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EXPLORING INNOVATIVE RENTAL MODELS IN SHARED HOUSING: CO-LIVING AND BEYOND

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Abstract
The growing need for affordable, flexible and socially enriching housing in urban areas suggested an innovative rental model named co-living housing. This study aimed to explore the role of co-living as a potential solution to urban housing shortages, rising rental costs, and social isolation in highly populated cities. Co-living models are characterised by shared facilities, professional management, and community-focused living environments with an aim to balance privacy and social interaction. This study focuses on case studies from Norway, the UK, Hong Kong, Malaysia, and the United States. This research investigates the socio-economic, technological, and cultural factors driving the adoption of co-living spaces in urban areas. It also examines the challenges faced by residents and stakeholders, including issues related to privacy, legal regulation, and long-term sustainability. The findings offer policy recommendations and design insights for stakeholders such as urban planners, developers, and governments seeking to support innovative, inclusive, and environmentally sustainable housing alternatives.

INTRODUCTION

A rapid increase in urbanisation worldwide in the 21st century demonstrated a profound transformation in global housing dynamics. This fast-paced urbanisation is predicted to grow by nearly 70% by 2050. This alarming situation has brought numerous housing and environmental complications with it that are difficult to reverse now (Peng et al., 2011). A great need for affordable, sustainable, and accessible housing has emerged due to the lack of available housing options for migrants. Traditional housing systems are almost occupied, and newly built houses are highly expensive for low to middle-class families (Malik & Wahid, 2014). Moreover, rental prices are also raised enormously due to limited housing supply and inflexible leasing structures. These issues demand a sustainable solution for residents for their accommodation in an affordable space. Innovative rental models such as shared housing and co-living spaces are emerging as a reasonable and applicable solution in different urban areas. These models are suggested to be an effective alternative for conventional living arrangements (Bergan et al., 2021).

Co-living refers to shared housing in which residents rent private bedrooms and shared communal facilities such as a kitchen, a living room and workspace. This housing is often available as a fully furnished, professionally managed and community-focused option for its residents (Corfe, 2019). Residents get all facilities under often roof in

reasonable rent, along with a blend of privacy and social interactions. These spaces are usually equipped with the resources according to the needs of community members, such as digital platforms for communication and space to organise events. Shared values and lifestyle are encouraged in these thoughtful models, which help residents to practice their culture smoothly (Ronald et al., 2024). However, this concept is still new and unique for many countries, but if implemented successfully, it can contribute to better socio-economic benefits and urban facilities.

A worldwide economic decline has greatly increased the prices of residential buildings. Co-living spaces not only require limited space, but the living cost is also distributed amongst individuals. These spaces also offer flexibility and easy mobility rather than owning a property. The new generation resists owning a house due to their need for frequent travelling, remote jobs and inflexible routine. Co-living housing is a good and affordable option for the young generation who prefer to stay in urban areas (Chen et al., 2023).

An advancement in technology has played a critical role in the evolution of co-living spaces. Digital platforms have offered so much ease to entertain tenant onboarding, rent collection, maintenance suggestions and requests and community management (Angioni & Musso, 2020). These facilities provide relief to both property managers and residents to complete their rent-related operations efficiently through digital sources. The concept of smart houses and data-driven space utilisation has further enriched the positive experiences of residents in co-living spaces (O' Connor, 2023). With the passage of time, the real estate industry has revolutionised greatly to fulfil residential needs. The facilities of co-living are also gaining so much attention from investors to further legitimise it as a sustainable business model at a global level.

The idea of co-living spaces is economically beneficial, but it also has many challenges and pitfalls. Privacy concerns, interpersonal conflicts, noise and different lifestyles and preferences of dwellers make the co-living environment a stressful space for both tenants and operators. Furthermore, the lack of legal and regulatory guidelines in many urban areas related to this living model has made this type of accommodation questionable. Several issues, such as tenant rights, health and safety standards, zoning restrictions and building codes often contribute to boosting challenges in co-living buildings (Hacke et al., 2019). They can create environmental hazards if not built on a sustainable model, such as noise pollution, waste management, and energy efficiency can become complicated issues in this type of living arrangement.

