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# Design of Residential Condominiums to Promote Quality of Life: A Comparison of Perspectives between Residents and Building Managers

Nattakan Muangsrichan $^{1*}$ , Kongkoon Tochaiwat $^{1,2}$ 

- <sup>1</sup> Innovative Real Estate Development Program, Faculty of Architecture and Planning, Thammasat University, THAILAND.
- <sup>2</sup> Thammasat University Research Unit in Project Development and Innovation in Real Estate Business, Faculty of Architecture and Planning, Thammasat University, THAILAND.
- \*Corresponding Author (Tel: +66 63 516 5423, nattakan.mua@dome.tu.ac.th).

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Unit design factor;
Location factor.

#### Abstract

This research aimed to determine the design of residential condominiums to promote a good quality of life. The researchers studied factors that contribute to a good quality of life for residential condominium residents by analyzing perspectives from seven building management experts and eight customers who purchased and lived in residential condominium projects, a total of 15 participants. Then, in-depth interviews and content analysis were conducted. It was found that most customers made purchase decisions based on location and accessibility, followed by affordability, with the interior space of the condominium unit playing a significant role. Regarding quality of life, both residents and building management experts emphasized the importance of corporate governance and resident participation in the project. Other considerations included common area spaces and amenities in the project. These factors were identified as key elements in designing residential condominiums to promote a good quality of life in four dimensions: 1) location factors, 2) interior design factors, 3) common area design and amenities factors, and 4) service and residential factors. These design considerations serve as guidance for developers in creating suitable residential condominium projects to enhance the quality of life for customers and to establish sustainable long-term residency experiences.

**Disciplinary**: Architecture, Real Estate Development.

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## 1 Introduction

Residential condominiums in Thailand are highly popular, with new projects continually entering the market. This trend is evident from the influx of residential condominiums into the market, exceeding 50,000 units per year since 2005 (Klanchuancheun, 2022). However, in the years 2020-2021, the overall real estate business contracted due to economic conditions and continuous declines caused by the spread of the coronavirus. This led to a decrease in consumer demand for residential properties and also influenced changes in consumer living behaviors. Consumers now seek residential properties for actual living purposes and adapt their lifestyles to accommodate the new normal, placing greater emphasis on health and well-being (Rodkul, 2023). The real estate sector must therefore adapt promptly and develop products that meet the changing consumer behaviors. In the past, developers have adjusted their projects based on their understanding of the prevailing circumstances. This article aims to determine the design of residential condominiums to promote a good quality of life for consumers by studying the current patterns and factors influencing the promotion of a good quality of life in residential condominiums. This research will benefit developers in improving, developing, and designing residential condominiums to enhance the quality of life for consumers in the residential condominium market, aligning with the changing directions and ensuring sustainable development in real estate projects in the long run.

#### 2 Literature Review

The real estate business in Thailand contributes approximately 4.8% of the country's Gross Domestic Product (GDP) in the year 2021. It plays a vital role in driving the economy by stimulating significant capital circulation, creating employment opportunities, and linking with other sectors. Residential condominiums are among the highly favored segments in the real estate industry, with new projects continuously entering the market (Klanchuancheun, 2023). An important stage in the development of real estate projects is the design phase, which involves coordinating architectural design, land use design, pricing design, and communication design aimed at customers (Satasuk and Tochaiwat, 2020). Real estate development is markedly different from other businesses due to its unique products, requiring careful consideration to design valuable properties. The customer demand for quality living is significant, as highlighted by UNESCO (1981), which defines quality of life as the individual's satisfaction with various aspects of life, crucial for societal development. Consequently, there is a growing emphasis on health and well-being, especially due to the COVID-19 pandemic, leading to the adaptation of lifestyles to accommodate the "new normal" (Rodkul, 2023). Designing for a good quality of life is, therefore, a pathway that aligns with changing customer behaviors, allowing users free to choose and control their environments. This aligns with Steemers' (2023a; 2023b) concept of designing for good living, which includes considerations like neighborhood and nature, moving and access, eating, indoor environmental quality, and design quality, all aimed at creating comfortable and healthy living environments. Relevant good discussions in design included factors for well-being (AIA, 2023; Brey. 2023, Larsson et al. 2023;

Willis, 2023; Keinonen, 2023; Miller and Kälviäinen, 2023), while Meeberg (1992) gave concept and analysis and Zhan (1992) discussed orientation and measurement issues.

