

Decade of Insights on Airport Terminal Advertising: A Comprehensive Guide to Media Planning Design and Effective Partnership Management

Jieying Liang

Abstract

Airport advertising, a significant source of non-aeronautical revenue, has limited academic research on its management. This essay presents principles and methods for airport advertising media planning, design, and management, based on a decade of experience at Guangzhou Airport, China. It highlights strategic layout planning, value evaluation methods, and effective partnership models, aiming to provide a comprehensive framework for airport advertising management, as how to be a good landlord for airport advertising media.

Management slant

- Planning principles: Core media is strategically positioned in key areas, ensuring full coverage and standardization of media products, creating iconic media landscapes, and integrating intelligent media with innovative technology applications.
- Design rules: “Clean and Simply” design to harmonise advertising media with the terminal environment and signage, ensuring suitability within the space, adapting media dimensions to the architectural module proportions of the terminal interior, balance the dynamic and static media formats.
- Management crucial: Environment controlling, including focus on maintaining the overall visual environment surrounding the advertising media, and the contract commitment stability.
- Value evaluation: entails utilizing both macro-level data analysis and micro-value calculation models to comprehensively assess the worth of advertising media
- Establishing a comprehensive advertising value management and control mechanism.

Introduction

The development of Guangzhou Airport Terminal 2 (GZAT2) into a global advertising hub exemplifies innovation and successful partnership. This study analyzes key factors contributing to the success of advertising strategies, partnership management, and the integration of commercial success with aesthetic considerations from 2012 to 2022.

Background on Airport Advertising and Overview of Guangzhou Baiyun International Airport's Terminal 2

Airport advertising is a lucrative sector within outdoor media. The economic activity of air passengers rivals the 25th largest economy globally (International Air Transport Association, 2019). It has been described as Flyland, a "country in the sky" (Frances Marcellin, 2019). Brands leverage this environment, utilizing media formats like lightboxes, LCD and LED screens, stickers, hanging billboards, podiums, and more to capture travelers' attention (Kotler and Keller, 2016). The certain time of passengers spent in terminal for boarding and arrival offers the unique value for advertising media in terminal.

Guangzhou Baiyun International Airport is the third largest airport in China and 13th busiest in the world, currently there are two terminals with a third in planning. Terminal 2 commenced operations on April 26, 2018, its architectural area of 658,700 square meters, along with a General Transportation Center covering 222,000 square meters, facilitating seamless integration of civil aviation, urban rail, subway, and highways. In 2019, Terminal 2 at Guangzhou Baiyun Airport was awarded the "Global Five-Star Terminal" by SKYTRAX from 2019–2023 (CAAC News, 2020), the authoritative global civil aviation transport research institution. The passenger exceeded 70 million, achieving another "ten-million-level" milestone in 2019. (CAAC News, 2019)

Chapter 1:

A Partnership Case Study on Advertising Tendering at Guangzhou Airport Terminal 2

(2500 words)

The partnership between GZAT2 and JCDecaux (JCD) was founded on strategic clarity during the tender process in 2017. GZAT2 set clear objectives for branding, service enhancement, and safety management, establishing guiding principles for comprehensive management, safety, service quality, value optimization, technological integration, and cultural and visual harmony (Duncan and Moriarty, 1998). Detailed requirements for media locations and appearances ensured a balance between media placement and passenger experience. There **three main factors contribute to the success** of the innovation in T2 advertising:

1. Factor 1: Clarity in Tendering Found the Partnership Success

1.1 You should know your needs: build up a clear objectives for the collaborator

In order to give a clear objective to the collaboration, GZAT2 set three objectives to guide the whole selection strategic and the partnership contract requirement:

A. Branding Objective:

It is targeted that the first-line brand release rate for the advertising media in Terminal 2 and the GTC (Ground Transportation Centre) of Baiyun Airport reaches over 30%. This is a key performance metric under assessment provisions.

B. Service Objective:

A high priority is placed on the visual experience of passengers, with the aim to transform Terminal 2 at Baiyun Airport into a premium media and arts space. This involves ensuring that the advertising not only enhances the ambiance but also complements the architectural and aesthetic values of the terminal.

C. Safety Management Objective:

The safety management goal is stringent: to prevent any severe incidents related to air defence security, serious aviation ground errors, or safety accidents associated with the construction and operation of advertising media (such as falling, collapsing, catching fire, or causing electrical injuries) due to the contractor's responsibilities. The objective is to maintain a record of zero incidents in advertising areas.

1.2 Establish a set of guiding principles to shape the future of "genuine service and pursuit of excellence."

To achieve the above objectives, GZAT2 established a set of guiding principles that would shape the future of its advertising approach:

- **Comprehensive Management:** Ensuring that all advertising initiatives align with the overarching goals of the airport, enhancing both operational efficiency and passenger satisfaction.
- **Safety and Security:** Maintaining the highest standards of safety and security in the implementation of new advertising installations to avoid any compromise to airport operations.
- **Service Enhancement:** Improving overall service quality through strategic placement and design of advertisements to enhance passenger experience and engagement.
- **Value Optimization:** Ensuring that all advertising spots are utilized to their maximum potential to deliver both aesthetic value and revenue generation.
- **Technology-Driven:** Embracing technological innovations to keep the advertising approach at the forefront of industry trends.
- **Cultural and Visual Integration:** Making sure that the advertising blends with the cultural themes and visual aesthetics of the terminal to create a harmonious environment.

1.3 Provide detailed requirements for media locations optimised and appearance specifications

One of the most significant contributions to the success of the Terminal 2 project was the meticulous planning and optimization of advertising media locations, achieved through a close partnership with GZAT2 and JCDecaux. In the tender process, one key contribution was the provision of detailed requirements for media spaces which given by GZAT2 written in the tender book that aimed to balance media placement with passenger experience. This approach ensured that bidders can not do whatever they want in the design and implementation after win the tendering:

- I. **Media Types and Placements:** The tendering process made available a variety of 805 media positions classified into 17 different types, as detailed in the media list and advertisement location map. However, bidders were required to adjust these placements based on an integrated evaluation of passenger flow, signage, and service quality. This approach ensured that advertising media were strategically placed to optimize visibility without disrupting the passenger journey.
- II. **Detailed Spatial Requirements:** Bidders were tasked with suggesting optimization adjustments to the general layout of the advertising spots, marking the exact locations on the floor plans. This ensured that every media placement was strategically considered to maximize visibility and impact.
- III. **Implementation Approval:** Any proposed media spot adjustments had to be approved by the GZAT2 before implementation, ensuring that all changes aligned with the overarching strategic objectives of the airport's advertising framework.
- IV. **Design Specifications for Media:** The media optimization plans included detailed design requirements for the appearance, size, and brightness of advertising media. The optimization plans included comprehensive guidelines for the design of advertising media:
 - **Design Requirements:** Proposals needed to reflect the cultural and visual goals of Baiyun Airport, maintaining a unified style in terms of design, color, and material across all media.

- **Size and Brightness Specifications:** The maximum dimensions for each media unit were predefined, with the stipulation that actual sizes would be adjusted based on on-site measurements to ensure that the final installations did not deviate from planned visuals or interfere with operational functionality.

V. Designated Media Optimization Requirements: Specific media optimizations were requested to ensure that essential areas such as the check-in hall did not compromise visibility of essential signage through the placement of advertising media. Proposals for high-traffic areas like the check-in hall required careful consideration of how advertising media would integrate with existing signage and passenger flows. For unique installations like column wraps and specialized media in 'cloud galleries' or 'cloud pavilions,' bidders had to provide detailed plans that balanced creativity with functionality.

VI. Implementing Strategic Cultural and Commercial Spaces: A pivotal part of the project was the transformation of an unused check-in island into a vibrant cultural and commercial hub known as the "Sky Stage." This area was designated as a multidimensional space combining advertising, cultural exhibitions, and passenger amenities:

- **Cultural Integration:** The design and operational plan for the "Sky Stage" were crafted to host a range of activities, from art exhibitions to high-end brand showcases, turning the space into a dynamic cultural landmark within the airport.
- **Operational and Design Flexibility:** The operational plans included provisions for adapting the space to various uses, ensuring that each setup was capable of accommodating different types of events and installations, enhancing both the aesthetic and functional utility of the area.

