

CHAPTER 4 – RESULTS AND DISCUSSION

4.1. Sample and Procedures

The researcher uses survey as a data collection method for this research. Data was collected from respondents by having them complete a questionnaire that is accessible online via Google Form to be analyzed. For the pilot test, the researcher collected 30 responses from 30 participants and then used SPSS to analyze the data and verify the normality, homogeneity and collinearity. When the early data is valid, the researcher continues to collect the 265 responses is met. Collected data is processed through descriptive statistical analysis starting from respondent's characteristics to each measurement.

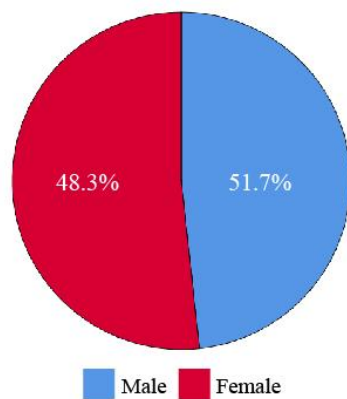
4.2. Demographic of Survey Respondent

Gender, age, occupation, monthly expense, hotel brand and frequency of visit of the respondents are a few control variables used in this study to describe the demographic profile of respondents. Using data collected from the survey, respondents of this research is dominated by female respondents with 137 people (51.7%) and male respondents have 128 people (48.3%). 100% of respondents of this research are 26 to 41 years old or classified as millennial generation. respondents of this research are dominated by 177 employees (66.8%), 86 entrepreneurs (32.5%) and the rest 2 people is not working yet. Respondents of this research with the highest monthly expense of 5,000,000IDR to 7,500,000 IDR (35.8%). It is followed by more than 7,500,000 IDR (30.6%), 3,000,000 IDR to 5,000,000 IDR (34%) and below than 3,000,000 IDR (12.8%). Most of respondents of this research domicile or working in Greater Jakarta (91.7%) and the rest are outside (8.3%). Respondents of this research are hotel guests of ibis Gading Serpong (32.8%), Mercure Alam Sutera (31.7%) and Novotel Tangerang (35.5%). From 265 respondents, 67.5% dominated by member of ALL/AccorPlus and 32.5% are nonmember of ALL/AccorPlus.

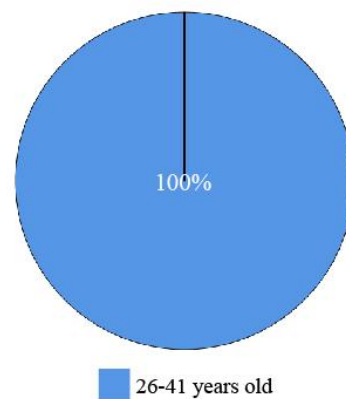
Table 4.1 Respondent Profiles

Demographic	Grouping	Number of respondents	Percentage
Gender	Male	128	48.3%
	Female	137	51.7%
Total		265	100%
Age	Less than 26 years old	0	0
	26 to 41 years old	265	100%
	More than 41 years old	0	0
Total		265	100%
Occupation	Employee	177	66.8%
	Entrepreneurship	86	32.5%
	Not working yet	2	0.8%
Total		265	100%
Monthly expense	Less than 3,000,000 IDR	34	12.8%
	3,000,000 IDR to 5,000,000 IDR	55	20.8%
	5,000,000 IDR to 7,500,000 IDR	95	35.8%
	More than 7,500,000 IDR	81	30.6%
Total		265	100%
Domicile/ working area	Jabodetabek (Greater Jakarta)	243	91.7%
	Non Jabodetabek	22	8.3%
Total		265	100%
Hotel brands	Ibis Gading Serpong	87	32.8%
	Mercure Alam Sutera	84	31.7%
	Novotel Tangerang	94	35.5%
Total		265	100%
Frequency of visiting	Two to three times	107	40.4%
	Four to five times	103	38.9%
	More than five times	55	20.8%
Total		265	100%
Member status	Nonmember of ALL/AccorPlus	86	32.5%
	Member of ALL/AccorPlus	179	67.5%
Total		265	100%