#### **3 Method**

This research categorizes residential condominiums into three price ranges for sales: (1) Average sale prices not exceeding \$2,000 per square meter, (2) Average sale prices ranging from \$2,000 to \$4,500 per square meter, and (3) Average sale prices starting from above \$4,500 per square meter. The research methodology involves collecting data to analyze factors related to a good quality of life in residential condominiums. This will be achieved through in-depth interviews with seven building managers of condominium property management companies, who have at least 10 years of work experience, and eight customers who have purchased and resided in residential condominiums for at least 1 year, marking a total of 15 participants. The interview forms were used as the primary data collection tool, with interview topic guidelines derived from literature reviews and relevant research works.

#### 4 Results and Discussion

The researchers conducted a screening of factors influencing the design of residential condominiums that promote a good quality of life. This was done by conducting interviews to collect data from building management and customers who purchased and lived in residential condominium projects, a total of 15 participants. The study's findings can be summarized as shown in Table 1:

**Table 1: General Information of Interviewee** 

Interviewee Type	Code	Position Interviewee	Experience (years)	Price Range of Residential Condominiums
	A1	Deputy General Manager	30	Not exceeding \$2,000 per square meter
	A2	General Manager	11	Not exceeding \$2,000 per square meter
Building	A3	Assistant General Manager	14	\$2,000 to \$4,500 per square meter
_	A4	General Manager	11	\$2,000 to \$4,500 per square meter
management	A5	General Manager	19	above \$4,500 per square meter
	A6	Deputy General Manager	30	above \$4,500 per square meter
	A7	General Manager	11	above \$4,500 per square meter
	B1	Residents	13	Not exceeding \$2,000 per square meter
	B2	Residents	12	Not exceeding \$2,000 per square meter
Consumers	В3	Residents	3	Not exceeding \$2,000 per square meter
who	B4	Residents	6	\$2,000 to \$4,500 per square meter
purchase and	B5	Residents	4	\$2,000 to \$4,500 per square meter
resided	B6	Residents	3	\$2,000 to \$4,500 per square meter
	В7	Residents	2	above \$4,500 per square meter
	B8	Residents	1	above \$4,500 per square meter

From Table 1, it is evident that the 15 participants consisted of both building managers, who are senior-level personnel in property management companies with experience ranging from 11 to 30 years, and customers who have purchased and resided in residential condominium projects for periods ranging from 1 to 13 years. The participants are distributed across the three specified price range categories, representing individuals with the specified qualifications.

# 4.1 Condominiums with Prices not Exceeding \$2,000 per Square Meter

The researchers collected data with average selling prices not exceeding \$2,000 per square meter, from two building managers of condominium property management companies, and from three customers who purchased and resided in residential condominium projects, a total of 5 participants. The study's findings can be summarized as shown in Table 2:

Table 2: Summarizes the interview data for the price range category with average selling prices not exceeding \$2,000 per square meter

