

Urban Livability and Vertical Inclusion: Exploring Mixed-Use Development Strategies in Khulna, Bangladesh

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Abstract:- As urban populations expand and future needs evolve amidst limited land availability, rethinking traditional planning and construction approaches becomes imperative. Architect Frank Schlesinger advocates for urban environments that embrace mixed-use complexes, conceptualizing urban land as dynamic, three-dimensional blocks accommodating diverse functions above, at, and below ground levels. Shopping facilities, pivotal in urban landscapes, reflect regional and temporal variations in consumer behavior. Integrating public and private amenities is essential for cultivating a thriving urban ecosystem. However, rigid block structures in current city master plan to constrain diversity and livability, are exacerbated by inadequate setbacks that challenge urban identity. In Khulna, bustling daytime cores contrast with deserted evenings and holidays, reflecting segregated land uses that hinder societal inclusivity. Despite demand, office and commercial spaces often remain vacant. This study employs a mixed-method approach, combining quantitative surveys with qualitative methods such as interviews and observational studies. It aims to address critical local issues including land scarcity, traffic management, vertical development challenges, and the provision of sophisticated services to enhance urban comfort. By exploring innovative configurations of civic facilities, both horizontally and vertically, the study seeks to demonstrate how integrating functions can create cohesive and vibrant urban environments. Ultimately, the adoption of vertically integrated spaces holds promise for fostering inclusivity and sustainability in Khulna's urban fabric.

Keywords:- Urban Ecosystem, Vertical Place, Public Inclusion.

I. INTRODUCTION

Human settlements have historically thrived as mixed-use environments, where the integration of residential, commercial, and industrial activities within close proximity shaped vibrant communities. This organic development pattern, fostered by walkability and communal spaces, not only facilitated economic exchanges but also promoted social cohesion and cultural vitality. In contemporary urban planning, mixed-use development continues to be recognized

for its potential to address multifaceted challenges and aspirations in growing cities like Khulna.

Khulna, Bangladesh's third-largest economic center, is undergoing rapid urbanization and faces significant development pressures exacerbated by major infrastructure projects such as the Padma Bridge. The city's current urban landscape already exhibits a mix of residential, commercial, and industrial uses, yet it grapples with challenges related to vertical inclusion, urban memory preservation, visual quality enhancement, sustainable practices integration, and the creation of diverse and accessible public spaces. These challenges underscore the need for strategic planning and innovative approaches to optimize urban space utilization and enhance overall urban quality of life.

This study employs a qualitative research approach to delve deeply into the dynamics and implications of mixed-use development in Khulna. By synthesizing insights from comprehensive literature reviews, comparative case studies of successful international and national examples, and stakeholder perspectives gathered through semi-structured interviews, the research aims to uncover underlying issues and opportunities. Through this exploration, the study seeks to propose informed strategies and recommendations that can foster urban livability, economic vitality, and community well-being in Khulna.

Effective mixed-use development, grounded in inclusive planning processes and collaborative stakeholder engagement, holds the potential to transform Khulna into a sustainable and resilient urban center. By addressing current challenges and leveraging local strengths, this research aims to contribute to the enhancement of Khulna's urban fabric, ultimately creating a more vibrant and equitable cityscape for its residents and visitors alike.

II. LITERATURE REVIEW

The increasing scarcity of land for development has heightened the urgency to maximize the use of available land, particularly in urban areas with well-developed services and transportation networks [1, 2, 3]. Mixed-use development has emerged as a compelling strategy to efficiently utilize limited space while accommodating diverse urban needs.

➤ *Definition and Evolution of Mixed-Use Development*

Mixed-use development integrates multiple types of land uses within a single building or a contiguous set of buildings. These uses can include residential, commercial, industrial, office, institutional, and recreational facilities [1]. Historically, urban settlements were characterized by mixed-use environments where people lived, worked, and socialized within close proximity, fostering vibrant communities [1]. However, the advent of single-use zoning in the mid-20th century in the United States, driven by concerns over efficiency and separation of incompatible uses, relegated mixed-use development to a lesser role [2]. Today, there is a renewed appreciation for mixed-use environments due to their ability to create vibrant, walkable neighborhoods that promote social interaction, economic diversity, and environmental sustainability [3]. The Urban Land Institute (ULI) defines mixed-use as incorporating three or more significant revenue-generating uses, with a strong emphasis on functional and physical integration to enhance urban livability and efficiency [1].