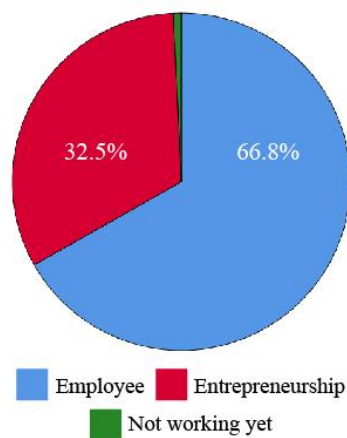
Respondent's Gender



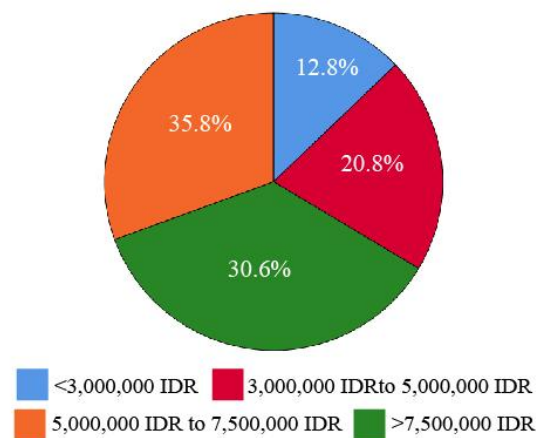
Respondent's Age



Occupation



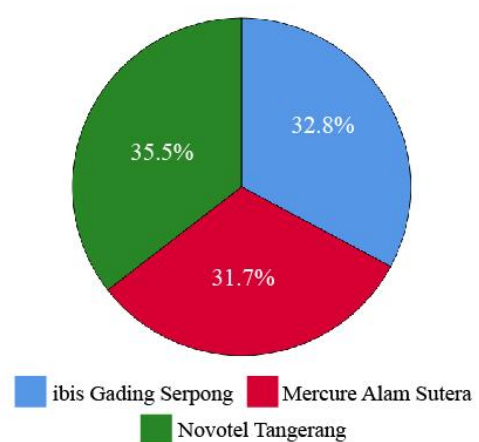
Respondent's Monthly Expense



Respondent's Domicile/Working Area



Hotel Brands



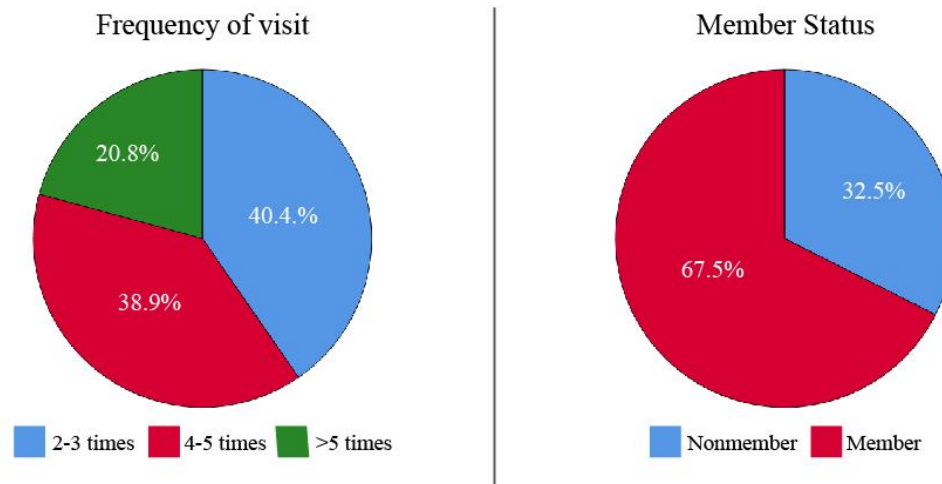


Figure 4.1. Respondent Profiles

4.3. Pre-Data Analysis Measures

4.3.1. Data Screening & Analysis

Data screening is the initial step before starting to analyze the data. All data from 265 respondents are added to the data from the survey once as they are converted to an excel file. And then, it is possible that the data is valid by looking for statement responses that are correctly positioned within the range of one to five on the Likert Scale. In this research, SPSS is used to screen the data to confirm that there is no issue in the survey and to remove possible outliers or invalid respondent by using Mahalanobis Distance (MD) analysis.

MD analysis can identify the individuals who differs greatly from the mean and find the acceptable distance. The analysis calculates value or probability between MD and chi-square distribution. According to the total number of independent variables, the degrees of freedom will be equal. The probability value that is less than 0.001 will be used to identify multivariate outliers. By conducting MD, no respondent is identified as outliers in this research. Therefore, those 265 data can be continued to be analyzed further.

4.3.2. Normality, Collinearity, and Homogeneity

4.3.2.1. Normality

Normality shows that data were obtained from an ordinarily distributed population or not. The Lilliefors correction as well as the Kolmogorov-Smirnov test was used to test for normality. Here are the results of the normality test using SPSS software.

Table 4.2 Normality Test Results: One Sample Kolmogorov-Smirnov

Construct/ Variable	Kolmogorov-Smirnov			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
VCD	.278	265	.000	.824	265	.000
CE	.244	265	.000	.862	265	.000
CR	.231	265	.000	.817	265	.000

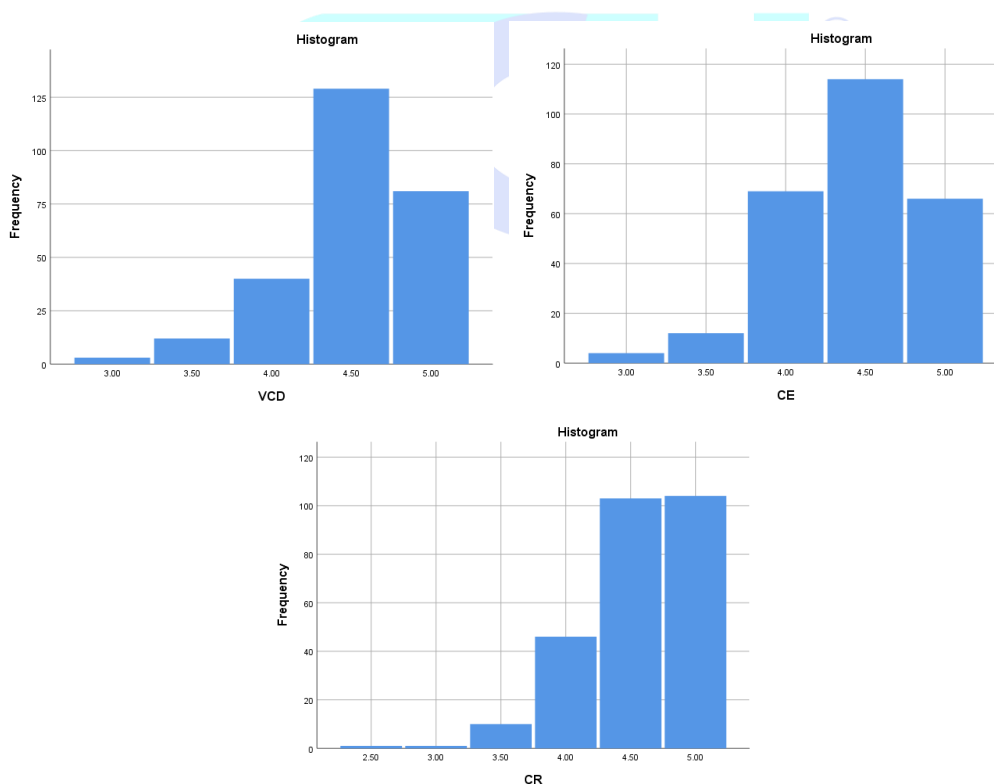


Figure 4.2. Normality Test Results for Each Construct

According to the results in Table 4.2 above, it is showed that all constructs are not normally distributed. It supported by the value of significance result for each construct are .000 which means they are less than 0.05. When the data is not distributed normally, researcher use nonparametric test. The result is also presented in bar chart in Figure 4.2

4.3.2.2. Collinearity

When the data is not normally distributed, researcher ensure the correlations between observed variables of each construct. When the correlation coefficient is below 0.9 there is no potential of multicollinearity (Hair et al., 2014).