Question	Building Managers (A1, A2)		Residents (B1, B2, B3)	
	Answer	Points	Answer	Points
What factors influenced your decision to choose to			-Prime location with potential -Familiar location	2
live in a residential			-Convenient transportation	1
condominium?			-Good surrounding environment	1
Do you think the space			-Inside the unit	3
inside the unit or the			-Common area	0
common area has more impact on the decision to live in a residential condominium?				
What is your opinion on the	-Adequate and appropriate	1	-Good project environment	2
term "quality of life" in	common area space		-Proximity to public facilities	2
residential condominiums?	-Clean and pleasant environment	1	-Convenient transportation	2
	-Safety in residency	1	-Good cohabitating residents	1
	-High-quality and well-managed	1	who understand communal	
	building team		living	
	-Good cohabitating residents	1	-Good surrounding environment	1
	who understand communal living		for the project -High-quality and well-	1
			managed building team	1
			-Good quality of materials used	1
			in the unit	1
			-Low energy consumption in	1
			the project	
			-Well-managed smoking areas	1
			-Exercise spaces available	1
What factors do you think	-Safety in residency	2	-Convenient transportation	2
contribute to a good quality	-Clean and pleasant environment	1	-Proximity to public facilities	2
of life in a residential	-Convenience in using common	1	-Adequate and appropriate	1
condominium? (Specify 5	area space		parking space	
factors)	-Reasonable common area fees	1	-Privacy is maintained, and	1
	-High-quality and well-managed	1	people are not crowded.	1
	building team -Adequate and appropriate	1	-Well-designed usage of living space	1
	common area space	1	-Located in a good location	1
	-Convenient communication	1	with potential	1
	channels	•	-High-quality materials inside	1
	-Adequate and appropriate	1	the units	•
	parking space		-A green area with ample shade	1
	-Restaurants and shops within or	1	and large trees	
	near the project		-Residents complying with regulations	1
			-Reasonable common area fees	1
			-No daily rental occupants	1
			-Safety in residency	1
			-High-quality and well-	1
			managed building team	
			-Convenient transportation	1

Table 2 (continued): Summarizes the interview data for the price range category with average selling prices not exceeding \$2,000 per square meter.

	prices not exceeding \$\pi_2,000				
Question	Building Managers (A1, A2		Residents (B1, B2, B3)		
Question	Answer	Points	Answer	Points	
What aspects of the unit	-Division of different areas into	2	-Division of different areas into	2	
space in a residential	proportions.		proportions.		
condominium contribute to	-Adequate usable space	1	The kitchen is enclosed and has	2	
a good quality of life?	according to needs.		good ventilation.		
			-Large balcony.	2	
			-Adequate usable space	2	
			according to needs.		
			-The bathroom has good	1	
			ventilation.	1	
			-Good ventilation in living		
			areas.		
What aspects of the	-Swimming pool	2	-Coin-operated laundry	2	
common area in a	-Large garden area with big trees	1	facilities		
residential condominium	-Outdoor exercise area	1	-Large garden area with big	2	
contribute to a good quality	-Multipurpose room (for	1	trees		
of life?	guests/work)		-Sufficient and suitable parking	1	
	-Sufficient and suitable parking	1	spaces		
	spaces		-Shops within the project	1	
	-Adequate gym space	1	-Swimming pool	1	
			-Multipurpose room (for	1	
			guests/work)		
D : : : 1 6	N. 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	2	-Adequate gym space	1	
Design principles for	-Neighborhood and Nature	2	-Neighborhood and Nature	2	
residential condominiums	-Moving and Access	2	-Moving and Access	1	
for well-being: Which	-Eating	1	-Eating	1	
principles do you think can	-Indoor Environmental Quality	2 2	-Indoor Environmental Quality	3 3	
be applied to develop a	-Design Quality	2	-Design Quality	3	
residential condominium					
project? (Can answer more					
than 1 point)					

From Table 2, it was found that the group with average selling prices not exceeding \$2,000 per square meter includes both building managers and residents, a total of 5 participants (A1, A2, B1, B2, B3). They shared the opinion that having a competent and high-quality building management team, as well as good communal living among residents, promotes a good quality of life in residential condominiums. Both building managers and residents agree that safety and convenient transportation, with a mass transit system, are the most crucial factors in promoting a good quality of life. Proximity to public facilities, sufficient parking space, and a competent and high-quality management team are also important factors, albeit slightly less critical. Regarding the design of unit spaces, separating areas proportionally and ensuring complete usability are seen as the most important aspects. The group emphasizes the need for large garden spaces and swimming pools in the common areas of residential condominiums.