➤ *Historical and Modern Perspectives*

The resurgence of mixed-use development gained momentum in the late 20th century as cities sought strategies for urban revitalization. The IDS Center in Minneapolis, completed in 1976, stands as an early example of successful mixed-use integration, combining offices, retail spaces, and a hotel in a single complex [1]. This project demonstrated the potential of mixed-use environments to attract diverse user groups and activities, revitalizing urban cores and enhancing economic vitality [1]. In contemporary urban planning, mixed-use development plays a crucial role in Transit-Oriented Development (TOD), Traditional Neighborhood Development (TND), and Smart Growth initiatives. These approaches advocate for compact, pedestrian-friendly communities that reduce dependence on automobiles, promote public transit use, and integrate housing, employment, and recreational opportunities within close proximity [1].

III. THEORETICAL FRAMEWORKS

➤ *Placemaking Principles*

Placemaking is a multifaceted approach to the planning, design, and management of public spaces that fosters community engagement and leverages local assets, inspiration, and potential. The ultimate goal is to create public spaces that enhance people's health, happiness, and well-being. Effective placemaking involves deep community engagement, ensuring that the spaces reflect the needs and desires of local residents. This process helps create a unique identity and character for the space by drawing on local culture, history, and geography. Inclusivity is another key principle, ensuring that spaces are accessible and welcoming to people of all ages, backgrounds, and abilities. Sustainability is also crucial, with placemaking promoting environmental, economic, and social sustainability. Finally, flexibility is important; public spaces should be adaptable to various activities and events, ensuring they remain vibrant and relevant over time [8].

➤ *Vertical Urbanism and Placemaking*

Vertical urbanism focuses on the development of high-density, multi-functional urban areas, often incorporating residential, commercial, and recreational spaces within high-rise structures. A central aspect of vertical urbanism is the integration of public spaces within and around tall buildings, providing areas for social interaction and community activities. Mixed-use developments are encouraged, combining different functions within a single building or cluster of buildings to create a vibrant, dynamic urban environment. Accessibility is also a key consideration, ensuring that vertical developments are easily accessible to all users, including the integration of public transportation and pedestrian pathways [10].

➤ *Pocket Urbanity*

Pocket urbanity refers to the creation of small, often temporary urban spaces that provide opportunities for social interaction and community activities. These spaces are typically found in underutilized areas such as vacant lots or alleyways. Pocket urbanity relies on small-scale interventions, often low-cost, to create impactful changes in the urban environment. The emphasis is on flexibility and adaptability, with these spaces capable of hosting temporary events or installations. Community engagement is critical, as involving local residents in the creation and use of these spaces fosters a sense of ownership and pride [4].

➤ *New Urbanism*

New Urbanism is an urban design movement that promotes walkable, mixed-use neighborhoods and sustainable communities. The principles of New Urbanism include designing neighborhoods to be walkable, with pedestrian-friendly streets and strong connectivity. Mixed-use development is encouraged, bringing together residential, commercial, and recreational uses within close proximity to reduce the need for car travel. Diverse housing options are provided to accommodate different demographics, and sustainability is emphasized, with a focus on environmentally sustainable practices in urban planning and development [13].

➤ *Indoor Urbanity*

Indoor urbanity refers to the creation of urban-like environments within indoor spaces, such as shopping malls, office complexes, and large public buildings. This concept involves incorporating public spaces within indoor environments to encourage social interaction and community activities. Mixed-use development within these indoor spaces is also important, combining retail, dining, and recreational areas to create vibrant, dynamic environments. Ensuring these spaces are easily accessible and navigable for all users is a key consideration [10].

➤ *Psychological Factors in Urban Design*

Psychological factors play a crucial role in how people perceive and interact with urban spaces. Ensuring a sense of safety is paramount, with design elements such as adequate lighting, visibility, and surveillance contributing to a secure environment. Creating spaces that encourage social interaction and community building, such as public plazas

and parks, is also important. Comfort and well-being are enhanced through amenities such as seating, greenery, and shade. Additionally, aesthetic appeal is vital, as visually engaging spaces are more enjoyable and likely to be well-used by the community [16].

IV. METHODOLOGY

This study employs a qualitative research approach to investigate the dynamics and implications of mixed-use development in Khulna. Qualitative methods are chosen for their suitability in exploring complex urban phenomena, allowing for in-depth examination and interpretation of social, economic, and environmental factors influencing mixed-use development. The research is grounded in a thorough literature review encompassing scholarly articles, books, and reports on mixed-use development, urban planning theories, and sustainable urbanism. This foundational review synthesizes historical perspectives, theoretical frameworks, and contemporary trends to establish a comprehensive understanding of mixed-use concepts and their applications.