1.4 A comprehensive set of criteria for tendering to hunter a successful

The establishment of a comprehensive set of criteria for tendering was pivotal in selecting the most suitable partner for the advertising operations at GZAT2. This approach ensured that the chosen collaborator not only met the financial expectations but also aligned with the strategic goals of the airport. In the competitive world of airport advertising, identifying and partnering with the right advertising firm is critical for achieving both aesthetic excellence and financial success. Here, I outline a set of criteria that can be employed to evaluate potential advertising partners, drawing from my own experience in managing large-scale advertising projects at a major international airport.

	Evaluation	Scoring	Analyse
Financial Proposal (60 points)	Calculated the net present value (NPV) of each bidder's total five-year advertising resource usage fee. A discount rate of 6% was uniformly applied.	The base score was set at 60 points, adjusted by comparing the NPV of each bid to an arithmetic mean increased by 5%. For each 1% a bidder's NPV was above this baseline, a deduction of 0.5 points was made; for each 1% below, a deduction of 1 point, continuing until a score of 0 was reached.	The financial aspect of a partnership is often the primary focus, and rightly so. For projects like Terminal 2's advertising overhaul, it adopted a sophisticated evaluation method.

	Evaluation	Scoring	Analyse
Advertising Planning and Optimization Proposal (5points)	Proposals were evaluated based on their overall optimization strategy, coherence in media appearance, and adherence to design, style, and brightness specifications that align with the airport's international hub status.	Top proposals received 5 points, adequate proposals 2 points, and substandard efforts 0 points.	The qualitative assessment of each bidder's approach to advertising is crucial.
Advertising Media Construction Proposal (10points)	Proposals needed to reflect high-quality materials, advanced equipment, and contribute positively to the airport's cultural atmosphere with distinctive landscape features.	Exceptional designs scored the highest, reflecting their potential to enhance the airport's environment.	The construction and operational plans for specific advertising installations, such as cultural plazas and themed areas, were rigorously reviewed
Collaboration with Top International Brands (10points)	We considered the number and quality of international brands each bidder had worked with, giving higher scores to those with more extensive high-level engagements.	Points awarded based on the number of international first-tier brand clients secured by the bidder certain time.	The extent of each bidder's existing relationships with top-tier global brands was a significant factor
Comprehensive Organizational Capability (5 points)	Based on the company's average profit margins and revenue sizes for the years	Each metric contributed to a final score reflecting the bidder's financial stability and experience.	The overall strength of each bidding company was evaluated based on several financial metrics included profit margins, revenue scales, quick ratios, and return on equity from recent years.
Experience in Large Airport Advertising (3points)	The number of advertising operations managed at top global airports was considered, with higher scores awarded to those with more extensive backgrounds.	Consider the number of airports where the bidder has managed advertising media, especially those among the top 50 globally by passenger volume in last 3 years.	The number of advertising operations managed at top global airports was considered, with higher scores awarded to those with more extensive backgrounds.
Operational Plan (5points)	Evaluate the comprehensiveness and feasibility of the operational management handbook, safety management plan, and information management plan.	Only the most reliable and visually impressive setups received the top marks.	Evaluating the technical and operational aspects of the proposed media solutions was essential. This included an assessment of the materials (like LED quality), structures, craftsmanship, visual quality, and the functionality and safety of the media control systems.
Commitment to Performance (2points)	Assess the operational team structure, the number of operational and maintenance staff, and the detailed resumes and commitments of key personnel managing T2 advertising media business.	Clear, actionable operational plans received the highest marks. Also, Score based on the payment terms offered by the bidder, with higher points for more favorable terms to the airport (e.g., annual vs. semi-annual prepayments).	The operational capacity to fulfill the contract terms was critically assessed. Details on team composition, maintenance personnel, and specific responsibilities for key personnel were required.

This structured approach in the tendering process was critical in ensuring that the selected partner, JCD, was best suited to meet the operational, aesthetic, and strategic goals of

GZAT2, ultimately fostering a partnership that leverages both entities' strengths and contributes significantly to the airport's continuous growth and enhancement of passenger experience.

2. Factor 2: Partnership Synergy and Collaboration

The synergy between GZAT2 and JCD was marked by a transparent tendering process and strategic alignment of goals (Morrison and Anderson, 2016). JCD's expertise in innovative advertising solutions complemented GZAT2's objectives, leading to the successful implementation of sophisticated advertising media. Collaboration extended to stakeholders like architectural designers and airport service teams, fostering a comprehensive ecosystem for continuous growth and innovation.

Strategic Partnership Selection. Initiated through a transparent tendering process in 2017, JCD's selection was based on their global leadership and capacity to attract premier international brands. Their expertise in cutting-edge advertising technologies aligned with GZAT2's goals to enhance passenger engagement and maximize revenue. Continuous dialogue and joint planning ensured technologically advanced and well-integrated advertising solutions.

Building a Collaborative Ecosystem. GZAT2 involved multiple stakeholders, including architectural designers, service teams, security, and signage teams, ensuring alignment across the advertising ecosystem. A consultant from Heathrow Airport added international expertise, refining media placement strategies and enhancing global appeal.

Leveraging Brand Strength. Partnering with JCD enhanced GZAT2's advertising capabilities and leveraged global brand relationships, attracting top-tier advertisers. This collaboration increased the terminal's status as a premium advertising location, making it a preferred destination for advertisers and passengers. Strategies were tailored to enhance brand visibility and impact, ensuring high-quality, targeted content.

The synergy and collaboration underpinning the partnership between GZAT2 and JCD, enhanced by the strategic insights from a consultant from Heathrow Airport, were fundamental to the success of the terminal's advertising initiatives. This partnership not only facilitated the integration of innovative advertising solutions but also created a vibrant ecosystem that supported continuous growth and improvement, establishing GZAT2 as a benchmark in airport advertising globally.

3. Factor 3: Rigorous Annual Assessments

Annual assessments ensured the partnership's alignment with GZAT2's standards and objectives. These evaluations covered safety management, operational excellence, public service advertising, and contractual adherence, allowing for dynamic responses to performance issues and fostering continuous improvement (Zenglein and Müller, 2007).

Key Components of the Assessment Strategy:

I. Comprehensive Evaluation Framework:

- A. The assessment integrates various performance metrics that cover the entirety of the advertising operation. These include safety management, operational excellence, public service advertising, and adherence to contractual obligations.
- B. Specific indicators are quantitatively measured, allowing for an objective assessment that aligns with predefined standards.

II. Seasonal and Annual Review Cycles:

- A. The operators are evaluated on a quarterly basis with adjustments made as necessary to ensure ongoing alignment with the airport's goals. The results of these quarterly reviews contribute to an annual summary that provides a holistic view of the operator's performance across the year.

III. Detailed Scoring System:

- A. Each aspect of the operator's duties is meticulously scored based on clearly defined criteria. This includes operational compliance, financial performance, safety records, and customer service metrics.
- B. Penalties and rewards are clearly stipulated, creating an environment that motivates continuous improvement and innovation.

IV. Dynamic Response to Findings:

- A. The assessment system is designed not only to identify areas of underperformance but also to facilitate immediate corrective action. This dynamic approach helps prevent issues from escalating and ensures that high standards are maintained continuously.

V. Transparency and Communication:

- A. Detailed reports are prepared and reviewed with the advertising operators, fostering a transparent environment where expectations are clear and feedback is used constructively.
- B. Regular updates and the involvement of multiple airport departments ensure that the assessment process is comprehensive and inclusive.

The rigorous annual assessments at GZAT2 are pivotal in maintaining a collaborative ecosystem that drives both commercial and aesthetic value. By systematically evaluating the advertising operators, the airport ensures that every aspect of the advertising operation contributes positively to the overall passenger experience and aligns with the strategic goals of the airport. This assessment strategy not only enhances operational compliance and performance but also fosters a culture of excellence and continuous improvement, making it a critical factor in the sustained success of the airport's innovative collaborations.

