found that guidebooks serve not only as sources of practical information but also as mediums for understanding local culture, deepening travel experiences, and enhancing safety during visits. This highlights the importance of clear narration, systematic content structure, and engaging visuals. While their study focuses on guidebook use by tourists, it contrasts with the present research, which is centered on guidebooks as tools for tour guides.

Meanwhile, Novitasari, Safitri, and Rahayu (2024) developed an English "City Tour" guidebook equipped with QR codes as a practical tool for tour guiding students. Expert validation and field testing confirmed that the guidebook is appropriate and effective in improving guiding performance in professional education settings. This study is relevant as it treats the guidebook as a professional learning tool—similar to the purpose of developing a bilingual guidebook for tour guides at Solo Technopark. However, the difference lies in the target audience and methodology. Novitasari et al. used the ADDIE R&D model for tourism students, while the current research focuses on operational tour guides in a real-world setting. In conclusion, the reviewed studies collectively affirm the strategic value of bilingual and digital guidebooks in tourism. Whether aimed at enhancing communication skills, integrating modern technology, supporting tourist understanding, or improving professional performance, guidebooks have proven to be versatile tools. These references provide a strong theoretical and practical foundation for the development of an effective, bilingual, and interactive guidebook tailored for tour guides at Solo Technopark.