The methodology includes a comparative case study analysis focusing on successful mixed-use projects in analogous urban contexts globally. Notable examples such as the IDS Center in Minneapolis and other relevant international case studies provide empirical evidence and practical insights into the implementation, challenges, and outcomes of mixed-use developments. Additionally, semi-structured interviews will be conducted with key stakeholders in Khulna, including urban planners, architects, developers, local government officials, and community representatives. These interviews aim to capture diverse perspectives on mixed-use development, identify local challenges and opportunities, and assess stakeholder perceptions and expectations regarding urban growth and development.

To address the local context, a detailed survey was conducted in Khulna to pinpoint specific issues related to the lack of vertical inclusion. The survey identified critical gaps such as the absence of urban memory, visual perceptors, activity-oriented open spaces, sustainable principles, and vertical place elements. Based on these findings, the research proposes objectives and suggestions to overcome these challenges.

Data analysis employs thematic analysis of qualitative data gathered from literature reviews, case studies, and

stakeholder interviews. Themes emerging from the data will be identified, categorized, and interpreted to discern patterns, contradictions, and insights related to mixed-use development in Khulna. This analytical approach ensures a comprehensive exploration of the multifaceted aspects of urban development and informs actionable recommendations for policy and practice. Ethical considerations include obtaining informed consent from participants, ensuring confidentiality, and adhering to ethical guidelines throughout the research process. Limitations of the study include potential biases inherent in qualitative research methods and the scope of case studies and interviews, which may limit generalizability beyond the specific context of Khulna. However, rigorous data collection and analysis methodologies will be employed to mitigate these limitations and enhance the validity and reliability of findings.

V. DISCUSSION

In evaluating the success of mixed-use commercial entities through the lens of placemaking principles, vertical urbanism, pocket urbanity, New Urbanism, indoor urbanity, and psychological factors, the analysis reveals varied degrees of success across the selected international, national (Bangladesh), and local (Khulna) cases.

➤ *International Case*

The international case, situated in a developed urban setting, exemplifies many of the principles outlined in the theories. This mixed-use development incorporates extensive community engagement throughout its planning and design phases, resulting in spaces that genuinely reflect the needs and desires of its users. The unique identity and character of the development are emphasized through the integration of local cultural and historical elements, which bolster a strong sense of place. Inclusivity is evident, with the development offering accessibility features that cater to people of all ages, backgrounds, and abilities.

In terms of vertical urbanism, the international case seamlessly integrates public spaces within and around its high-rise structures, providing vibrant areas for social interaction and community activities. Mixed-use development is effectively realized, with residential, commercial, and recreational spaces coexisting harmoniously, thereby reducing the need for car travel and enhancing walkability. Sustainability practices are robust, addressing environmental, economic, and social dimensions.