Table 4.3 Correlation Coefficient using Spearman's

			VCD	CE	CR
Spearman's rho	VCD	Correlation Coefficient	1.000	.408**	.223**
		Sig. (2-tailed)	.	.000	.000
		N	265	265	265
	CE	Correlation Coefficient	.408**	1.000	.302**
		Sig. (2-tailed)	.000	.	.000
		N	265	265	265
	CR	Correlation Coefficient	.223**	.302**	1.000
		Sig. (2-tailed)	.000	.000	.
		N	265	265	265

** . Correlation is significant at the 0.01 level (2-tailed).

Table 4.3 shows that the correlation coefficient between constructs is below 0.9. It means that the potential of multicollinearity is low. On the other hand, to determine how an independent variable's variance is impacted by its correlation with other independent variables, one can use the value of variance inflation factor (VIF) and Collinearity Tolerance. If the value of VIF is less than five and the value of collinearity tolerance is higher than 0.2, no collinearity between the variables will be reported (Hair et al., 2014). Table 4.4 shows that VIF value for each construct are below 5 with collinearity tolerance higher 0.2. Therefore, no multicollinearity issue exists.

Table 4.4 Collinearity Test Results

Construct/ Variable	VCD	CE	CR
VIF			
VCD		1.000	1.249
CE	1.000		1.249
Collinearity Tolerance			
VCD		1.000	0.801
CE	1.000		0.801

4.3.2.3.Homogeneity

A homogeneity test was performed to evaluate whether the population had homogeneous variance or not. Based on the set of relevant control variables, it illustrates respondents' perspectives for each concept. If the significance >0.05 the data distribution is homogeny. Table 4.5. shows that different occupation, monthly expenses, frequency of visit and member status could alter how people perceive customer experience differently.

Table 4.5 Homogeneity Test Results based on Mean.

	Levene Statistic	df1	df2	Sig.
Gender				
VCD	.533	1	263	.466
CE	.102	1	263	.750
CR	8.183	1	263	.005
Occupation				
VCD	1.192	2	262	.305
CE	11.930	2	262	.000
CR	1.027	2	262	.360
Monthly expenses				
VCD	1.430	3	261	.234
CE	4.915	3	261	.002
CR	2.141	3	261	.095
Domicile/Working Area				
VCD	1.560	1	263	.213
CE	.287	1	263	.593

CR	.193	1	263	.661
Hotel brands				
VCD	1.969	2	262	.142
CE	2.312	2	262	.101
CR	1.059	2	262	.348
Frequency of visit				
VCD	.259	2	262	.772
CE	10.963	2	262	.000
CR	2.020	2	262	.135
Member status				
VCD	3.521	1	263	.062
CE	22.313	1	263	.000
CR	2.063	1	263	.152

4.3.3. Reliability

Reliability test was performed to evaluate if the questionnaire in this research is reliable or not. Cronbach's alpha with a range of values of consistency above 0.7 is classified reliable or consistent. The value of the composite reliability of each variable is larger than Cronbach's Alpha 0.7 according to all assessed valid data as shown on Table 4.6 below.

Table 4.6 Reliability Test Results

Constructs/ Variables	Items	Cronbach's Alpha	Description
Visual Communication Design (VCD)	16	0.778	Reliable
Customer Experience (CE)	20	0.846	Reliable
Customer Retention (CR)	16	0.821	Reliable

4.4. Descriptive Statistic Analysis

Based on mean of each construct, researcher found that respondents constructs have mean value that slightly differ. If we go thorough to the dimensions, researcher indicates that it is important if VCD is entertaining, informative and credible. On the other hand, CE can be driven by sensory experience and cognitive experience. Plus, CR was affected by price insensitivity and the power of word of mouth. Overall descriptive statistical analysis results are summarized in the Table 4.7 below.

Table 4.7 Descriptive Statistic Analysis Results

Constructs	Dimension	Minimum	Maximum	Mean	Std. Deviation
VCD	VCD_Inf	3.00	5.00	4.4396	.49057
	VCD_Ent	2.00	5.00	4.4000	.50975
	VCD_Eng	2.50	5.00	4.3547	.52280
	VCD_Cre	2.00	5.00	4.4377	.49322
CE	CE_Sen	3.50	5.00	4.4434	.41811
	CE_Fee	2.00	5.00	4.3000	.56542
	CE_Thi	2.50	5.00	4.4000	.50975
	CE_Act	2.00	5.00	4.3094	.61122
	CE_Rel	1.00	5.00	4.3717	.60346
CR	CR_Wom	2.50	5.00	4.3830	.53077
	CR_Non	2.50	5.00	4.2642	.53126
	CR_Rep	2.00	5.00	4.3264	.55225
	CR_Pri	3.00	5.00	4.4509	.46000

Based on Table 4.7, VCD has average value or mean of 4.5151, CE has mean of 4.4264 and CR has mean of 4.5585 which are higher than each standard deviation. It means that respondent's evaluation of each variable is favorable.

4.5. Structural Equation Modelling Analysis

This research use Lisrel 8.8 to test the hypotheses using structural equation modelling (SEM). Validity testing was the first step in the analysis. The t-value of the factor loading and the standardized factor loading (SFL) can be used as assessment methods to evaluate a questionnaire's reliability. Goodness of fit was measured based on several aspect such as chi-square (χ^2), root mean square error of approximation (RMSEA) and goodness of fit index (GFI). Then construct reliability (CR) and average variance extract (AVE) was run to measure reliability of indicators. The single factor model (SFM), oblique lower model (OLOM), and higher order model (HOM) analyses are investigated in this study. After measure all observed variables for SFM, researcher measure the construct by categorizing the observed variables based on the dimensions for OLOM. Next, constructs are measured at the level of dimension in HOM. When analyzing the factor structure of data sets, HOM are not more significant or valuable than lower-order factors. Instead, HOM offers an

alternative viewpoint on the data (Navruz et al., 2015). Both OLOM and HOM are alternative models to analyze data.