4. Challenges Overcome in the Partnership between GZAT2 and JCDecaux

The strategic collaboration between GZAT2 and JCDecaux (JCD) faced challenges, particularly during the global pandemic. Addressing these challenges was crucial for maintaining the partnership and pushing the boundaries of airport advertising innovation:

- I. **Managing Partnership Selection Scrutiny:** JCD was chosen despite not offering the highest bid due to their superior contributions to media design, construction quality, environmental integration, and brand caliber. This decision prioritized quality over financial gain, setting a precedent for future tenders.
- II. **Responding to Reduced Passenger Traffic During the Pandemic:** GZAT2 established an advertising value assessment system to rationalize fees during the pandemic, ensuring financial support for advertising partners and mitigating financial impacts.
- III. **Maintaining Advertising Revenues:** Despite reduced passenger traffic, GZAT2 maintained high advertising revenue per passenger by focusing on preserving the quality and integrity of existing advertising environments.
- IV. **Strategic Focus on High-End International Brands:** The partnership emphasized high-end international brands, creating additional value within existing advertising contracts without compromising on quality.
- V. **Maintaining Quality and Price Stability:** The exclusive management model provided control over the media environment and pricing stability, exploring supplementary agreements for new media resources to balance expansion needs with market conditions.
- VI. **Interdependence Between Commercial Tenants and Advertising:** Coordinated development strategies were needed to balance high-end retail spaces with premium advertising, ensuring both sectors thrived without competition over the same customer base.

GZAT2 and JCD's strategic measures safeguarded the partnership's integrity, allowing it to adapt to external pressures and internal growth needs, setting a benchmark for airport advertising globally.

5. Legacy and Impact Analysis of the GZAT2 and JCDecaux Partnership

Reflecting on the partnership between GZAT2 and JCD highlights how they set new industry benchmarks and strategized for future growth:

- I. **Assessment of Achievements:**
 - A. **Innovations Introduced:** Review the innovative advertising solutions and technologies introduced and their impact on GZAT2's standards and practices.
 - B. **Brand Enhancement:** Analyze how the partnership enhanced GZAT2's branding as an international hub, focusing on high-end international brands.
- II. **Evaluation of Challenges Overcome:**
 - A. **Resilience During the Pandemic:** Highlight strategies implemented to mitigate the impact of decreased passenger traffic on advertising revenue.
 - B. **Structural Changes:** Reflect on modifications to the exclusive management model and how these changes shaped current practices.
- III. **Long-Term Impacts:**
 - A. **Commercial and Aesthetic Contributions:** Discuss long-term contributions to the airport environment and their influence on passenger experience and satisfaction.
 - B. **Sustainability of Initiatives:** Examine the sustainability of initiatives launched during the partnership, including ongoing projects and advertising campaigns.
- IV. **Transition and Future Directions:**

- A. **Transition to New Partnerships:** Explore GZAT2's transition to new partnerships or in-house management, analyzing expectations based on the groundwork laid by the previous partnership.
- B. **Lessons Learned and Strategic Insights:** Summarize key lessons learned and their integration into current and future airport advertising strategies.

This structured retrospective helps stakeholders understand the value of the past partnership and how its legacies are shaping future strategies for airport advertising partnership management.

6. Conclusion: A Benchmark Achievement in Airport Advertising Innovation

The GZAT2 and JCDcaux (JCD) partnership set a transformative precedent in airport advertising. Underpinned by strategic clarity, synergy, and rigorous assessment, the collaboration met its immediate goals and paved the way for sustainable innovations and operational excellence.

The initial phase, marked by Strategic Clarity in Tendering, laid a solid foundation by defining clear, measurable objectives. This clarity aligned GZAT2's goals with JCD's capabilities, fostering a partnership built on mutual understanding and shared ambitions.

As the partnership evolved, Synergy and Collaboration were pivotal. Integrating JCD's global expertise with GZAT2's insights introduced innovative solutions that resonated with international and domestic audiences. The inclusion of a consultant from Heathrow Airport brought global best practices, refining GZAT2's strategies.

Rigorous Annual Assessments ensured the partnership remained on course, adapting to changing market conditions and passenger needs. The partnership's resilience was particularly tested during the global pandemic, demonstrating its proactive planning and adaptability.

In conclusion, the end of this partnership marks a new beginning for GZAT2. Lessons learned and benchmarks set will guide future collaborations, ensuring GZAT2 remains at the forefront of airport advertising. This case study reflects a successful partnership and serves as a blueprint for future collaborations, driving the airport advertising industry towards greater heights.

Chapter 2:

Collaborative Team Experience: Mastering Advertising media Design and Layout

(2500 words)

In this chapter, I reflect on my personal experience working with the collaborative team on the innovative advertising project at Guangzhou Airport Terminal 2 (GZAT2). My role involved orchestrating design strategies and media placements alongside stakeholders from BYGJ, GZAT2, and JCDecaux (JCD). This discussion highlights the dynamics of the team, effective strategies for media layout and design, and my contributions to the project's success, including the development of a media value assessment method. Additionally, I will explore areas for improvement, providing a concise analysis of the challenges and triumphs in creating a successful and innovative advertising space at one of the world's leading airports.

1.About the Author and My Role

Starting in December 2008, I served as a Senior Designer at the Advertising Co. of Guangzhou Baiyun International Airport (BYGJ, which a wholly-owned subsidiary of the Guangzhou Airport Ltd.), where I led advertising media strategic planning and design for Terminals 1 and 2. My role included managing a design team, pioneering digital media integrations, and creating significant projects like the 'Time and Space Tunnel' in Terminal 1, which became a key attraction. This experience was instrumental in shaping my understanding of how effectively positioned media can enhance passenger experience and maximize revenue potential.

In September 2017, I advanced to Deputy Director of resource management department at Terminal 2 Management Co. of Guangzhou Baiyun International Airport. Here, I was instrumental in forming the management company and overseeing all advertising business included design, construction and management in Terminal 2. I also led the design and management of 'Sky Stage,' a multifunctional space that hosted over 100 charity performances, enhancing the terminal's community engagement and cultural offerings. These experiences have provided me with a comprehensive understanding of strategic advertising management and terminal operations.

These roles at BYGJ and GZAT2 have equipped me with a profound understanding of the intricacies of airport commercial management and advertising, demonstrating a track record of innovative solutions and effective leadership in complex environments.

2. Analyse the Dynamics of the Team

The successful execution of the advertising and architectural strategy at Guangzhou Airport Terminal 2 was the result of a highly collaborative effort among four main entities: Guangzhou Baiyun International Advertising Ltd. (BYGJ), the Terminal 2 management team (GZAT2), JCDecaux (JCD), and The Guangdong Institute of Architectural Design (ADI). Each team brought unique strengths and played specific roles that synergized to create an innovative and effective advertising landscape within the terminal.

Guangzhou Baiyun International Advertising Ltd. (BYGJ): Operating under the umbrella of Guangzhou Airport Ltd., which is a wholly-owned subsidiary of the Guangzhou Airport Ltd., BYGJ was instrumental during the initial stages of the project from 2012. Their primary responsibility was the strategic media planning which encompassed preparatory work for electrical setups, weight considerations for hanging installations, and IT infrastructure crucial for digital advertisements. BYGJ's role was pivotal in ensuring that advertising media were considered during the architectural planning phase, integrating these elements into the terminal design from the onset.

Terminal 2 Management Team (GZAT2): The creation of the GZAT2 management team in 2017 marked a significant transition in the project's approach to advertising. Taking over from BYGJ, GZAT2, focused on enhancing the terminal's appeal to international brands and elevating the overall passenger experience through high-end advertising, aimed to achieve the 5 stars airport in the world. Their work was crucial in redefining the advertising scope that targeted a global audience, to ensure that advertising strategies were not only commercially effective but also aesthetically pleasing and serve to good service to passengers.