# 4.2 Condominiums with Prices of \$2,000 to \$4,500 per Square Meter

The researchers collected data with average selling prices of \$2,000 to \$4,500 per square meter, from two building managers of condominium property management companies, and from

three customers who purchased and resided in residential condominium projects, a total of 5 participants. The study's findings can be summarized as shown in Table 3.

Table 3: Summarizes the interview data for the price range category with average selling prices of \$2,000 to \$4,500 per square meter.

\$2,000 to \$4,500 per square meter.  Building Managers (A3, A4) Residents (B4, B5, B6)					
Question	Answer	Points	Answer	Points	
What factors influenced	AIISWCI	1 OIIIIS			
			-Prime location with potential	3	
your decision to choose to			-Familiar location	2	
live in a residential			-Convenient transportation	2	
condominium?			-Reasonable price	3	
			-Trustworthiness of the project	1	
			developer		
			-Good project image	1	
			-Unit design	1	
Do you think the space			-Inside the unit	2	
inside the unit or the			-Common area	1	
common area has more					
impact on the decision to					
live in a residential					
condominium?					
What is your opinion on the	-High-quality and well-managed	2	-Good quality of materials used	2	
term "quality of life" in	building team		in the units		
residential condominiums?	-Good cohabitating residents	2	-Effective air ventilation system	1	
•	who understand communal	_	-Natural light exposure	1	
	living		-High-quality and well-	1	
	-Convenience in using common	1	managed building team	-	
	area space	1	-Adequate and appropriate	1	
	-Safety in residency	1	common area space	1	
	-Residents complying with	1	-Well-designed project	1	
	regulations	1	-Good cohabitating residents	1	
	regulations		who understand communal	1	
XXII . C 1	A.1	1	living	2	
What factors do you think	-Adequate and appropriate	1	-High-quality and well-	3	
contribute to a good quality	common area space		managed building team	•	
of life in a residential	-Safety in residency	1	-Located in a good location with	2	
condominium? (Specify 5	-Adequate and appropriate	1	potential		
factors)	parking space		-Few residential units.	2	
	-Restaurants and shops within or	1	-A green area with ample shade	2	
	near the project		and large trees		
	-Reasonable common area fees	1	-Adequate and appropriate	2	
	-Residents complying with	1	common area space		
	regulations		-Good cohabitating residents	2	
	-Good cohabitating residents	1	who understand communal		
	who understand communal		living		
	living		-Adequate lighting in the units	1	
	-Convenience in using common	1	-Good air ventilation in	1	
	area space		common areas		
	-Activities organized to foster	1			
	relationships				
What aspects of the unit	-Division of different areas into	2	The kitchen is enclosed and has	2	
space in a residential	proportions.	_	good ventilation.		
condominium contribute to	-Good ventilation in living areas.	1	-Division of different areas into	1	
a good quality of life?	cood ventuation in fiving areas.	1	proportions.	1	
a good quality of file:			-Natural light enters the	1	
			sleeping area.	1	
				1	
			-Large guest reception area.	1	
			The bathroom uses good non-	1	
			slip materials.	4	
		1	-Spacious and not cramped.	1	

Table 3 (continued): Summarizes the interview data for the price range category with an average selling price of \$2,000 to \$4,500 per square meter.