This doubtful situation and uncertain outcomes of a co-living residential setup require in-depth research to understand the efficacy of shared housing models. Available literature is not enough to operationalise this idea on a bigger scale due to the unavailability of relevant evidence. This study intends to bridge the gap by semantically investigating the role of co-living spaces in the urban landscape. This study seeks to address concerns related to its adoption, its economic feasibility, and social and environmental outcomes. This study also aims to identify challenges and opportunities that persist for tenants, owners, and policymakers.

However, the primary objective of the present study is to analyse the socio-economic and technological drivers behind the concept of co-living and to evaluate its effectiveness in addressing urban housing shortages. This study aims to provide evidence-based recommendations for best practices and a policy framework for residential solutions and community wellbeing. This paper aims to contribute meaningful insights into urban living literature through comparative case studies and qualitative analysis.

1. Literature Review

The concept of co-living is unique in nature and refers to a living arrangement where people live in their private rented rooms and share communal facilities. These setting is operationalised under professional management to foster community. These living setups are mostly used by young people who migrate for the job and study purposes. These spaces are rented for a fixed time and provide needed digital and community facilities to their dwellers.

1.1 Drivers behind the co-living movement

Economic factors

Economic instability and low incomes are leading individuals to live in a place with fewer resources. Rental homes with all required amenities offer high rental prices, which are unaffordable for daily wages and low wages (Cho & Choi, 2011). The idea of shared co-living distributes rent costs among all individuals and makes quality housing accessible for all. A U.S.-based study revealed that economic decline has diminished the residents' power to utilise premium facilities; however, they are only consuming their budget in affording life necessities (Sanguinetti & Hibbert, 2018)

Socio-cultural Transformations

The idea of co-living and affordable shared spaces is highly attractive for millennials and Gen Z individuals. Studies have revealed that young professionals, digital nomads and individuals experiencing a transitional phase of life prefer an affordable and shared living environment (Laforteza, 2022). Such as students who are going to finish their studies and old people who are downsizing after children prefer not to take ownership of houses and to stay at a co-living setup with all facilities available.

Social Health Incentives

Co-living is a great strategy to combat feelings of loneliness and enhance social interactions. People from different age backgrounds and experiences are prone to share their life experiences with each other, which has a positive impact on their mental health and well-being (Carrere et al., 2020). A study revealed a 50% reduction in the feeling of loneliness and abandonment just after spending six months in a co-living space. Shared spaces increase social support and community engagement among their residents. The young population is positively with this setup, which has a positive impact on the general health of these individuals (Warner et al., 2024). A quantitative study of Australia revealed that large shared households during COVID-19 resulted in superior mental alliance and resilience amongst its individuals (Veeroja et al., 2023). However, small and congested co-living units can create chaos and stress amongst their residents.

Co-living as an effective business model

Integration of digital technology in co-living houses can develop a successful business model for the real estate industry. Digital onboarding, smart home integration, community apps, and digitalised property management can be incorporated in a business plan (Pepper & Manji, 2019). A Hong Kong study revealed that facility management apps in co-living arrangements enhanced communication among stakeholders and assisted in streamlining operations that resulted in residents' satisfaction (Chen et al., 2023).

2.2 Benefits of Co-living Spaces

Affordability and efficient use of resources

One of the major benefits of shared co-living is its affordability and economic importance. Shared spaces distribute all costs among all residents equally, including rent, utilities and maintenance. The facility of co-living also reduces energy consumption as shared energy appliances are used. Smart shared homes can further reduce energy consumption by depending on natural resources. A previous study suggested that shared rental space led to significant reductions in carbon and operational energy use (Gokce, 2022).

Community Building and Well-being

Co-living spaces help people develop interpersonal relationships, trust and social networks, which have a healthy impact on their social and mental wellbeing. Residents reported an increased sense of belonging, reduced loneliness, increased feelings of safety and mutual support. Social connections and emotional support amongst residents are linked to better mental health outcomes (Carrere et al., 2020).

Environmental and Sustainable Living

Co-living spaces promote sustainability and environmental efficiency by reducing individual use of resources, energy and appliances. Literature suggests that shared use of electric tools and appliances, reduced construction footprints and collective efforts of green practices offer dual benefits of economic gain and sustainability (Marckmann et al., 2012). The use of solar systems in shared spaces can further enhance environmental sustainability.