JCDecaux (JCD): A renowned leader in outdoor advertising, JCDecaux brought its global expertise to the partnership, significantly impacting the approach to advertising in Terminal 2. Their involvement brought about a shift towards more sophisticated and technologically advanced advertising solutions, which were crucial in attracting top-tier international brands

The Guangdong Institute of Architectural Design (ADI): ADI's involvement as the architectural backbone of Terminal 2 was fundamental. They ensured that the physical infrastructure supported the ambitious advertising plans laid out by BYGJ and later by GZAT2 and JCD. Their role was to harmonize the architectural and advertising elements, making sure that the infrastructure facilitated the advertising media included advanced digital advertising strategies envisioned.

The collaboration among these teams was characterized by open communication and continuous integration of ideas. The dynamic between the teams allowed for a fluid exchange of expertise, ensuring that all aspects of the project—from structural integrity to digital innovation—were aligned with the overarching goals of the airport's development. This synergy not only enhanced the aesthetic and functional aspects of the terminal but also ensured that the advertising strategies implemented were innovative, effective, and reflective of the terminal's status as a premier international hub.

3. Highlight Effective Strategies of Design and Layout Media

Effective Strategy 1: Early Integration

The initial phase of the advertising strategy at GZAT2 was initiated in 2012, at the same time with the terminal architecture initial design which run by The Airport Branch of the

Guangdong Institute of Architectural Design (ADI). ADI was responsible for the overall architectural design of the terminal. The advertising design was operated by Guangzhou Baiyun International Advertising Ltd (BYGJ). BYGJ was responsible for the early stages of media planning, which included preparations for electrical requirements, weight support for hanging installations, and IT cabling essential for digital advertising platforms. From the very beginning, BYGJ's design management foresight by integrating advertising strategies directly into the terminal's design and operational planning. This early integration ensured that advertising spaces were not just afterthoughts but integral elements of the terminal's layout. By planning for advertising needs during the architectural phase, GZAT2 was able to optimise the visibility and effectiveness of the advertising mediums.

Effective Strategy 2: Architectural Synergy

Collaboration between advertising planners and architects harmonized media installations with terminal aesthetics, ensuring media dimensions and visual appeal consistency (Babin and Attaway, 2000). BYGJ collaborated with the DI allowed the inclusion of advertising considerations in the initial design plans, ensuring that these elements complemented the aesthetic and functional aspects of the terminal. In order to coordinate the advertising media with the environment, be suitable for the space, highlight the taste of advertisers, to generate the commercial atmosphere for terminal. Media design was carried out according to the following **principles**:

(1) Media size adapts to the terminal building module ratio

Advertising media is an important part of the terminal building space. It is essential to make sure the media set up harmonious with the environment, the size of the advertising media in Terminal 2 has been consistent with the interior decoration module of the building. For example, the size of the wall light box is consistent with the module ratio of the wall aluminium plate; The curtain wall large light box/LED is consistent with the curtain wall glass module ratio; The height of the security check LCD is consistent with the glass partition; The security check LED is consistent with the ceiling arc vault module; The boarding gate LCD and signages series modules are also highly consistent. The size of the advertising mediums are strictly controlled within the building module. Specific size debugging requires a 3D model of the terminal to be tested at the beginning, and a cardboard model placed on site for visual analysis to ensure that the mediums are coordinated with the environment and signages.

(2) The media appearance adopt a minimalist design style.

The media frames are designed to be clean and simple without unnecessary decorations, focusing on terminal environmental transparency. This simplicity in frames better accommodates different styles of advertiser screens. Advertisements are part of clients' global campaigns, and modifying screens specifically for a particular airport is infrequent because the process involves multiple companies in the advertise industry chain. Therefore, advertising media prioritize using market-standard, conventional size ratio, which facilitates the deployment of advertiser screens. Media with unusual sizes are harder to market sales; for example, the interior of the corridor bridge in T2 building is designed with a triangular module, making the matching of triangular sticker designs a challenge for placing client advertise visual.

(3) The colours of the advertising media frames use the terminal VI colour scheme.

For example, the colour of wall light boxes frames are sprayed painting to the same colour with the terminal's aluminium panel. The green glass of the high-altitude column-clad light boxes mirrors the tint of the terminal's glazed glass, ensuring visual continuity, while the colours of the LCD decorative lines are coordinated with the terminal's signage colour. To maintain aesthetic unity and avoid visual distractions, the use of colours for advertising media that starkly contrast with the terminal environment for the advertising media frames is strictly prohibited.

Effective Strategy 3: Strategic Media located and formats

Media were strategically placed in high-traffic areas to maximize exposure, adhering to principles that avoided visual interference and complemented the terminal's architectural flow (Pashkevich and Lang, 2014). The overall layout of advertising media at Guangzhou Airport Terminal 2 (GZAT2) is meticulously structured based on the architectural space and passenger flow dynamics. From a spatial physics perspective, the "point, line, and plane" construction rules typically segment general spaces into "three verticals and three horizontals," forming visual partitions effectively.

(1) POINT–Core Media Placement in Key Passenger Flow Areas: For establish the tone and character of the area, creating a flagship brand presence, each key location lay out a core media. Setting core media in strategic locations is essential for fostering the target brands environment. Areas like the departure hall, security check hall, and boarding areas—where passenger gatherings are concentrated—feature premium brand media tailored to the specific passenger flows. This includes hanging LEDs and large light boxes in departure halls and similarly impactful media in security and waiting areas. The planning and positioning of these media types are crucial for brand positioning and attracting top-tier brands. Media designs adhere to principles of environmental respect, avoiding visual interference from nearby advertising media, shops, signages, or art installations.

(2) LINE–Comprehensive Coverage at each passenger flow line: The strategy of full coverage and standardisation of media products series acts as a revenue assurance, meeting the objective market rules of airport advertising, which require comprehensive coverage of both departing and arriving, international and domestic passengers. The media planning is thus tailored to divide different media series packages to ensure comprehensive coverage across all processes, ensuring effective advertising reach and impact. This includes standardised placements like LCD screens at boarding gates, light box series in corridors, and LCD screens at baggage carousels, maintaining consistency with advertising series seen in other terminals and aligning with customer advertising habits.

(3) PLANE–Creating Iconic Media Landscapes: Constructing iconic media landscapes as the iconic media plane ensures the realisation of advertising landscape goals. Integrating advertising with landmark features of the space is an innovative aspect of GZAT2's advertising planning. Examples include the Sky Stage in the checkin hall, Long advertising Tunnel and Short advertising corridors, which break away from traditional constraints to

focus on passenger experience, making advertising a part of the airport's interactive space. Utilizing new media technologies, these areas serve as dynamic visual landscapes, doubling as social media hotspot areas for passengers, combining public service announcements with interactive features, and serving as competitive platforms for advertising creativity awards, thereby establishing industry status.

Effective Strategy 4: Dynamic and Static Media Selection

A balanced mix of dynamic digital displays and static media optimized passenger engagement based on area functionality and passenger flow (Lovelock and Wirtz, 2011).