GLOBAL												AVERAGE FOLLOWING PRINCIPLES = 27									
NAME OF CASES	PLACEMAKING PRINCIPLES					VERTICAL URBANISM AND PLACEMAKING					POCKET URBANITY		NEW URBANISM			INDOOR URBANITY		PSYCHOLOGICAL FACTORS			Numeric comparison(out of 31)
	Community engagement	Local identity	Public spaces	Historical and cultural references	Walkability	Public spaces	Vertical density	Public spaces	Walkability	Public spaces	Public spaces	Public spaces	Public spaces	Public spaces	Public spaces	Public spaces	Public spaces	Public spaces	Public spaces	Public spaces	
International Case (Bangladesh)	✓	✓	✓	✓	✓	✗	✗	✓	✓	✓	✓	✗	✓	✓	✓	✓	✓	✓	✓	✓	27
International Case (USA)	✓	✓	✓	✓	✓	✗	✗	✓	✓	✓	✓	✗	✓	✓	✓	✓	✓	✓	✓	✓	29
International Case (Singapore)	✓	✗	✓	✓	✓	✗	✗	✓	✓	✓	✓	✗	✓	✓	✗	✓	✗	✓	✓	✓	25
International Case (London)	✓	✓	✓	✓	✓	✗	✗	✓	✓	✓	✓	✗	✓	✓	✓	✓	✓	✓	✓	✓	28
International Case (Tokyo)	✓	✗	✓	✓	✓	✗	✗	✓	✓	✓	✓	✗	✓	✓	✓	✓	✓	✓	✓	✓	27
International Case (Sydney)	✓	✗	✓	✓	✓	✗	✗	✓	✓	✓	✓	✗	✓	✓	✓	✓	✓	✓	✓	✓	27
International Case (Melbourne)	✓	✗	✓	✓	✓	✗	✗	✓	✓	✓	✓	✗	✓	✓	✓	✓	✓	✓	✓	✓	26
International Case (Wellington)	✓	✓	✓	✓	✓	✗	✗	✓	✓	✓	✓	✗	✓	✓	✓	✓	✓	✓	✓	✓	27
International Case (Auckland)	✓	✓	✓	✓	✓	✗	✗	✓	✓	✓	✓	✗	✓	✓	✓	✓	✓	✓	✓	✓	26
International Case (Vancouver)	✓	✓	✓	✓	✓	✗	✗	✓	✓	✓	✓	✗	✓	✓	✓	✓	✓	✓	✓	✓	28
International Case (Portland)	✓	✓	✓	✓	✓	✗	✗	✓	✓	✓	✓	✗	✓	✓	✓	✓	✓	✓	✓	✓	29
NATIONAL												AVERAGE FOLLOWING PRINCIPLES = 17									
NAME OF CASES	PLACEMAKING PRINCIPLES					VERTICAL URBANISM AND PLACEMAKING					POCKET URBANITY		NEW URBANISM			INDOOR URBANITY		PSYCHOLOGICAL FACTORS			Numeric comparison(out of 31)
	Community engagement	Local identity	Public spaces	Historical and cultural references	Walkability	Public spaces	Vertical density	Public spaces	Walkability	Public spaces	Public spaces	Public spaces	Public spaces	Public spaces	Public spaces	Public spaces	Public spaces	Public spaces	Public spaces	Public spaces	
National Case (Bangladesh)	✗	✗	✓	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✓	✗	✓	✓	✗	22
National Case (USA)	✗	✗	✓	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✓	✗	✓	✓	✗	11
National Case (Singapore)	✓	✗	✓	✓	✓	✗	✗	✓	✓	✓	✓	✗	✓	✓	✓	✓	✓	✓	✓	✓	20
National Case (London)	✓	✗	✓	✓	✓	✗	✗	✓	✓	✓	✓	✗	✓	✓	✓	✓	✓	✓	✓	✓	21
National Case (Tokyo)	✗	✗	✓	✓	✓	✗	✗	✓	✓	✓	✓	✗	✓	✓	✓	✓	✓	✓	✓	✓	21
National Case (Sydney)	✗	✗	✓	✓	✓	✗	✗	✓	✓	✓	✓	✗	✓	✓	✓	✓	✓	✓	✓	✓	14
National Case (Melbourne)	✓	✗	✓	✓	✓	✗	✗	✓	✓	✓	✓	✗	✓	✓	✓	✓	✓	✓	✓	✓	10
National Case (Wellington)	✓	✗	✓	✓	✓	✗	✗	✓	✓	✓	✓	✗	✓	✓	✓	✓	✓	✓	✓	✓	22
LOCAL												AVERAGE FOLLOWING PRINCIPLES = 9.6									
NAME OF CASES	PLACEMAKING PRINCIPLES					VERTICAL URBANISM AND PLACEMAKING					POCKET URBANITY		NEW URBANISM			INDOOR URBANITY		PSYCHOLOGICAL FACTORS			Numeric comparison(out of 31)
	Community engagement	Local identity	Public spaces	Historical and cultural references	Walkability	Public spaces	Vertical density	Public spaces	Walkability	Public spaces	Public spaces	Public spaces	Public spaces	Public spaces	Public spaces	Public spaces	Public spaces	Public spaces	Public spaces	Public spaces	
Local Case (Bangladesh)	✗	✗	✗	✗	✓	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	06
Local Case (USA)	✓	✗	✗	✗	✓	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✓	✗	✓	✓	✓	12
Local Case (Singapore)	✗	✗	✓	✓	✗	✗	✗	✓	✓	✓	✓	✗	✓	✓	✓	✓	✓	✓	✓	✓	06
Local Case (London)	✗	✗	✓	✓	✗	✗	✗	✓	✓	✓	✓	✗	✓	✓	✓	✓	✓	✓	✓	✓	19
Local Case (Tokyo)	✗	✗	✓	✓	✗	✗	✗	✓	✓	✓	✓	✗	✓	✓	✓	✓	✓	✓	✓	✓	05
Local Case (Sydney)	✗	✗	✓	✓	✗	✗	✗	✓	✓	✓	✓	✗	✓	✓	✓	✓	✓	✓	✓	✓	07
Local Case (Melbourne)	✗	✗	✓	✓	✗	✗	✗	✓	✓	✓	✓	✗	✓	✓	✓	✓	✓	✓	✓	✓	11
Local Case (Wellington)	✗	✗	✓	✓	✗	✗	✗	✓	✓	✓	✓	✗	✓	✓	✓	✓	✓	✓	✓	✓	05