Table 4.8 Range Value for Model Fit Measurements

Measurement		Range	Remarks	Reference
Construct Validity	t-values	≥ 1.96	Valid	Hair et al (2014)
	SFL	≥ 0.3	Valid	
Composite Reliability	CR	≥ 0.7	Reliable	
Convergent Validity	AVE	≥ 0.5	Valid	
Structural Coefficient		n/a		
Normed Chi-Square	χ^2/df	< 3.00	Good Fit	Kline (2011)
		< 5.00	Close-fit	
Root Mean Square Error of Approximation	RMSEA	≤ 0.01	Poor fit	MacCallum, Browne and Sugawara (1996); Kline (2011)
		> 0.01 or ≤ 0.05	Good Fit	
		≤ 0.08	Mediocre/ Close fit	
Goodness-of-Fit Index	GFI	≥ 0.95	Good Fit	Miles and Shevlin (1998)
Standardized Root Mean Residual	SRMR	≤ 0.08	Good Fit	Hu & Bentler (1999)
		0	Perfect fit	
Comparative Fit Index	CFI	≥ 0.95	Good Fit	
		≥ 0.90	Close Fit	
Normal Fit Index	NFI	≥ 0.95	Good Fit	Bentler & Bonett (1980)
		0.90-0.95	Marginal fit	
		≤ 0.90	Poor fit	
Non-Normed Fit Index/ Tucker Lewis Index	NNFI/ TLI	≥ 0.95	Good Fit	Hu & Bentler (1999)
Incremental Fit Indices	IFI	≥ 0.90	Good Fit	Bollen's (1989)

Source: (Hair et al., 2014; Hooper et al., 2008; Kaplan & Gürsbüz, 2020)

4.5.1. Measurement Model Analysis

4.5.1.1. Measurement Model Analysis of Visual Communication Design

Visual Communication Design (VCD) is a construct that consists of four dimensions: Informative, Entertainment, Engagement, Credibility (VCD_Inf, VCD_Ent, VCD_Eng and VCD_Cre).

In SFM, several observed variables of VCD have factor loading below 0.5. Though, researcher still put it on the analysis since the value is not close to 0. In OLOM and HOM, no observed variables or dimensions of VCD which their loading factor below than 0.3. This construct had good reliability since the value of Composite Reliability (CRel) at SFM, OLOM or HOM is above 0.7. The AVE value of SFM and OLOM resulted below 0.5. Therefore, researchers conducted discriminant analysis. According to Fornell-Larcker criterion, discriminant analysis is to ensure whether the square root of AVE (SQRTA) is bigger than coefficient correlations between the constructs in this research (Henseler et al., 2015; Hooper et al., 2008). Researcher found that SQRTA is bigger than coefficient correlations 0.408 (see Table 4.3). Thus, this construct is still valid. Overall model fit in HOM is acceptable except for the normed chi-square. Its normed chi-square in SFM and OLOM is more acceptable than in HOM. Therefore, the measurement of the construct VCD was reliable and valid. The measurement model analysis result can be seen in Table below.

Table 4.9 Visual Communication Design Measurement Model Analysis Results

	SFM			OLOM			HOM			
Item	SFL	t-value	Error	SFL	t-value	Error	Dimension	SFL	t-value	Error
VCD1	0.26	3.68	0.93	0.31	4.24	0.9	VCD_INF	0.86	17.18	0.26
VCD2	0.46	6.92	0.79	0.57	7.92	0.67				
VCD3	0.43	6.21	0.82	0.42	5.77	0.82				
VCD4	0.44	6.49	0.81	0.57	7.95	0.67				
VCD5	0.29	4.19	0.92	0.22	3.47	0.95	VCD_ENT	0.73	13.59	0.46
VCD6	0.25	3.57	0.94	0.19	3.17	0.96				
VCD7	0.44	6.60	0.81	0.33	4.25	0.89				
VCD8	0.44	6.59	0.81	0.33	4.28	0.89				
VCD9	0.51	7.82	0.74	0.46	6.99	0.79	VCD_EN G	0.93	19.45	0.14
VCD10	0.41	6.10	0.83	0.39	5.92	0.85				
VCD11	0.51	7.79	0.74	0.46	6.96	0.79				
VCD12	0.46	6.83	0.79	0.45	6.79	0.8				
VCD13	0.42	6.18	0.82	0.42	6.10	0.83	VCD_CRE	0.89	18.27	0.2
VCD14	0.41	6.18	0.83	0.39	5.77	0.85				
VCD15	0.33	4.80	0.89	0.31	4.59	0.91				
VCD16	0.53	7.97	0.72	0.48	7.05	0.77				
CRel	0.767			0.748			0.916			
AVE	0.176			0.166			0.734			
SQRTA	0.420			0.408			0.857			

χ^2	143.16	138.87	7.52
df	96	92	2
χ^2/df	1.491	1.509	3.760
p-value	0.00130	0.00116	0.02330
RMSEA	0.043	0.044	0.102
GFI	0.94	0.94	0.99
SRMR	0.053	0.052	0.017
CFI	0.95	0.95	0.99
NFI	0.87	0.88	0.99
NNFI	0.93	0.93	0.98
IFI	0.95	0.95	0.99

4.5.1.2. Measurement Model Analysis of Customer Experience

Customer Experience (CE) is a construct that consists of five dimensions: Sense, Feel, Cognitive, Act and Relational (CE_Sen, CE_Fee, CE_Thi, CE_Act and CE_Rel).

In SFM, most observed variables of CE have factor loading above 0.3 except for CE1 and CE6. Since SFL value of CE1 was close to 0, the item was removed in this research. In HOM, no dimensions of CE have loading factor below than 0.3. This construct had good reliability since the value of Construct Reliability at SFM, OLOM or HOM is above 0.7. The AVE value of SFM and OLOM resulted below 0.5. Though, researcher found that SQRTA value is still bigger than coefficient correlations 0.408 (see Table 4.3). AVE in HOM increased beyond the threshold. Thus, using HOM is acceptable for this construct since overall model fit resulted better than SFM and OLOM. The measurement of the construct CE was reliable and valid, and its measurement model analysis result can be seen in the table below.