Question	Building Managers (A3, A4	.)	Residents (B4, B5, B6)	
Question	Answer	Points	Answer	Points
What aspects of the	-Adequate gym space	2	-Adequate gym space	3
common area in a	-Multipurpose room (for	2	-Large garden area with big	2
residential condominium	guests/work)		trees	
contribute to a good quality	-Sufficient and suitable parking	1	-Spacious corridor	1
of life?	spaces		-Sufficient and suitable parking	1
	-Swimming pool	1	spaces	
	-Easy and convenient access for	1	-Swimming pool	1
	legal personnel		-Multipurpose room (for	1
	-Large garden area with big trees	1	guests/work)	
Design principles for	-Neighborhood and Nature	2	-Neighborhood and Nature	3
residential condominiums	-Moving and Access	2	-Moving and Access	2
for well-being: Which	-Eating	1	-Eating	1
principles do you think can	-Indoor Environmental Quality	1	-Indoor Environmental Quality	3
be applied to develop a	-Design Quality	1	-Design Quality	3
residential condominium				
project? (Can answer more				
than 1 point)				

From Table 3, it was found that the group with average selling prices of \$2,000 to \$4,500 per square meter has data from both the building managers and residents, a total of 5 participants (A3, A4, B4, B5, B6). They shared the opinion that having a proficient and high-quality property management team promotes a good quality of life in residential buildings. Factors that contributed to a good quality of life for both building managers and residents include having adequate common areas as the most crucial factor, followed by having good communal living understanding as a secondary important factor. In terms of space design, the allocation of different areas in proportion is deemed most critical. The common areas in residential buildings that this group considers necessary include a gym, a multipurpose room, a large garden area, sufficient parking, and a swimming pool.

# 4.3 Condominiums with Prices above \$4,500 per Square Meter

The researchers collected data with average selling prices of \$2,000 to \$4,500 per square meter, from three building managers of condominium property management companies, and from two customers who purchased and resided in residential condominium projects, a total of 5 participants. The study's findings can be summarized as shown in Table 4:

From Table 4, it was found that the group with average selling prices above \$4,500 per square meter has data from both the building managers and residents, a total of 5 participants (A5, A6, A7, B7, B8). They shared the opinion that comfortable residential buildings contributed to a better quality of life. Factors that promote a good quality of life for both building managers and residents include adequate parking as the most crucial factor, followed by other amenities being equally important. In terms of space design, the allocation of different areas in proportion is

deemed most critical. The common areas in residential buildings that this group considers essential include a gym, a multipurpose room, a meeting space, and a large garden area.

Table 4: Summarizes the interview data for the price range category with average selling prices above

\$4,500 per square meter.

	54,500 per square in		,	
Question	Building Managers (A5, A6, A		Residents (B7, B8)	
Question	Answer	Points	Answer	Points
What factors influenced your			-Convenient transportation	1
decision to choose to live in a			-Prime location with potential	1
residential condominium?			-Good project image	1
residential condominant:			-Unit design	1
Decree delate decree de la la				
Do you think the space inside			-Inside the unit	1
the unit or the common area has			-Common area	1
more impact on the decision to				
live in a residential				
condominium?				
What is your opinion on the	-Convenience in using common	1	-Comfortable living without	1
term "quality of life" in	area space		disturbances	
residential condominiums?	-Safety in residency	1	-Not overcrowded	1
	-Clean and pleasant environment	1	-Convenience in using common	1
	-Adequate and appropriate common	1	area space	
	area space		•	
	-High-quality and well-managed	1		
	building team			
	-Good cohabitating residents who	1		
	understand communal living	-		
	-Residents complying with			
	regulations	1		
What factors do you think			Wall designed years of living	1
What factors do you think	-Safety in residency	3	-Well-designed usage of living	1
contribute to a good quality of	-High-quality and well-managed	3	space	1
life in a residential	building team		-Convenient transportation	1
condominium? (Specify 5	-Clean and pleasant environment	2	-Restaurants and shops within or	1
factors)	-Sufficient amenities in the project	2	near the project	
	-Convenience in using common		-Exercise spaces available	1
	area space	2	-Good views from the units	1
	-Good cohabitating residents who		without obstruction	
	understand communal living	1	-Privacy is maintained, and	1
	-Proximity to public facilities		people are not crowded.	
	-Adequate and appropriate parking		-Adequate and appropriate	1
	space	1	parking space	
	•	1	-Adequate and appropriate	1
			common area space	
			-A green area with ample shade	1
			and large trees	_
			-High-quality materials inside	1
			the units	-
What appears of the control	Tonne arrest managette manage	2		1
What aspects of the unit space	-Large guest reception area.	2	-Division of different areas into	1
in a residential condominium	-Division of different areas into	1	proportions.	
contribute to a good quality of	proportions.	_	-High ceilings.	1
life?	-Private parking space is included	1	-Good ventilation in living areas.	1
	within each unit.		-Offers privacy.	1
			-Thick walls between rooms.	1
What aspects of the common	-Swimming pool	3	-Adequate gym space	2
area in a residential	-Adequate gym space	3	-Multipurpose room (for	1
condominium contribute to a	-Sufficient and suitable parking	3	guests/work)	
good quality of life?	spaces		-Meeting/conference space	1
	-Spacious lobby area	2	available	
	-Multipurpose room (for	2	-Large garden area with big trees	1
	guests/work)	_	<i>6. 6</i>	_
	-Meeting/conference space	2		
	available			
	-Large garden area with big trees	1		
	Large garden area with big trees	1		