Fig 1: Comparative Analysis of the Selected Cases

➤ *National Case (Bangladesh)*

The national case in Bangladesh demonstrates several strengths and some areas for improvement. Community engagement was partially incorporated during the planning phase, leading to public spaces that are moderately reflective of local needs. The development strives to create a distinct identity, yet there are opportunities to deepen the integration of cultural and historical references to enhance this further.

Vertical urbanism principles are applied, but not as extensively as in the international case. The integration of public spaces within high-rise structures is present, although the quality and vibrancy of these spaces vary. Mixed-use elements are evident, but the balance between residential, commercial, and recreational functions could be optimized to promote greater synergy. Accessibility remains a challenge, with improvements needed to ensure that all users can navigate the spaces comfortably.

➤ *Local Case (Khulna)*

The local case in Khulna presents a mixed-use commercial entity that is still evolving in its adherence to the outlined theories. Community engagement has been minimal, resulting in public spaces that may not fully reflect the needs and aspirations of local residents. There is a nascent effort to establish a unique identity and character, but this is not yet fully realized.

The principles of vertical urbanism are less pronounced in the Khulna case, with limited integration of public spaces within and around tall buildings. The mixed-use component exists but is not as robust, leading to a somewhat fragmented urban environment. Accessibility remains a significant concern, with many areas not being easily navigable for all users.

VI. FINDINGS

The analysis of the selected international, national (Bangladesh), and local (Khulna) mixed-use commercial entities reveals a clear gradation in their adherence to the principles of placemaking, vertical urbanism, pocket urbanity, New Urbanism, indoor urbanity, and psychological factors. This adherence directly correlates with their overall success as vibrant, inclusive, and sustainable urban spaces.

The local case in Khulna adheres to an average of 9.6 principles. This relatively low adherence indicates that the local development is less successful compared to its national and international counterparts. The limited community engagement, minimal integration of public spaces, and insufficient focus on accessibility and identity formation are significant areas needing improvement.

The national case in Bangladesh adheres to 17 principles. This moderate level of adherence suggests that while the national development shows promise, there are still notable areas for enhancement. Greater emphasis on comprehensive community engagement, stronger identity formation, and improved accessibility could elevate its success as a mixed-use development.

The international case stands out with adherence to 27 principles. This high level of adherence highlights the effectiveness of the international development in implementing comprehensive planning and design strategies. The success of this case is attributed to robust community engagement, a well-defined identity, inclusivity, sustainability, and seamless integration of public spaces within a high-density context.

Following the initial analysis, a detailed survey was conducted to investigate the specific issues contributing to the lack of vertical inclusion in the local case of Khulna. The survey aimed to identify the gaps and challenges hindering the development's success in adhering to the principles of placemaking, vertical urbanism, pocket urbanity, New Urbanism, indoor urbanity, and psychological factors.

➤ *Identified Issues*

The survey revealed several critical issues that explain the local case's deficiencies in vertical inclusion and overall urban design effectiveness:

- **Absence of Urban Memory:** The development lacks elements that evoke a sense of historical continuity and cultural heritage. Urban memory is crucial for creating spaces that resonate with the local community and foster a sense of belonging.
- **Visual Perceptor Deficiency:** There is a significant lack of visual appeal and distinct landmarks within the development. Visual perceptors such as iconic structures, public art, and aesthetically pleasing designs play a crucial role in making a place memorable and engaging.
- **Inadequate Open Spaces:** The available open spaces do not support a diverse range of activities, nor do they promote social interaction. Quality open spaces are essential for community gatherings, recreation, and relaxation.
- **Lack of Sustainable Principles:** The development does not adequately incorporate sustainable practices. Issues such as inefficient energy use, poor waste management, and lack of green spaces indicate a gap in environmental sustainability.
- **Missing Vertical Place Elements:** The development fails to integrate vertical elements effectively, such as rooftop gardens, sky bridges, and multi-level public spaces. These elements are essential for creating dynamic and engaging vertical urban environments.