Table 4.10 Customer Experience Measurement Model Analysis Results

Item	SFM			OLOM			HOM			
	SFL	t-value	Error	SFL	t-value	Error	Dimension	SFL	t-value	Error
CE2	0.49	7.97	0.76	0.48	6.76	0.77	CE_SEN	0.99	21.91	0.03
CE3	0.54	8.84	0.71	0.52	7.21	0.73				
CE4	0.38	6.03	0.85	0.38	5.53	0.86				
CE5	0.34	5.41	0.88	0.31	4.88	0.9	CE_FEE	0.89	18.36	0.21
CE6	0.28	4.31	0.92	0.29	4.5	0.92				
CE7	0.41	6.71	0.83	0.40	6.14	0.84				
CE8	0.62	10.54	0.62	0.64	9.63	0.59				

CE9	0.54	8.92	0.71	0.44	6.58	0.81	CE_THI	0.83	16.32	0.31
CE10	0.34	5.26	0.88	0.32	5.17	0.9				
CE11	0.35	5.53	0.88	0.27	4.55	0.93				
CE12	0.43	6.91	0.81	0.42	6.30	0.82				
CE13	0.69	12.00	0.53	0.71	11.79	0.5	CE_ACT	0.91	19.18	0.16
CE14	0.61	10.45	0.62	0.61	10.25	0.62				
CE15	0.43	6.80	0.82	0.44	6.99	0.81				
CE16	0.34	5.44	0.89	0.35	5.48	0.88				
CE17	0.67	11.65	0.55	0.64	10.99	0.59	CE_REL	0.96	20.80	0.08
CE18	0.60	10.16	0.64	0.58	9.86	0.67				
CE19	0.50	8.08	0.75	0.48	7.94	0.77				
CE20	0.56	9.34	0.69	0.55	9.30	0.7				
CRel	0.844			0.833			0.964			
AVE	0.233			0.220			0.893			
SQRTA	0.483			0.469			0.945			
χ^2	225.73			188.92			2.23			
df	161			135			1			
χ^2/df	1.402			1.399			2.23			
p-value	0.00058			0.00152			0.13534			
RMSEA	0.039			0.039			0.068			
GFI	0.92			0.94			1			
SRMR	0.05			0.048			0.0041			
CFI	0.97			0.98			1			
NFI	0.92			0.93			1			
NNFI	0.97			0.97			0.99			
IFI	0.97			0.98			1			

4.5.1.3.Measurement Model Analysis of Customer Retention

Customer Retention (CR) is a construct that consists of four dimensions: Word of Mouth, Noncomplaining Behavior, Repurchase Behavior, Price Insensitivity (CR_Wom, CE_Non, CR_Rep and CR_Pri).

In SFM and OLOM, all observed variables of CR has factor loading above 0.3. This construct had good reliability since the value at SFM, OLOM or HOM is above 0.7. The AVE value of SFM and OLOM resulted below 0.5. Though SQRTA is still bigger than coefficient correlations 0.408 (see Table 4.3). It is acceptable to use HOM

for this construct and overall model fit also resulted in compliance with threshold value. The measurement of the construct CE was reliable and valid. The measurement model analysis result can be seen in the table below.

Table 4.11 Customer Retention Measurement Model Analysis Results

	SFM			OLOM			HOM			
Item	SFL	t-value	Error	SFL	t-value	Error	Dimension	SFL	t-value	Error
CR1	0.37	5.73	0.93	0.38	5.78	0.86	CR_WOM	0.95	20.66	0.09
CR2	0.42	6.51	0.79	0.43	6.59	0.82				
CR3	0.61	10.11	0.82	0.62	9.83	0.62				
CR4	0.56	9.01	0.81	0.56	8.84	0.69				
CR5	0.34	5.24	0.92	0.31	4.62	0.91	CR_NON	0.94	20.41	0.11
CR6	0.40	6.20	0.94	0.39	5.89	0.85				
CR7	0.40	6.14	0.81	0.39	5.83	0.85				
CR8	0.48	7.56	0.81	0.48	7.03	0.77				
CR9	0.54	8.68	0.74	0.48	7.90	0.77	CR_REP	0.91	19.06	0.17
CR10	0.58	9.41	0.83	0.55	9.20	0.69				
CR11	0.53	8.45	0.74	0.5	8.27	0.75				
CR12	0.59	8.03	0.79	0.49	8.01	0.76				
CR13	0.38	5.84	0.82	0.35	5.46	0.88	CR_PRI	0.88	18.26	0.22
CR14	0.5	8.00	0.83	0.48	7.59	0.77				
CR15	0.49	7.69	0.89	0.49	7.63	0.76				
CR16	0.46	7.21	0.72	0.45	7.03	0.8				
CRel	0.816			0.811			0.958			
AVE	0.222			0.217			0.852			
SQRTA	0.471			0.466			0.923			
χ^2	195.83			188.92			2.28			
df	106			135			1			
χ^2 /df	1.847			1.399			2.28			
p-value	0			0			0.13139			
RMSEA	0.057			0.039			0.07			
GFI	0.92			0.94			1			
SRMR	0.059			0.048			0.0055			
CFI	0.94			0.98			1			
NFI	0.89			0.93			1			
NNFI	0.93			0.97			0.99			
IFI	0.94			0.98			1			

4.5.2. Structural Modelling Analysis

In this part, structural modeling analysis was done to assess how the constructs in the research model related to one another. The analysis of this structural model was the

basis for the hypothesis testing that will be discussed in the following section. Figure 4.3 below shows the constructs in the research model.

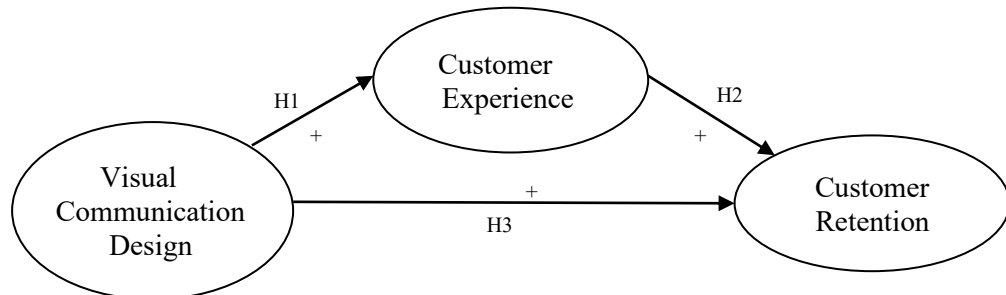


Figure 4.3 Research Model of This Study

4.5.3. Hypotheses Testing Results

Three hypotheses were tested in this study to analyze: 1) the impact of visual communication design on customer experience; 2) the impact of customer experience on customer retention; 3) the impact of visual communication design on customer retention.