Table 4 (continued): Summarizes the interview data for the price range category with average selling prices above \$4,500 per square meter.

Ouestion	Building Managers (A5, A6,	A7)	Residents (B7, B8)	
Question	Answer	Points	Answer	Points
Design principles for residential	-Neighborhood and Nature	3	-Neighborhood and Nature	2
condominiums for well-being:	-Moving and Access	3	-Moving and Access	1
Which principles do you think can	-Eating	1	-Eating	1
be applied to develop a residential	-Indoor Environmental Quality	2	-Indoor Environmental Quality	2
condominium project? (Can	-Design Quality	2	-Design Quality	2
answer more than 1 point)				

Table 5: Summarizes the interview data for all price level groups.

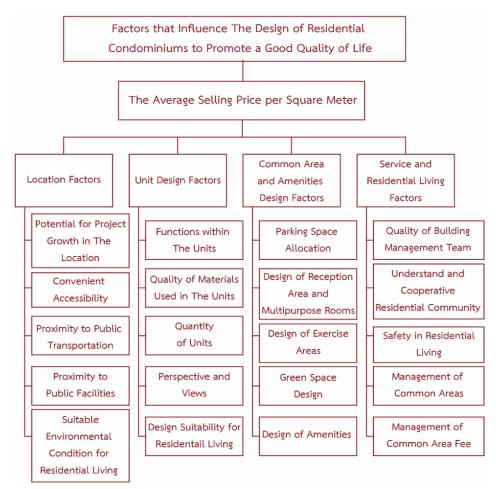
Organitan	Building Managers (A1 - A7	Building Managers (A1 - A7) Residents (B1 - B8)			
Question	Answer	Points	Answer	Points	
Question  What factors influenced your decision to choose to live in a residential condominium?  Do you think the space inside the unit or the common area has more impact on the decision to live in a residential condominium?  What is your opinion on the term "quality of life" in residential condominiums?	-Good cohabitating residents who understand communal living -High-quality and well-managed building team -Safety in residency -Adequate and appropriate common area space -Convenience in using common		Answer  -Prime location with potential -Convenient transportation -Familiar location -Reasonable price -Good project image -Unit design -Good surrounding environment -Trustworthiness of the project developer -Inside the unit -Common area  -Good cohabitating residents who understand communal living -High-quality and well-managed building team -Convenient transportation -Good quality of materials used in the units -Adequate and appropriate	Points  6 4 3 3 2 1 1 1 6 2  3 2 2 2 1	
	area space -Clean and pleasant environment -Residents complying with regulations	2 2 2	common area space -Convenience in using common area space -Good project environment -Proximity to public facilities -Low energy consumption in the project -Well-managed smoking areas -Exercise spaces available -Effective air ventilation system -Natural light exposure -Well-designed project -Comfortable living without disturbances -Not overcrowded	1 1 1 1 1 1 1 1 1	
What factors do you think contribute to a good quality	-Safety in residency -High-quality and well-managed	6 4	-A green area with ample shade and large trees	4	
of life in a residential condominium? (Specify 5 factors)	building team -Convenience in using common area space	4	-High-quality and well-managed building team -Adequate and appropriate	3	
	-Adequate and appropriate parking space -Clean and pleasant environment	3	common area space -Located in a good location with potential	3	
	-Restaurants and shops within or	3	-Proximity to public facilities	3	
	near the project -Adequate and appropriate	2	-Adequate and appropriate parking space	2	