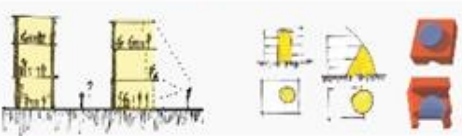




OUTCOME PRINCIPLES	ISSUE	OBJECTIVES	TRANSFORMATION OF OBJECTIVES .
Unique form/Iconity/Aesthetic aspects,Circulation	Absence of urban Memory	<ul style="list-style-type: none"> ▪ Creating uniqueness in the builtform and Imagibility for the urban memory . 	
Visual connection ,functional highlight	Visual Receptors	<ul style="list-style-type: none"> ▪ Exposition of Atrium ,Perforated building skin for visual attraction . ▪ Highlight Functions . 	
Active use ,Economic opportunity	Activity	<ul style="list-style-type: none"> ▪ Provide Efficient and Comfortable Vertical zoning . ▪ Multiple use of space . ▪ Densify separated and Contradictory function . 	
Open space and triangulate	Open space	<ul style="list-style-type: none"> ▪ Triangulate the local fabric with the open place . 	
Sustainability	Sustainability	<ul style="list-style-type: none"> ▪ Social sustainability for social inclusion ▪ Sustainable infrastructure . ▪ proper tenor management . 	
Destination	Missing of Vertical Place	<ul style="list-style-type: none"> ▪ Provide pocket urban space for vertical linkage ▪ Use of 2nd and 3rd atrium . 	

Fig 2: Suggested Objectives for Local Cases.

To address the deficiencies in the local mixed-use commercial entity in Khulna, several objectives and suggestions are proposed. Enhancing urban memory can be achieved by integrating historical and cultural references in the design, establishing heritage trails, and organizing cultural events. Improving visual perceptors involves investing in public art installations, iconic structures, and aesthetic improvements in building facades and streets, while introducing greenery to soften the urban landscape. Developing quality open spaces requires creating versatile areas for various activities, equipping them with amenities such as seating and shade, and ensuring they are well-maintained and safe. Integrating sustainable principles involves adopting green building standards, creating green spaces, and promoting renewable energy and sustainable transportation options. Incorporating vertical place elements includes designing multi-level public spaces like rooftop gardens and sky parks, constructing sky bridges and elevated walkways, and adding vertical green walls. Additional indicators for these improvements include the presence of historical markers, public art, diverse activities in open spaces, energy consumption metrics, and user feedback on vertical connectivity and aesthetics. By implementing these objectives, the development can enhance its success, fostering a more vibrant, inclusive, and sustainable urban environment.

VII. CONCLUSION

This study provides a comprehensive examination of mixed-use development in Khulna, grounded in qualitative research methods that allow for an in-depth exploration of the complex interplay between social, economic, and environmental factors. Through a detailed literature review, comparative case studies, and stakeholder interviews, the research identifies key principles and challenges associated with successful mixed-use developments. The international case studies, such as the IDS Center in Minneapolis, offer valuable insights into best practices and potential pitfalls, which are contextualized within the local dynamics of Khulna.

The findings highlight significant deficiencies in the local development, particularly in terms of vertical inclusion, urban memory, visual perceptors, open space activity, sustainability principles, and vertical place elements. By addressing these issues through targeted objectives and suggestions, the study proposes actionable strategies to enhance the vibrancy, inclusivity, and sustainability of mixed-use developments in Khulna.

The thematic analysis of the qualitative data reveals patterns and insights that inform practical recommendations for urban planners, architects, developers, and policymakers. These recommendations emphasize the importance of community engagement, historical and cultural integration, aesthetic improvements, and sustainable practices in creating successful mixed-use developments.

While the study acknowledges the limitations inherent in qualitative research methods and the specific context of Khulna, the rigorous approach to data collection and analysis ensures the validity and reliability of the findings. The proposed objectives and strategies provide a robust framework for addressing the identified challenges and advancing the development of mixed-use commercial entities in Khulna.

In conclusion, this research underscores the critical role of comprehensive urban planning and design principles in fostering sustainable and inclusive urban environments. By learning from international examples and tailoring solutions to the local context, Khulna can achieve significant improvements in its mixed-use developments, ultimately contributing to a more dynamic and resilient urban future.

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