- (1) **Dynamic and Static Media Selection:** The principle of combining dynamic and static media forms is rooted in adapting to the psychological and behavioral patterns of passengers. In high-movement areas such as walkways and entrances, static media forms like lightboxes are used to capture attention without overwhelming passengers. Conversely, in areas where passengers typically wait, such as boarding gates and baggage claim areas, dynamic media forms like digital screens engage passengers with moving images and interactive content. This strategic placement ensures maximum visibility and effectiveness of advertisements across different passenger zones. The strategy at GZAT2 involves a balanced distribution between dynamic digital displays and static media such as lightboxes and posters, maintaining a ratio of approximately 4:6. This mix is carefully crafted to align with the distinct areas within the airport, optimizing media visibility and effectiveness based on passenger flow and area functionality.
- (2) **Integration of Smart Media and Innovative Technologies:** Embracing the trend towards digitalization in advertising, GZAT2 has incorporated smart media functionalities that go beyond traditional advertising methods. For instance, in the Time-Tunnel advertising area, wall-to-ceiling digital screens are strategically placed at passenger touchpoints. In the Sky-Stage advertising area, it provides interactive experiences. The LCD screens at each boarding gate are equipped with technology to display real-time information relevant to passengers, such as weather updates at their destination, stock market trends, or even real-time news—making each interaction personalized and informative. Further, advanced technologies such as Augmented Reality (AR) and naked-eye 3D are integrated into large digital displays along corridors and public spaces. These technologies not only captivate passengers with immersive experiences but also offer advertisers innovative ways to showcase their brands, making advertisements more engaging and memorable.
- (3) **Minimizing Digital Media Challenges:** The risk of screens being hacked to display unauthorized content is a primary focus in airport advertising management. Recognizing the potential challenges that come with digital media—such as IT security risks, electrical reliability, and maintenance concerns—the deployment of digital displays is undertaken with a high degree of caution. A lesser proportion of digital media helps mitigate these issues, ensuring that operational disruptions are kept to a minimum. This approach also prevents any small imperfections in digital displays, such as pixel errors, from detracting from the overall aesthetic and functional harmony of the terminal environment. Each digital unit should be strategically placed and designed to blend seamlessly with the

terminal's architecture, ensuring that its maintenance and security demands do not compromise the terminal's operational efficiency or passenger experience.

By implementing a cautious and balanced approach to media type selection, GZAT2 effectively addresses the logistical and aesthetic challenges of integrating advertising within an airport setting. This strategy not only enhances the passenger experience through thoughtful media placement but also ensures the long-term sustainability and effectiveness of the advertising program, maintaining a serene and operationally sound environment.

4. Contributions to Project Effectiveness

My role encompassed collaborative design integration, strategic media placement, and the development of a valuation framework that guided advertising investment decisions. These contributions were pivotal in aligning the project's aesthetic and commercial goals.

5. Conclusion

This chapter has walk into the dynamics of collaborative teamwork that shaped the innovative design and layout strategies at Guangzhou Airport Terminal 2. Through my roles with BYGJ and GZAT2, and in collaboration with JCDecaux and ADI, we successfully integrated complex advertising concepts into the architectural fabric of the terminal. These efforts not only optimized the terminal's commercial potential but also significantly enhanced the aesthetic and functional quality of its advertising spaces. The strategies discussed here—ranging from the early integration of design elements to the strategic placement and type of media—exemplify a comprehensive approach to terminal advertising. My personal contributions, especially in pioneering the Micro-Value Framework Algorithm, have played a crucial role in refining the economic assessment and strategic placement of advertising media, ensuring that each element serves its intended purpose effectively.

Reflecting on this journey, the successful implementation of these design and layout strategies at GZAT2 highlights the transformative power of collaborative innovation in airport environments. This experience offers valuable insights into how targeted advertising strategies can be seamlessly incorporated into large-scale infrastructure projects, setting a benchmark for future endeavors in the realm of airport advertising.

Chapter 3:

Project Development Journey: Value and management

(3000words)

The Guangzhou Airport Terminal 2 advertising project exemplifies a pioneering venture into integrating sophisticated advertising solutions within an airport environment. This project sought to enhance both the aesthetic appeal and functional utility of the airport through carefully crafted media installations that not only serve advertising purposes but also enrich the passenger experience. Initiated as part of the broader development of Terminal 2, the project was designed to set new benchmarks for airport advertising globally. Its objectives were ambitious: to create a seamless blend of digital and physical advertising mediums that resonate with international brands and travelers alike, boosting the airport's revenue while elevating its status as a premier international hub.

1. Conceptualization

The project was grounded in six core principles to ensure a harmonious blend of functionality, aesthetics, and technological advancement:

- ① **Overall Coordination:** Integrate Terminal 2 and Terminal 1 through systematic layout and comprehensive planning.
- ② **Safety Assurance:** Adhere to safety standards in size, structure, load-bearing, waterproofing, and fire protection of advertising media.
- ③ **Service Enhancement:** Combine advertising with airport services to enhance the service image of the airport.
- ④ **Landscape and Cultural Identity:** Create unique landscape media reflecting Lingnan region's characteristics, transforming advertising into a cultural showcase.
- ⑤ **Technology-Oriented:** Incorporate digital technology, align with international trends, and set up scientifically.
- ⑥ **Value Optimization:** Strategically place high-quality and high-value media in key areas.

The project also focused on six core goals:

- ① **Management Goal:** Unified planning and phased construction to enhance passenger experience and meet Skytrax five-star terminal requirements. The construction complexity, structural integrity, and material choices are all considered to ensure a seamless integration of aesthetics and functionality. In the planning stages, it is proposed that 25% of the media spaces be categorised within a deferred construction area, allowing for future expansions and adaptability.
- ② **Economic Goal:** Under the circumstance of diverting passengers between two terminals, still need to increase the advertising revenue per passenger. Increase advertising revenue per passenger by positioning premium media assets in core areas.
- ③ **Visual Goal:** Ensure do not obstruct main flow signage or affect passenger travel. Enhance the airport's visual environment with iconic landscape media that provide a pleasant experience. It aims to create distinctive landscape media that embodies the cultural essence of Terminal 2's advertising plan. This initiative captures the essence of

the "Above the Clouds, View of Lingnan" concept, showcasing images that are characteristic of Lingnan culture, including "Cloud Pool," "Cloud Pavilion," and "Cloud Corridor."

- ④ **Engineering Goal:** Plan electrical distribution points with a high reservation accuracy, ensuring simultaneous reservation for high and low voltage systems.
- ⑤ **Client Goal:** Develop international high-quality media platforms to attract premium brands and enhance the aesthetic appeal of advertising displays. Responding to media development trends, plan to create art media spaces that attract high-end brands. These spaces are designed to be interactive, participatory, and adaptable, serving not only as temporary advertising locations but also as venues for cultural events. It aims to transform these areas into vibrant hubs for traveler engagement and cultural exhibitions, hosting commercial performances that enhance passenger services and simultaneously generate media value.
- ⑥ **Product Goal:** Incorporate cutting-edge technology to ensure media products meet international industry standards. It enforces stringent quality standards for media products, incorporating advanced technologies to ensure that they meet international industry benchmarks. Covering both Terminal 2 and the Ground Transportation Centre (GTC), it has established a comprehensive media layout that ensures total coverage, guarantees high advertising reach, and maintains a balanced development of advertising effectiveness.

2. Key Stages Timeline

2.1 Planning Stage (2012–2016)

- I. **Challenges:** Establishing advertising design and layout to attract international brands as a new hub in China.
- II. **Solutions:** Early collaboration with architects and stakeholders to integrate advertising media from the onset, ensuring both aesthetic appeal and functional integration. This solution finding was extensively detailed in **Chapter 2**.

2.2 Tendering Stage (First Half of 2017)

- I. **Challenges:** Selecting an operational model that ensures efficiency and scalability. Aim to find a good partnership is the essential challenge.
- II. **Solutions:** Adopting a single-operator model after comparing various models from other domestic airports, ensuring cohesive management and consistency in advertising quality. The final operational model for Terminal 2's advertising was established as follows:
 - **Bidding Model:** The model adopted was an open tender combined with exclusive operation rights.
 - **Cooperation Model:** The successful bidder was granted the right to use the advertising resources within the planned scope of Terminal 2 and the Ground Transportation Centre (GTC). The operator was responsible for the design optimization, investment in construction, advertisement operation, and maintenance.
 - **Revenue Model:** The fee for the use of advertising resources was based on a "guaranteed minimum price plus excess commission" model.
 - **Operation Period:** 5+3 years.

This solution was designed to streamline management, ensure the quality of advertising, and align financial incentives between the airport and the operating partner. The whole tendering formation and the collaboration was extensively detailed in **Chapter 1**.