	Building Managers (A1 - A7	( )	Residents (B1 - B8)	
Question	Answer	Points	Answer	Points
	common area space -Good cohabitating residents who understand communal living	2	-Good cohabitating residents who understand communal living -High-quality materials inside the	2 2
	-Reasonable common area fees -Sufficient amenities in the	2	units -Privacy is maintained, and	2
	project -Convenient communication	2	people are not crowdedFew residential units.	2
	channels	2	-Proximity to public amenities	
	-Residents complying with		-Safety in residency	2 2 1
	regulations -Activities organized to foster relationships	1	-Reasonable common area fees -Residents complying with regulations	1
	retationships	1	-Convenient transportation	1
			-Good views from the units without obstruction	1
			-No daily rental occupants	1
			-Exercise spaces available -Natural light exposure	1
			-Good air ventilation in common areas	1
What aspects of the unit space in a residential	-Division of different areas into proportions.	5	-Division of different areas into proportions.	4
condominium contribute to a good quality of life?	<ul><li>-Large guest reception area.</li><li>-Adequate usable space according</li></ul>	2	The kitchen is enclosed and has good ventilation.	4
	to needsGood ventilation in living areas.	1	-Adequate usable space according to needs.	2
	-Private parking spaces are included within each unit.	1	<ul><li>-Good ventilation in living areas.</li><li>-Large balcony.</li></ul>	2 2
	meraded within each unit.	1	-Large guest reception area.	1
			-The bathroom has good	1
			ventilationNatural light enters the sleeping	1
			area. The bathroom uses good non-slip	1
			materialsSpacious and not cramped.	1
			-High ceilings.	1
			-Offers privacy.	1
Wile of a second of Cale and a second	A.I.		-Thick walls between rooms.	
What aspects of the common area in a residential	-Adequate gym space -Swimming pool	6 6	-Adequate gym space -Swimming pool	6 6
condominium contribute to a good quality of life?	-Multipurpose room (for guests/work)	5	-Multipurpose room (for guests/work)	5
	-Sufficient and suitable parking spaces	5	-Sufficient and suitable parking spaces	5
	-Large garden area with big trees	3	-Large garden area with big trees	3
	-Meeting/conference space available	2	-Meeting/conference space available	2
	-Spacious lobby area -Easy and convenient access for	2	-Coin-operated laundry facilities -Shops within the project	2
	legal personnel Outdoor exercise area	1	-Snops within the project -Spacious corridor	1
Design principles for	-Neighborhood and Nature	2	-Neighborhood and Nature	3
residential condominiums	-Moving and Access	2	-Moving and Access	2
for well-being: Which principles do you think can	-Eating -Indoor Environmental Quality	1 1	-Eating -Indoor Environmental Quality	3
be applied to develop a residential condominium project? (Can answer more than 1 point)	-Design Quality	1	-Indoor Environmental Quanty -Design Quality	3