Table 4.12 Hypotheses Testing Results

Constructs	Hypotheses relationship	Structural coefficient	t-value	Hypothesis test result
VCD → CE	H1 ₀ : Visual Communication Design does not have significant impact on Customer Experience. H1 ₁ : Visual Communication Design has significant impact on Customer Experience.	0.89	16.86	H1 ₀ is rejected and H1 ₁ is supported.
CE → CR	H2 ₀ : Customer Experience does not have significant impact on Customer Retention. H2 ₁ : Customer Experience has significant impact on Customer Retention.	0.57	5.73	H2 ₀ is rejected and H2 ₁ is supported.

VCD → CR	H3 ₀ : Visual Communication Design does not have significant impact on Customer Retention. H3 ₁ : Visual Communication Design has significant impact on Customer Retention.	0.33	3.36	H3 ₀ is rejected and H3 ₁ is supported.
----------	--	------	------	---

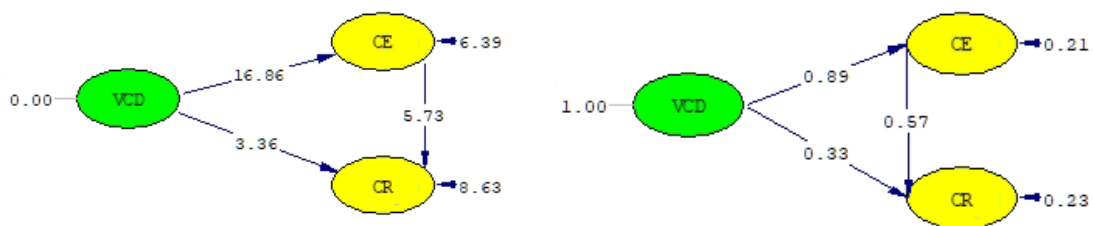


Figure 4.4 Model of t-value (left) and Model of Structural Coefficient (right)

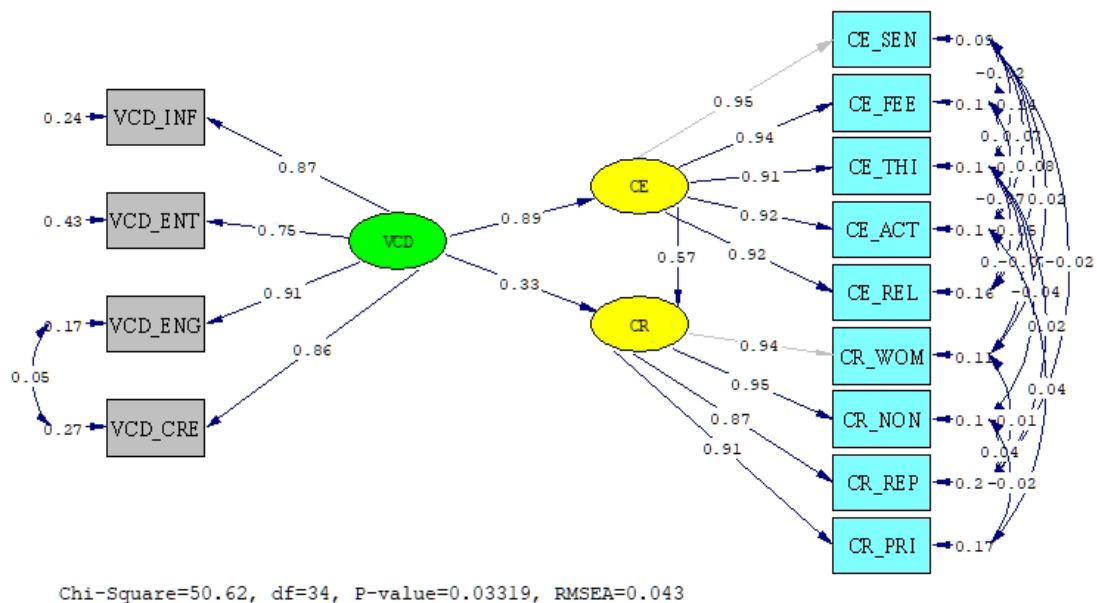


Figure 4.5 Model of Structural Coefficient per Dimension

From the Table 4.11 and Figure 4.5, researcher found several results of hypotheses testing as follows.

H1₀ : VCD does not have significant impact on CE

H1₁ : VCD has significant impact on CE

Reject $H1_0$ and accept $H1_1$ if t-value exceeds t-table.

The impact of VCD on CE has a t-value of 16.86 with structural coefficient of 0.89. The t-value exceeds t-table 1.96, therefore $H1_0$ is rejected and $H1_1$ is accepted. This means that VCD has significant impact on CE. The development of VCD can have an impact on increasing CE by 89% based on the value of structural coefficient 0.89. This value is lower than 1.0 which is also confirmed that the potential of multicollinearity is low.

$H2_0$: CE does not have significant impact on CR

$H2_1$: CE has significant impact on CR

Reject $H2_0$ and accept $H2_1$ if t-value exceeds t-table.

The impact of CE on CR has a t-value of 5.73 with structural coefficient of 0.57. The t-value exceeds t-table 1.96, therefore $H2_0$ is rejected and $H2_1$ is accepted. This means that CE has significant impact on CR. The development of CE can have an impact on increasing CR by 57% based on the value of structural coefficient 0.57. This value is lower than 1.0 which is also confirmed that the potential of multicollinearity is low.

$H3_0$: VCD does not have significant impact on CR

$H3_1$: VCD has significant impact on CR

Reject $H3_0$ and accept $H3_1$ if t-value exceeds t-table.