2.3 Further Design and Construction Stage (2017–2018)

- I. **Challenge:** Synchronizing the construction of advertising installations with the terminal's overall architectural progress under tight deadlines.
- II. **Solution:** Detailed project management and phased construction plans to align with airport construction, minimizing disruptions.

2.4 Terminal Opening (April 26, 2018)

- I. **Challenge:** Ensuring that all advertising platforms were operational and met the high standards expected by international brands at launch. Marked by the grand opening of Terminal 2, this phase celebrated the launch of operations and the newly installed advertising spaces, setting a new benchmark in airport advertising.
- II. **Solution:** Rigorous testing and adjustments in the months leading up to the opening, with contingency plans for quick resolution of any technical issues.

2.5 Adjustment and Prosperous Development Phase (2018–2020)

- I. **Challenge:** After the terminal's opening, the project entered a phase of operational adjustment and rapid development. (1) **Better Management Needs:** As the terminal's operations evolved, the need for more structured and scientific management became apparent. Ensuring the effectiveness of management practices to meet the dynamic operational needs required ongoing adjustments. (2) **Media Location Changes:** Media resource allocations lacked a robust basis for valuation, which risked potential revenue losses and inefficiencies in media placement. This posed a challenge in maintaining profitability while ensuring the effectiveness of media displays throughout the terminal.
- II. **Solution:** (1) **Annual Performance Assessments:** To enhance management practices, annual performance assessments of the advertising operator, JCDecaux (JCD), were implemented. These assessments were designed to evaluate the effectiveness, efficiency, and adaptability of JCD's management strategies, ensuring that they met the high standards required for airport operations. This helped streamline operations and provided regular checkpoints to address any areas needing improvement. (2) **Single Media Value Evaluation System:** In response to the challenge of media resource changes, a Single Media Value Evaluation system was developed. This system provided a quantitative method to assess the value of each advertising space based on its visibility, traffic flow, and overall impact. It allowed for data-driven decisions regarding media placements and adjustments, ensuring optimal use of advertising resources and preventing revenue losses from poorly evaluated media changes. This tool proved crucial in adapting to changes in the airport's layout and operational focus, particularly with fluctuating passenger numbers and evolving advertiser needs.

2.6 Pandemic Period (2020–2021)

- I. **Challenge:** Drastic reduction in passenger numbers impacting advertising revenue, without existing contractual provisions to address such a scenario.
- II. **Solution:** Creation of the Macro Media Value Assessment Algorithm to recalibrate advertising rates and terms, maintaining financial viability while accommodating the unprecedented drop in airport traffic.

2.7 Transition and Project Closure (July 2021)

By July 2021, after over a decade of involvement, I stepped away from the project and the airport. By this time, the advertising project had matured into a well-established operation.

2.8 End of Partnership (May 2023)

In May 2023, the partnership between Baiyun Airport and JCD concluded, marking the end of an extensive and transformative collaboration.

This narrative structure provides a comprehensive overview of the project from its inception through its various challenges, adaptations, and the eventual transition beyond my direct involvement, offering a detailed view of the project's lifecycle and its impact on the airport's commercial and aesthetic landscape.

3. Key findings on advertising value and management research in this journey

3.1 How to estimate the value of single media in terminal?

During this project development journey, I Developed the Micro-Value Framework Algorithm for Advertising Media. This method is suitable for estimating the value of single advertising media using a comprehensive comparison method. It assesses variety factors such as the media's environmental characteristics, physical attributes, size, form, and spatial relations. By comparing with benchmark advertising media of known value, the method estimates the value of the media being assessed.

(1) Key Indicators for Single Media Value Assessment

The value of a single media unit is influenced by 9 key parameters across three categories: media attributes, environmental factors, and traffic metrics.

- **Media Attributes Parameters:**
 - **Size/Area:** Larger advertising areas generally have higher values. (This model uses a comparison approach with similar media types and does not account for differences between dynamic and static media.)
 - **Orientation:** Media facing directly and unobstructed at a high level typically represent core value. Media visible from the side along passenger flows tend to be less effective.
- **Environmental Parameters:**

- **Visibility Distance:** Longer visibility ranges and exposure times enhance media value. High placements might reduce visibility duration, generally with a visual analysis set to not exceed a 15-degree vertical angle.
- **Obstructions:** Common obstructions include passengers, signs, plants, seating, art installations, bins, and trolleys. Planning must ensure that advertisements and signs are harmoniously designed without mutual interference.
- **Exclusivity:** Considers if the media is the only one within the visual space for a given time, also factoring in the proportion of visual space occupied. Shared media spaces reduce exclusivity and thus value.
- **Environmental Attributes:** The primary consideration for environmental attributes is whether the space has landmark significance and whether the overall environment is high-end and tidy. If the space is cluttered with too many devices or is messy and dirty, it will negatively impact the media's value.
- **Traffic Parameters:**
 - **Audience Traffic Volume:** Based on the number of passengers that can see the media, using traffic data for calculation.
 - **Passenger Dwell Time:** Higher value is given to media in areas where passengers linger, such as queues for check-ins or security, suggesting the use of dynamic displays in these longer dwell time areas.
 - **Audience Demographics:** Value increases if the media covers passengers from major airlines or premium classes, with domestic flows generally preferred over international in the market.

(2) Constructing a Matrix Framework for Single Media Value Assessment

This framework omits factors like the strength and maintenance capabilities of advertising operators, focusing instead on universal attributes like media brightness. The assessment framework is built as follows, with scoring ranges from various operational and environmental criteria, allowing for a nuanced valuation of each advertising unit based on size, traffic exposure, visibility, and other critical factors.

Table2. Indicators and Scoring

Score Range	1–2	3–4	5–6	7–8	9–10
Media Size	Calculate scores proportionally based on the media with the largest size rated 10. Round to the nearest whole number.				
Audience Traffic Volume	Media with the highest traffic volume scores 10, others are scored proportionally. Round to the nearest whole number.				
Media Visibility Distance	Media with the longest visibility distance scores 10, others are scored proportionally. Round to the nearest whole number.				
Passenger Dwell Time	Media where passengers linger the longest scores 10, others are scored proportionally. Round to the nearest whole number.				

Media Orientation	In the direction of passenger flow	Near, slanting side	Near, direct front	Far, high side	Far, high face
Obstructions	Completely covered by obstructions	Partially covered over a long visibility distance	Partially covered over a short visibility distance	No obstructions	No obstructions and a clean environment occupying most of the visual space
Media Exclusivity	Non-competitive with other media in the space	Among other media in the space, but parallel in view	Primary visual media among others in the space	The only media in the space	The only media in the space, occupying most of the visual space
Audience Value	– Covering major domestic airline passengers +2 – Covering regular domestic passengers +2 – Targeting first and business class passengers +2 – Covering domestic flights of major airlines for international passengers +1 – Covering regular international passengers +1; Up to a total of 10 points				
Environmental Attributes	Environment dirty and cluttered	Numerous devices and facilities in the environment	Suitable environment	High-end and clean environment	Environment with a landmark significance

The "Micro-Value Framework Algorithm for Advertising Media" integrates market comparison providing a model for managing the value of advertising spaces in different scenarios. It is particularly useful for regional advertising development, value assessments of display spaces, and comparisons of new media valuations.

3.2 What factors influence the advertising media value?

The ultimate value of advertising lies in its ability to effectively reach and engage passenger consumers. This value realization involves several key industry players including the airport owners, advertising operators, advertising clients, 4A advertising agencies, and passengers themselves. For airport owners, the ultimate advertising revenue is generated through the industry's ecosystem. The main source is the advertising spend of market clients, which is influenced by 8 factors:

3.2.1 Sources of Revenue (Input Parameters)

3.2.1.1 Advertising Market Client Budgets: The advertising market is a barometer of economic health. Client budgets can be predicted from annual industry reports to assess overall trends and the share of airport advertising. In the context of a global pandemic, the overall advertising market declined, leading to reduced budgets and more cautious spending decisions. For example, as passenger numbers at airports like Beijing and Shanghai plummeted, overall advertising plans were canceled, impacting Guangzhou Airport.