From Table 5, it was evident that upon considering the overall interview data across all price groups, both the building managers and residents shared the view that having cooperative and understanding residents promotes a good quality of life in residential buildings. The factors that contribute to a good quality of life for both building managers and residents include having a proficient and high-quality property management team as the most crucial factor in promoting a good quality of life. This is followed by the importance of having adequate amenities and comprehensive common areas. Regarding space design, the allocation of different areas in proportion is deemed most critical. The essential common areas in residential buildings according to this group include a swimming pool, a gym, a multipurpose room, sufficient parking, and a large garden area. Considering the COVID-19 pandemic situation, there have been adjustments in residential living in Thailand, following the new normal lifestyle focusing on cleanliness, social distancing, and online communication. From the interviews, it was observed that residential buildings were adapted to this by designing larger living spaces and common areas to accommodate work-from-home arrangements. There have also been adjustments in shared equipment in common areas to reduce contact and an increase in space for parcel deliveries, given the rise in online shopping. The importance of well-being is also emphasized, aligning with Thailand's focus on this aspect. The principles for designing a good quality of life encompass five main areas: Neighborhood and Nature, Moving and Access, Eating, Indoor Environmental Quality, and Design Quality. These can be applied to develop residential projects that promote a good quality of life. Table 5 shows that Neighborhood and Nature, Indoor Environmental Quality, and Design Quality are the topics most adaptable for development, followed by Moving and Access, while Eating is considered less adaptable. These trends and interests are likely to guide future lifestyles that promote a better quality of life.

From analyzing the interview results from the 15 participants, it was found that there are factors that significantly influence the design of residential condominiums that promote a good quality of life, a total of 31 points in all. These factors can be summarized and categorized into 4 main factors, each of which can be further divided into 5 sub-factors (Figure 1):

- (1) Location Factors: potential for project growth in the location, convenient accessibility, proximity to public transportation, proximity to public facilities, and suitable environmental conditions for residential living.
- (2) Unit Design Factors: functions within the units, quality of materials used in the units, quantity of units, perspectives and views, and design suitability for residential living.
- (3) Common Area and Amenities Design Factors: parking space allocation, design of reception areas and multipurpose rooms, design of exercise areas, green space design, and design of amenities.
- (4) Service and Residential Living Factors: quality of building management team, understanding and cooperative residential community, safety in residential living, management of common areas, and management of common area fees.



**Figure 1**: A relationship diagram of factors that influence the design of residential condominiums to promote a good quality of life.

Figure 1 shows influencing factors for the design of residential condominiums to promote a good quality of life. Noted during the time of this study the exchange rate is Baht35 per US dollar.

### 5 Conclusion

From this study, the participants prioritized the Service and Residential Living factors the most, followed by Common Area and Amenities Design factors. When considering what contributes to a good quality of life in residential living, these factors play crucial roles in shaping the living experience. However, in contrast, when asking customer groups about their decision-making process in purchasing residential condominiums, it was found that 75% consider the unit space, while 25% consider the common area space.

Therefore, in developing residential condominiums to promote a good quality of life, it is essential to consider comprehensive aspects including the project's location, unit space, common area space, and amenities within the project. It is also crucial not to overlook project management and communal living considerations for the future to prevent potential issues, thus sustaining a good quality of life in residential living within the condominiums. From this study, a relationship diagram of factors has been summarized (see Figure 1) that promote a good quality of life in residential condominiums.

# 6 Availability of Data and Material

All complied information is included in this article.

#### 7 References

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**Nattakan Muangsrichan** is a student at the Department of Innovative Real Estate Development, Faculty of Architecture and Planning, Thammasart University, Thailand. She got a Bachelor's degree in Architecture from Kasetsart University, Thailand. Her research encompasses Real Estate Development, Architectural Design, and Sustainable Design.



**Dr. Kongkoon Tochaiwat** is an Associate Professor at the Department of Innovative Real Estate Development, Faculty of Architecture and Planning, Thammasart University, Thailand. He is also the Head of the Thammasat University Research Unit in Project Development and Innovation in Real Estate Business. Dr.Kongkoon Tochaiwat got his Master's and Ph.D. Degrees in Civil Engineering from Chulalongkorn University, Thailand. His research focuses on Real Estate Development and Real Estate Customer Behaviors.