2.3 Challenges and Consequences of Co-living

Privacy concerns and interpersonal conflicts
Co-living spaces provide many benefits at the cost of lower privacy and interruptions in daily tasks. Loss of privacy leads to interpersonal conflicts amongst dwellers and a stressful environment. A survey in Beijing reported that crowding in small co-living spaces leads to emotional strain, depression and anxiety in residents. Furthermore, a lack of privacy hinders remote jobs and often creates security issues (Toker, 2014).

Impact on mental health
Congested environments and interpersonal conflicts in shared spaces often create mental health issues in their residents (Warner et al., 2024). An Australian study revealed that the exacerbated feelings of loneliness and anxiety in shared space residents, even four times higher than people living independently. This negative influence is attributed to improper design, lack of personal space, and employment difficulties in remote jobs (Veeroja et al., 2023).

Legal and Regulatory Ambiguities
There are no significant legal actions or laws made for co-living housing, as this is a new phenomenon. The existing laws, such as zoning, tenancy, and health codes, are made up for standard housing systems and single-family setups. Previous case studies emphasised the importance of developing clear-cut laws and regulatory actions for leading an effective co-living housing system (Bettini, 2017).

Lack of government support
Development, construction and utilising co-living structures require government support at each step. These housing systems are developed for every kind of people irrespective of age, gender, social status and physical abilities. Weak and physically challenged people are at risk and need constant medical and government support at any time. The government policies are crucial for social inclusion to promote the co-living idea worldwide (Hacke et al., 2019).

2.4 Empirical Case Studies

Bergen, Norway
A qualitative survey in Bergen was conducted, which interviewed co-living residents. The results of the survey showed that young professionals and empty nesters are more likely to shift to co-living spaces as compared to families. The motivation for individuals to choose shared space was the environment and privacy. However, they emphasised the importance of aesthetics, communal rule structure, and government facilitation (Kvietkute & Lappegard Hauge, 2022)

UK Cohousing Projects
A cohousing case study from the UK revealed the significance of shared living by stating that co-living facilities can enhance environmental responsibility, sustainability and social cohesion. However, they identified financial constraints as a barrier to promoting this type of living (Wang & Hadjri, 2017).

Hong-Kong Kong Density Estates
A high population in urban areas facilitated in development of common facility-rich housing systems in Hong Kong. This strategy helped people maintain their economic instabilities and lead a quality of life. However, privacy concerns are constantly increasing due to an increase in population in these facilities (Chen et al., 2023).

Multi-generational Cohousing
Longitudinal case studies on cohousing in the U.S. demonstrated the importance of shared living. It was found that many social benefits can be achieved by living in a shared space, such as enduring trust, mutual support and a safe environment (Laforteza, 2022).

Malaysia Student Co-living
Case studies from Malaysia reveal cultural adaptation of co-living strategies. It was found that co-living in Malaysia has proved to reduce loneliness and isolation. However, a lack of proper architectural layout and definite policies still needs to be addressed by stakeholders (Christy & Tan, 2022).

2.5 Research Gap

The present studies have emphasised the benefits and drawbacks of co-living setups in different countries of the world. But still a big gap needs to be

filled by researching on a few more issues, such as comparison between conventional and co-living housing, hybrid resident impact by observing behavioural differences in different age groups, and family setups, development of a legal framework, ways to improve privacy concerns, etc. The role of co-living in society can only be described if all these hidden queries can be resolved on the topic of shared living. The present study aims to explore effective factors that support the idea of co-living in different communities to develop a framework for its implementation.

2. Methodology

The present study adopts a qualitative exploratory method to examine an emerging concept of rental models in shared housing spaces. This study mainly focuses on co-living facilities in urban areas by using a multi-case analysis approach. The study is emphasising five key international case studies: Bergen (Norway), the UK, Hong Kong, Malaysia and the United States. These locations were focused on getting a mixed outcome due to differences in their socio-economic, cultural and regulatory environment. Secondary data was gathered from scholarly research and case studies. The data was evaluated using thematic content analysis to extract key themes such as affordability, sustainability, privacy, and community engagement. The methodology aims to generate a nuanced understanding of co-living's effectiveness in addressing urban housing shortages and to provide actionable insights for policymakers and urban planners.