3.2.1.2 Target Audience Groups: Decisions on advertising spend are influenced by the positioning of the city's terminals, the strength and relationships of advertising operators, the attractiveness of specific media locations, covered passenger flow and structure, and the controlling abilities of operators and owners over the publishing environment. Expanding target audience groups is a primary source of revenue growth. For instance, the automotive

industry inside the terminal accounts for approximately 23%. Adding new commercial operations targeting the same industry does not generate new revenue but dilutes the value of existing advertising resources.

3.2.2 Quantitative Factors:

3.2.2.1 City Positioning: The advertising placements consider whether the city's positioning aligns with the target market. For international clients, global capitals and economic hubs are essential coverage areas.

3.2.2.2 Capacity of the Advertising Operator: This is crucial as it determines the ability to secure stable annual advertising budgets.

3.2.3 Core Variable Coefficient — Passenger Flow (Volume/Structure)

Passenger flow, both in terms of volume and structure, is a primary coefficient that significantly influences value assessments and directly impacts the return on investment calculations for clients.

3.2.3.1 Passenger Volume: Passenger volume refers to the number of people that advertising media can reach and is a core coefficient for calculating the return on investment in the advertising industry. It is essential for assessing regional advertising output, valuing advertising impacted by pandemics, and pricing individual media placements.

3.2.3.2 Passenger Structure: The structure of passenger flow includes elements such as the airline companies, whether international or domestic, departures or arrivals, VIP lounge guests, and pick-up or drop-off visitors. Advertising placements often prioritize brands associated with airlines that have a significant base at the airport. For example, GAC might prefer placements where Southern Airlines predominates, like T2, while companies headquartered in Shanghai or Beijing might opt for placements in terminals serviced by Eastern Airlines or Air China, ensuring visibility. Historical data and industry attributes suggest that the domestic to international passenger value contribution generally has a ratio of 4:1.

3.2.4 Controllable Management Coefficients

Planning and managing the advertising media, the environment for ad releases, and maintaining stable price thresholds are crucial for balanced management within advertising operations.

3.2.4.1 Advertising Media Planning and Design Factors: The planning and design of advertising media, which dictate the placement, form, and exposure of advertisements, are crucial in determining their attractiveness. Effective media planning was extensively discussed in Chapter 2. In practical management, building a stable advertising value system typically involves maintaining consistent media placement rather than allowing frequent additions or removals, which could disrupt existing media contracts or valuations within the area.

3.2.4.2 Management Control of the Advertising Release Environment: Managing the environment where ads are released is critical for controlling premium advertising spaces, particularly important to top-tier international brands.

3.2.4.3 Advertising Pricing: Advertising operators establish guideline prices for media sales, which set the baseline pricing for brands seeking to feature in the terminal. The overall

advertising rate card for T2, benchmarked against international standards like those at Shanghai Hongqiao Airport, provides a framework for establishing consistent pricing standards. Maintaining equal pricing for similar advertising spots ensures that the pricing system remains unbreached, crucial for preserving advertising income stability, especially in the face of fluctuating market conditions such as during a pandemic when guideline prices may be adjusted downward.

This format clearly categorizes the 8 factors and details the strategic aspects for maintaining the value of existing advertisements in an airport terminal setting:

Key Aspect	Details
1. Advertising Market Budget	– Develop reasonable business expectations from annual advertising industry reports.
2. Target Audience	– Broaden the target audience. – Protect existing advertising clients, avoid creating multiple entry points, and prevent bargaining that impacts existing advertising formats.
3. City Positioning/ Terminal Image	– Support airport construction development, actively improve passenger services, and maintain a Skytrax five–star environment. – Assist in promoting the city’s image.
4. Advertising Operator	– Enforce strict contract management. – Collaborate and develop together; achieve mutual understanding.
5. Passenger Flow (Quantity/Structure)	– Actively implement the airport’s passenger expansion plan. – Keep the distribution of passenger data between the two terminals confidential.
6. Advertising Media Planning and Design	– Carefully consider the environmental and operational impact of new advertising positions on existing media locations.
7. Advertising Environment Control	– Maintain the terminal’s environment as high–end, tidy, transparent, and smooth. – Adhere to the terminal’s visual management committee’s review system. – Ensure there are no visual disturbances around top–tier international brands, and avoid displaying different brand levels.
8. Advertising Placement Pricing	– Strictly manage brand exposure channels to prevent breaking the pricing system; coordinate with relevant departments to maintain it. – Monitor the pricing competition among different advertising operators.

3.3 How to evaluate Algorithm for the terminal advertising media ?

There is a mathematical algorithm widely accepted within the industry for calculating the macro–value of advertising resources at airports, based on passenger traffic estimates, ensuring that all factors such as input parameters, fixed quantitative coefficients, and controllable management coefficients remain consistent.

Macro–Value Formula (M) = Per–Passenger Advertising Revenue (P) ✖ Passenger Volume (E)

3.4 How to maintain a good advertising environment?

There are three key control components to maintain a high-end advertising environment, it includes:

- Ensuring that the surrounding visual environment of the media maintains the high-end, minimalist atmosphere of a five-star international terminal. For instance, maintaining the transparency and aesthetic simplicity of security checkpoints protects the advertising value generated there, with strict controls against visually inconsistent elements like cartoon designs in high-traffic areas.
- Maintaining stable compliance with advertising agreements, ensuring that public service advertising demands do not frequently disrupt the scheduled posting periods or alter contractual billing.
- Harmonizing the brand relationships among nearby advertisements. Ensuring that advertisements in the same area do not feature competing or disparate brands is crucial for maintaining the integrity of the advertising environment. For example, luxury brands often prefer to be situated among similar high-status brands to maintain an appropriate environmental standard.

3.5 How many types of Operator Model and How it effect advertising value?

Conducting thorough **Research** and **Comparative Analysis** with other airports, there are three types of Operational Models in China Airports:

I. Single Operator Model:

- A. **Characteristics:** A single advertising operator holds exclusive rights to manage all media in the terminal.
- B. **Advantages:** This model allows control over advertising sales and brand thresholds, avoiding price wars within the same venue. It ensures a premium advertising environment which is crucial for international top-tier brands.
- C. **Disadvantages:** Requires the operator to have substantial operational capacity and financial strength. The airport must implement robust control and assessment mechanisms to manage the monopoly risks and potential bankruptcy of the operator.
- D. **Examples:** Shanghai Airport, Shenzhen Airport, Yunnan Airport, Chengdu Tianfu Airport, Nanjing Airport, Hangzhou Airport, Qingdao Airport, and Guangzhou Baiyun Airport T2.

II. Multiple Operators Model:

- A. **Characteristics:** Several advertising agencies manage different media sectors simultaneously.
- B. **Advantages:** More entry points for advertisers, creating a dynamic market and giving the airport more negotiating power.
- C. **Disadvantages:** Increased complexity in management and difficulty in controlling the advertising environment. There is a risk of price wars among agencies that could harm the airport's interests.

III. Management Models:

- A. **Exclusive Rights Transfer:** Selected through public tendering, e.g., Hangzhou Airport and Chengdu Tianfu Airport.

- B. **Joint Venture Model:** Partnering with professional advertising firms to form joint ventures, e.g., Shanghai and Shenzhen Airports.
- C. **Self-Operation/Segmented Tendering:** Managed by the airport's wholly-owned advertising company or tendered to various agencies, e.g., Beijing Airport and Chengdu Airport.

4. Conclusion:

This chapter covers the developmental aspects and provides a detailed analysis of the economic outcomes and the evolution of operational models that have influenced modern airport advertising strategies. The insights gained from this project are invaluable for similar future endeavors, demonstrating the importance of adaptability, strategic planning, and integrated management in achieving success in dynamic commercial landscapes.

Conclusion Chapter

The comprehensive study presented in "Decade of Insights on Airport Terminal Advertising: A Comprehensive Guide to Media Infrastructure Planning, Design, and Effective Partnership Management" encapsulates a decade of innovative practices, strategic developments, and insightful partnerships at Guangzhou Airport's Terminal 2. This exploration offers a profound look into the transformative processes that have not only redefined advertising within the airport domain but have also set benchmarks for global airport advertising strategies.