The impact of VCD to CR has a t-value of 3.36 with structural coefficient of 0.33. The t-value exceeds t-table 1.96, therefore $H3_0$ is rejected and $H3_1$ is accepted. This means that VCD has significant impact on CR. The development of VCD can have an impact on increasing CR by 33% based on the value of structural coefficient 0.33. This value is lower than 1.0 which is also confirmed that the potential of multicollinearity is low.

Table 4.13 Structural Equations and R-Square

Constructs	Structural Equations	R-Square
CE	$0.89 \times \text{VCD}$	0.79
CR	$0.57 \times \text{CE} + 0.33 \times \text{VCD}$	0.77

Table 4.13 shows the structural equations with its R-Square. R-Square is used to determine the capacity of dependent constructs to give impact on independent constructs. If the R-Square value is 0.67, it means excellent. If the R-Square value is 0.33, it is moderate. If the R-Square value is 0.19, it is weak (Ghozali, 2014).

In this research, R-Square value of CE is 0.79 which means that VCD can strongly explain the variance on CE about 79%. Meanwhile, CE is influenced by other variables which are not examined in this research by 21%.

R-Square value of CR is 0.77 which means that both VCD and CE simultaneously can strongly explain the variance on CR about 84%. Meanwhile, CE is influenced by other variables which are not examined in this research by 16%.

4.5.4. Overall Model Fit Analysis

Researcher discovered that this study had a good fit model from the model in the previous section. According to (Hair et al., 2014), three to four fit indices are often sufficient to demonstrate model fit. CFI, RMSEA, χ^2 and degrees of freedom will frequently provide enough distinctive data to evaluate a model. Other studies show the other measurement such GFI, SRMR, NFI, NNFI and IFI also support the model fit analysis. The overall model fit analysis results are packaged in Table 4.14 below.

Table 4.14 Overall Model Fit Analysis Results

Measurement		Results	Range	Remarks	Reference
Normed Chi-Square	χ^2/df	1.49	<3.00	Good Fit	Kline (2011)
			<5.00	Close-fit	
Root Mean Square Error of Approximation	RMSEA	0.04	≤ 0.01	Poor fit	MacCallum, Browne and Sugawara (1996); Kline (2011)
			>0.01 or ≤ 0.05	Good Fit	
			≤ 0.08	Mediocre/ Close fit	
Goodness-of-Fit Index	GFI	0.97	≥ 0.95	Good Fit	Miles and Shevlin (1998)
Standardized Root Mean Residual	SRMR	0.01	≤ 0.08	Good Fit	Hu & Bentler (1999)
			0	Perfect fit	
Comparative Fit Index	CFI	1	≥ 0.95	Good Fit	
			≥ 0.90	Close Fit	
Normal Fit Index	NFI	1	≥ 0.95	Good Fit	Bentler & Bonett (1980)
			0.90-0.95	Marginal	

				fit	
			≤ 0.90	Poor fit	
Non-Normed Fit Index/ Tucker Lewis Index	NNFI/ TLI	1	≥ 0.95	Good Fit	Hu & Bentler (1999)
Incremental Fit Indices	IFI	1	≥ 0.90	Good Fit	Bollen's (1989)

Source: (Hair et al., 2014; Hooper et al., 2008; Kaplan & Gürsbüz, 2020)

From Table 4.13 above, there are eight fit indices to evaluate the overall model fit in this study. The first index is the Normed Chi-Square (χ^2/df) which is obtained from dividing Chi-Square to the degrees of freedom. Chi-Square value is like “badness of fit” which is sensitive to sample size. When using large data, the Chi-Square statistic nearly usually rejects the model; but when using small samples, it lacks power and may not be able to distinguish between models that fit well and those that do not. Thus, researcher use Normed Chi-Square to minimize the impact of sample size on Chi-Square (Hooper et al., 2008). This research has Normed Chi-Square value of 1.49 which is categorized as good fit according to Kline.

The second index is Root Mean Square Error of Approximation (RMSEA). It illustrates how well the model would fit the population covariance matrix with the chosen parameter estimates. This research has RMSEA value of 0.04 which is categorized as good fit according to MacCallum, Browne and Sugawara.

The third indicator, called the Goodness-of-Fit Index (GFI), measures how well the model captured the observed covariance matrix and is an alternative to the Chi-Square test or the model's overall appropriateness. This research has GFI value of 0.95 which is categorized as good fit according to Miles and Shevlin.

The fourth index is Standardized Root Mean Residual (SRMR). When the research's questionnaire has items with a range of values (1-5 range points in this research), it becomes useful. The difference between the residual of the observed covariance matrix and the hypothesized covariance model is calculated as the square root of this difference. This research has SRMR value of 0.01 which is categorized as good fit according to Hu & Bentler.

The fifth index is Normed-Fit Index (NFI) which compares the proposed model and the null model. This research has CFI value of 1 which is categorized as good fit according to Hu & Bentler. The sixth index is Non-Normed Fit Index (NNFI) whose aim is to solve the issue brought on by the model's complexity. This research has NNFI value of 1.00 which is categorized as good fit according to Hu & Bentler. The seventh index is Comparative Fit Index (CFI). This the revision form of NFI which has a tendency to decrease fit value in small sample size. This research has CFI value of 1.00 which is categorized as good fit according to Hu & Bentler.

The eight index is Incremental Fit Measure (IFI) which indicate the relative improvement in fit of proposed model compared with an independence/null mode. This research has IFI value of 1.00 which is categorized as good fit according to Bollen's.

4.6. Discussion

All hypotheses were supported in this research. The data supports the first hypothesis where VCD has significant impact on CE. The t-value, structural coefficient and R-Square indicates that VCD is a strong driver to develop CE in hotel industry. Second hypothesis was supported where CE has significant impact on CR. The t-value, structural coefficient and R-Square indicates that CE can boost CR in hotel industry. Third hypothesis was supported where VCD has significant impact on CR. The t-value and structural coefficient indicates that VCD can be strong driver for hotel management to develop CR in the hotel.