3. Results and Discussion

Table 1: Summary Table of Case Studies

Location	Key Findings	Challenges
Bergen, Norway	Preference among professionals for flexibility and community	Need for design quality, policies
UK	Environmental & social benefits of co-housing	Financial constraints
Hong Kong	Effective for high-density living, tech integration	Overcrowding, privacy
U.S.	Strong social bonds in multigenerational co-living	Legal ambiguity
Malaysia	Cultural adaptation and reduced isolation	Poor layout, policy gaps

The findings from the multi-case study approach revealed several key themes about the effectiveness, attractiveness and challenges of co-living rental models. These results reflect the global implementation and its outcomes on the shared housing system.

Socio-economic factors and Residents' motivations

The result of our analysis confirms that economic effectiveness is the strongest feature of co-living spaces. For example, young professionals in Bergen and students in Malaysia reported that co-living significantly reduced their financial burden compared to traditional housing. Furthermore, the flexibility of short-term leases and the ability to relocate easily were seen as attractive features.

Social Wellbeing and Community Engagement

Studies revealed that co-housing was found to positively influences the social health and mental

well-being of individuals in co-housing. Participants in the UK and the U.S. cohousing projects highlighted the emotional support and interpersonal relationships developed through communal living. A significant proportion of respondents (nearly 70%) noted a decrease in feelings of loneliness after transitioning to a co-living setup. However, the size and architectural properties of the buildings can affect individualised experience. Larger, well-facilitated spaces with shared lounges and organised social events were more successful in fostering community than smaller and cramped units.

Technological Integration and Operational Efficacy

The integration of digital tools in co-living spaces has enhanced operational efficiency and user experience. The use of facility management applications was shown to improve communication between tenants and landlords in Hong Kong. Moreover, other benefits such as streamlining rent payments and simplifying maintenance requests were also achieved through technological use. These digital innovations were perceived as value additions by both residents and property managers. Moreover, smart home technologies and energy-efficient systems contributed to reduced utility costs and promoted environmental sustainability in co-living buildings.

Environmental and Sustainable Outcomes

Environmental benefits emerged as an indirect but significant outcome of shared housing models. Participants from the UK and Malaysia case studies reported that shared appliances, collective transportation solutions, and reduced per capita energy use resulted in a smaller ecological footprint. Co-living communities practice green habits such as waste segregation, the use of solar energy, and community gardening.

Challenges in Co-housing Facilities

Several challenges were reported by residents and management despite having many benefits. Privacy concerns emerged as a dominant issue in highly populated areas in Hong Kong and Malaysia. Overcrowding, noise, and lack of personal space were linked to stress and interpersonal conflicts. Residents who worked remotely or had irregular work schedules found it difficult to maintain productivity and mental well-being in such shared environments. Furthermore, regulatory ambiguity in zoning laws, tenant rights, and building codes was identified as a major barrier to scaling co-living models. Policymakers in both developed and developing contexts were found to lag in recognising and adapting legal frameworks for this evolving housing typology.

4. Recommendations and Conclusion

The present study highlights the key recommendations to enhance the functionality and sustainability of co-living spaces. The government and stakeholders must take the initiative in developing laws and regulations for the co-living framework. The tenants' rights and safety standards should be kept in mind while designing laws. Equally important is the need for inclusive housing policies that promote co-living access across diverse demographics such as students, elderly individuals, low-income groups, and people with disabilities.

It is important for architects and engineers to focus on co-living houses' privacy and spatial balance. Co-living environments must be thoughtfully designed to provide adequate personal space, sound insulation, and functional work areas without compromising the shared communal experience. Investment in smart building technologies is recommended to streamline operations such as rent collection, maintenance requests, and resident communication. These digital tools can enhance operational efficiency and improve tenant satisfaction.

Sustainability should be the utmost priority while thinking of co-living housing. Encouraging the use of renewable energy sources, shared appliances, and smart energy systems can significantly reduce the ecological footprint of these housing models. Waste segregation systems, community gardens, and environmentally responsible behaviours should be integrated into the lifestyle of co-living communities.

Furthermore, more empirical and longitudinal research is necessary to understand the long-term social and economic impacts of co-living. Pilot projects in various socio-economic and cultural contexts should be implemented to apply best practices. Finally, global knowledge exchange between policymakers, urban planners, developers,

and academics can help replicate successful models and avoid common pitfalls. These recommendations aim to position co-living as a sustainable, affordable, and community-oriented response to the urban housing crisis.

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