Synthesis of Key Insights:

1. **Strategic Planning and Design:** The success of Terminal 2's advertising is largely attributed to meticulous planning and strategic design that seamlessly integrated advanced media technologies within the airport's architectural framework. Aligning advertising goals with terminal aesthetics, passenger flow, and brand engagement created a symbiotic environment that enhances traveler experience and maximizes revenue.
2. **Effective Partnership Management:** The partnership between Guangzhou Airport and JCDcaux (JCD) exemplifies effective collaboration, underpinned by a synergy of global expertise and local market knowledge. This was crucial in delivering high-quality, impactful advertising solutions catering to an international audience.
3. **Value Assessment and Optimization:** The development of the Micro-Value Framework Algorithm enabled the quantification of advertising space value, facilitating informed decision-making and strategic ad placements. This systematic approach to value assessment provides a replicable model for airports worldwide.
4. **Adaptability in Challenges:** The study highlighted how the airport navigated significant challenges such as the COVID-19 pandemic. The management's flexibility and adaptability in adjusting strategies to respond to decreased passenger traffic and economic downturns underscored the resilience and foresight of the advertising strategies employed.

Implications for Future Airport Advertising Ventures:

This analysis serves as a cornerstone for future advertising projects at airports globally. It offers a guide on leveraging advertising as a strategic tool for non-aeronautical revenue enhancement while improving passenger experience. The insights derived from this study advocate for:

- A holistic approach to media planning that incorporates technological advancements and innovative design.
- The cultivation of strategic partnerships that align with long-term airport goals.
- Continued adaptation and responsiveness to changing market dynamics and passenger behaviors.

Conclusion:

The journey of Guangzhou Airport Terminal 2 exemplifies a forward-thinking approach to airport terminal advertising. It reflects a confluence of innovation, strategic alignment, and operational excellence. The lessons gleaned from this decade-long venture will undoubtedly

influence future airport advertising strategies, promoting a blend of commercial success and aesthetic enrichment in airport environments worldwide. As airports continue to evolve as crucial hubs of economic activity, the integration of sophisticated advertising platforms will play a pivotal role in defining their commercial landscape and passenger interaction strategies.

References

- Babin, B.J. and Attaway, J.S., 2000. Atmospheric Affect as a Tool for Creating Value and Gaining Share of Customer. *Journal of Business Research*, 49(2), pp.91–99.
- Duncan, T. and Moriarty, S.E., 1998. A Communication–Based Marketing Model for Managing Relationships. *Journal of Marketing*, 62(2), pp.1–13.
- International Air Transport Association (IATA), 2019. *The Impact of Air Transport on Global Economic Development*.
- Kotler, P. and Keller, K.L., 2016. *Marketing Management*. 15th ed. Pearson.
- Lovelock, C. and Wirtz, J., 2011. *Services Marketing: People, Technology, Strategy*. 7th ed. Pearson.
- Morrison, A.M. and Anderson, D.J., 2016. Airport Marketing. *Journal of Travel & Tourism Marketing*, 33(5), pp.599–616.
- O’Connor, P. and Frew, A.J., 2004. The Future of Hotel Electronic Distribution: Expert and Industry Perspectives. *Cornell Hotel and Restaurant Administration Quarterly*, 45(4), pp.335–347.
- Pashkevich, M. and Lang, B., 2014. Exploring the Relationship Between Airport Advertising and Passenger Experience. *Journal of Air Transport Management*, 39, pp.7–15.
- Schmidt, S. and Wolff, P., 2016. The Role of Digital Signage in Transforming Passenger Experience at Airports. *Journal of Airport Management*, 10(2), pp.123–135.
- Zenglein, M.J. and Müller, J., 2007. Non–Aeronautical Revenue at Airports: The Importance of Commercial Management. *Journal of Airport Management*, 1(3), pp.279–294.
- 华经情报网, 2022. 2022–2027年中国机场广告行业市场全景评估及发展战略规划报告. [online] Available at: <https://www.huaon.com/channel/media/772238.html> [Accessed 20 May 2024].
- jemian News, 2022. 2022年，户外广告“涨”，互联网广告“降”. [online] Available at: <https://m.jiemian.com/article/7275113.html> [Accessed 20 May 2024].
- Sina Finance, 2023. 白云机场(600004.SH)签订2.86亿元T1航站楼广告经营合同. [online] Available at: <https://finance.sina.cn/hkstock/gsxw/2023-05-11/detail-imytkvku9941507.d.html?from=wap> [Accessed 20 May 2024].
- Zhihu, 2023. 白云机场烽火戏诸侯，“利好”背后真相让人心忧. [online] Available at: <https://www.zhihu.com/column/p/27265566> [Accessed 20 May 2024].
- Guangzhou Baiyun International Airport Co., Ltd., 2022. 关于 2021 年度部分广告发布费支付问题达成解决方案的公告. [pdf] Available at: <https://www.example.com/path/to/document> [Accessed 20 May 2024].
- Guojin Securities, 2018. *Guangzhou Baiyun International Airport Advertising Business Unified Model and Non–Aviation Logic Enhancement Report*. [pdf]

- 华创证券, 2019. 户外广告市场竞争的参考演绎：以机场、地铁推荐（首次）广告为例. [pdf]
- Airport Technology, 2023. Why Airport Advertising is Important. [online] Available at: <https://www.airport-technology.com/features/why-airport-advertising-is-important/> [Accessed 20 May 2024].
- Wilson, R.T. and Till, B.D., 2008. Airport Advertising Effectiveness: An Exploratory Field Study. *Journal of Advertising*, 37(1), pp.59–72. [pdf] Available at: <https://www.tandfonline.com/doi/pdf/10.2753/JOA0091-3367370105> [Accessed 20 May 2024].
- Chmielewski, S. and Tompalski, P., 2017. Estimating Outdoor Advertising Media Visibility with Voxel-Based Approach. [pdf]
- Jearth, P., Singh, G. and Munjal, S., 2021. Ethnographic and Exploratory Study of Passengers' Perceived Factors Towards the Airport Advertising. *Academy of Marketing Studies Journal*, 25(1), pp.1–13. [pdf]
- Watkins, M., 2008. How to Market a Regional Airport? Case Study — Birmingham International Airport. [pdf]
- JCDcaux, 2023. JCDcaux Unveils Neuroscience Research Into Travellers & Airport Advertising. [pdf] Available at: <https://www.proquest.com/trade-journals/jcdecaux-unveils-neuroscience-research-into/docview/2780566362/se-2?accountid=130472> [Accessed 20 May 2024].
- Wilson, R.T., 2024. Out-of-home advertising: a bibliometric review. *International Journal of Advertising*, 43(2), pp.286–320. [pdf] Available at: <https://doi.org/10.1080/02650487.2023.2186013> [Accessed 20 May 2024].
- Halpern, N., 2022. Airport marketing. In: D. Buhalis, ed., *Encyclopedia of Tourism Management and Marketing*. Cheltenham: Edward Elgar Publishing. [pdf]
- Leung, A., Yen, B.T.H. and Lohmann, G., 2017. Why passengers' geo-demographic characteristics matter to airport marketing. *Journal of Travel & Tourism Marketing*, 34(6), pp.833–850. [pdf] Available at: <https://www.tandfonline.com/doi/full/10.1080/10548408.2016.1250698> [Accessed 20 May 2024].
- CAAC News, 2019. 白云机场年旅客吞吐量突破7000万人次. [online] Available at: http://www.caacnews.com.cn/1/5/201912/t20191214_1287616.html [Accessed 20 May 2024].
- CAAC News, 2020. 白雲機場T2蟬聯SKYTRAX“全球五星航廈”稱號. [online] Available at: https://www.caac.gov.cn/big5/www.caac.gov.cn/XWZX/HYDT/202006/t20200617_203140.html [Accessed 20 May 2024].