Based on hypotheses testing results, researcher found that the indirect effect of CE as intervening variable contributes more to the relationship between VCD and CR. Both VCD and CE have significant impact on CR. Furthermore, the presence of CE can boost more impact to CR which is aligned with (Christabella & Fachira, 2021) . Thus, it is important for hotel industry to compose a VCD to create CE first in order to enhance better CR in the hotel industry.

In VCD, engaging (VCD_Eng) and informative (VCD_Inf) dimensions becomes important to develop good VCD among other dimensions. Informative means that the

VCD should give clear information of a promotion or a product of the hotel, convincing enough to make the guest revisit in the future because of the quality of the product they had. For example, when a hotel promotes a room offer in a poster, it should contain a picture of the room which shows its comfort and cleanliness, the offer (special price or discount), the identity of the hotel and the contact person. Engaging means that the VCD should deliver the message that fit to the guest, so they become interested about the promotion and feel as a valued guest of the hotel. Therefore, the guest will start distributing the information to their family or colleagues. For example, quality of picture of the room in a poster may fit to guest preference who prefer cozy and clean room. When the 4-star hotel consider their valued guest, the quality of a poster should be concerned as a poster of 4-star hotel. Once the guest engaged with that, the potential of the guest to distribute the information to their family or colleagues is open.

In CE, sense (CE_Sen) and feel (CE_Fee) can support hotel management to increase noncomplaining behavior and word of mouth of their guests among other dimensions. Sense means that the VCD should be able to give a nice experience and to evoke the awareness and recognition. Therefore, the guest will get a good feeling when they saw the VCD. VCD of the hotel also should left the guest in a positive mood, positive emotion, impressed and furthermore can make them remember the hotel while they are not in the hotel. For example, a representing picture with nice colours and high-resolution output gives good experience so the guests can keep their mood and emotion positive. This experience can raise the awareness of the hotel, whether it has the same product/services or if has innovation or new product/services compared to the competitors. If they are impressed about the information in VCD and the hotel experience they got earlier, it can help them when they have a need to find an accommodation or other services in a future.

Noncomplaining behavior (CR_Non) means that the guest has hotel experience they expect, willing to express positive things, good stories while staying at the hotel and tend to use the hotel as their first choice. Word of mouth (CR_Wom) means the hotel guest willing to sharing hotel information and recommend the hotel of their family,

colleagues, or group, encourage people to choose the hotel and become the spokesperson or hotel's ambassador in their social circle. For example, a guest that satisfied with the sense or feel experience they got while staying at the hotel tend to give positive review about the product/services. If the satisfaction continues every time they visit the hotel, it will raise the tendency to choose the hotel as their first choice to stay in the future. It is possible for them to tell their social group that the hotel is recommended because of the good experience they got. Thus, it is important to build the experience better than competitors because a guest can be a "hotel's ambassador" for their family or colleagues.

4.7. Research Contributions

4.7.1. Theoretical/Literature Contribution

This research provides current information to enrich the literature of CR in hotel industry as reference in academicians. This research analyzed the impact of variables involved, VCD, CE and CR in a research model by observing the phenomenon (from business perspective) and reviewing the existing literatures (from academic perspective). This research confirmed the importance of variables involved as part of hotel strategy to keep their loyal hotel guests visiting and using their products and services. With the lack of related research in hotel industry, this research's finding can fill in the gaps and provides insight on certain phenomena in hotel industry. This research also clarified that CR is more strongly impacted by VCD when it is supported by CE. business hotels, hotel management needs to strengthen the department concern in creating better VCD. It is to provide better CE that can improve the CR. Because of hotel industry is close to hospitality, so the service should be the main driver of customer retention.

4.7.2. Managerial/ Practical Contributions

From the business perspective, this research could provide insights for the hotel management in developing plan in enhancing their CR. In this research, CR in the hotel industry can be enhanced and impacted by VCD through CE in general.

Continuing the discussion from previous section, VCD can be used to communicate hotel programs or promotions to their customers to build the CE. Hotel management should put a concern to develop informative and engaging VCD, followed by entertaining and credible VCD. An informative VCD should be able to provide clear information, giving product knowledge about the hotel and promotion (educative), persuade the guests about the quality of hotel and able to stimulate the guests to revisit the hotel in the future. An engaging VCD should be make the guest as part of the hotel, feel fit with the hotel, put interest in the hotel and drive them to participate spreading the information.

A good VCD can enhance CE as well as the hotel management put attention to sense/sensory and feel/affective experience, followed by act/physical, think/cognitive and relational/social experience. Sense experience can be earned by raising the awareness about the hotel promotion, recognition of the product/services a hotel has, good sensory experience and positive impression while viewing the VCD in the hotel area. Feel experience can be supported by creating positive mood, emotion, impressing and giving great affect to the guests. Thus, the guest may remember of the hotel promotion in particular time.

When all experiences have been developed, it can influence the guest to have positive word of mouth, less complaint, plan to revisit in the future and being insensitive of price. Positive word of mouth by willing to recommend, encourage and sharing information of the hotel to others like the guests are willing to be spokesperson of the hotel. Noncomplaining behavior can be viewed from more feeling of satisfaction than dissatisfaction, telling positive reviews, having less complaint, and considering the hotel as the first choice.

VCD in the hotel area can be in printed and digital. VCD in printed output would make a cost of printing, but hotel management could alternate it by utilizing more their in-room tv or digital signages in the hotel area. Furthermore, the use of digital media can help the hotel management to distribute any VCD of hotel's marketing promotion in less costs. In-depth interviews are conducted by researcher with AH & FMS related to this research. They are two respondents who already filled out the

questionnaire of this research. From the interview, it can be summarized that a VCD which represents the hotel products/services will give better impression to them as guests. VCD is kind of a trigger or a door for them to know any updates about the hotel. Therefore, they can consider revisiting the hotel especially when the promotion/information well-fit to them. On the other hand, accessing hotel promotion through hotel's social media also can help them to get the information better while they are not in the hotel.

Depart from those insights, researcher indicates the hotel management also can be more creative in order to retain their existing customers. Considering social networks may be an additional idea to ensure VCD of the hotel is more accessible and hopefully it can give the experience even though the guests are not in the hotel.

