Chapter III
Research Methodology

3.1 Research Paradigm

Research paradigm is a frame of thinking that describes how research views the fact in the real world and how research treats the science or theory (Ramdhani and Ramdhani 2014). Paradigm is built on a set of principle that form a basis for seeing something. While according to Sugiyono, paradigm can be interpreted as a mindset that shows the relationship between variables then to be research which reflects the type and formulations of the problems that need to find the answer through the research, then theory will be used to formulates hypotheses, types and number of the hypotheses, and statistical analysis technique which will be used (Suharsaputra 2012).

This research used quantitative for the research paradigm for doing research using variables such as social media performance, social media marketing communication capability, social media product development capability and innovation capability. All the variable chosen basis on how the Florist most of them time doing the brand awareness and promotion in social media especially on Instagram.

3.2 Object of Research

In this research, writer take population of Florist in Java to find the answer of the hypothesis. There's no specific criteria for who going to answer the question but it will be good if the owner them self who answering. As this thesis want to see what's Florist business strategy when it come to their Instagram, writer will focusing to Florist Shop that active on the social media.

The target of this research are Florist Shops in Java. For the sample can be Florist shops owners itself or the staff who understand the business. Sampling technic using questioners and as for the sample size are 98 Florist .

3.3 Population and Sample

Population refers to the set or group of all units on which the findings of the research are to be applied (Shukla 2020). Population is the objective of the research study to generalize the study findings from the sample to the populations of interest (Majid 2018). Population not only one or two person but it can be call as the object and it can be counted as the whole characteristic that the subject and object have.

According to Sugioyono, sample still part of the population. Population can be mean for a specific organization or place (Suharsaputra 2012). Most of the time, the research starting point based on a population but as there is some of the limitation, author choose to have sample as the object to be studied.

For the sample can be random or specific. From the sample data then the author will doing generalization to population where the sample taken Sample also can be generated as object or subject that have quality and characteristic according to the author for the research and to make the conclusion.

This research using Cluster Sampling. According to Sugiyono quoting from Zamrodah, Cluster Sampling can be used for determinate sample if the research object or data source that very wide(Zamrodah 2016). The sample will be taken based on the sample area that has been choose and for this research is Java.

3.4 Variable Operation

This research using 4 variables that will be studied and used as material for the analysis. First social media marketing capability, second social media product development capability, third innovation capability and the last one social media performance :

Table 3.1 Operational Table Variable

No	Variable	Operational Definition	Dimension	Indicator	Scale	Reference

1	Social Media Marketing Communication Capability	The way the firm promoting their business with portfolios they have been made then post it on their Instagram with a attractive captions. picture or video		Themed Day (SMM1) Responsive towards Client (SMM2) Story Telling Caption (SMM3) Caption Narrative (SMM4) Communications Towards Customers (SMM5) Design (SMM6) Portfolios (SMM7) Copywriting (SMM8)	Very agree Agree Neutral Not Agree Strongly not Agree	**Tarsakoo & Charoensukmongkol (2020)**
2	Innovation Capability	Ability to create also exploring new idea from trend or maybe from a platform and able to have collaboration with a different product		Innovations (IC1) Innovative Idea (IC2) Leadership (IC3) Collaborations (IC4) Innovation is Culture (IC5) Trends(IC6) Marketing Innovations (IC7)	Very agree Agree Neutral Not Agree Strongly not Agree	**Bader K AlNuaimi Sanjay Kumar Singh Brian Harney (2021)**
				Have Speed Move on Creating (SMP1) Product Marketing (SMP2)	**Very agree Agree Neutral Not Agree**	

3	Social Media Product Development	A ability that refers the firm to create their product or following the customer's request		Competitors (SMP3)	**Strongly not Agree**	**Tarsakoo & Charoensukmongkol (2020)**
				Pricing Product (SMP4)		
				Product Launching (SMP5)		
				Monitoring (SMP6)		
				Service (SMP7)		
				Stay with Original Product (SMP8)		
4	Social Media Performance	Social media performance is the ability to perform a non-financial and financial either for the profit or the firm social media.	Financial	Increased Income (P1)	**Very agree Agree Neutral Not Agree Strongly not Agree**	**Andre Marchand Thorsten Hennig-Thurau (2019)**
				New Client(P2)		
				Revenue (P3)		
				Order Increased (P4)		
			Non-Financial	Engagement (P5)		
				Networking (P6)		
				A Dominant Tools (P7)		
				Brand Awareness (P8)		
				Instagram Ads (P9)		

(Source: Research Data Processing)

3.5 Data Collection Technique

Data collection technique this research will use is questioner. Data collection technique with questioner can be more efficient for the author for knowing the detail

for the measured variable that get used (Suharsaputra 2012). This technique also the best option when the responder in big number and can be anywhere.

The questionnaire will be made using Google Form to collect the respondent via online, which going to be share through social media like WhatsApp and Instagram. The question type is close question which mean the answer is limited for respondent to answer. Research using number scare for the measurement, number 1 for not strongly not agree, 2 for not agree, 3 for neutral answer, 4 for agree, and 5 for strongly agree.

3.6 Data Analysis Technique Pre-Test

3.6.1 Validation Test research Instrument

Validation test useful for measuring instrument eligibility for measuring what is measured (Ningtyas 2014). For able to get the validity from measurement tool for the variable, author have to see the correlation between the question. If the correlation up to 0,5 it can be counted as valid. Question. When the question already valid, can said that the consistencies internal or the question already have the same aspect. But the opposite way, if the question not valid, its mean this question contradictive with other question while doing the measurement for the same variable (Kriyantono 2014).

3.6.2 Reliabilities research Instrument

Reliability represent how consistency of a measurement. In a research, validity test its need to know the reliability level. Questioner in a research can be said reliable when the corresponded answer the question consistence from time to time. Reliability according hair is the consistency between multiple measurements of a variable. One form of reliability is test-retest. For the method, consistency measure between the responses for an individual at two points in time. Reliability coefficient also talk about assesses the consistency

of the scale with Cronbach alpha. Cronbach's Alpha is the mathematise formula for test reliability measurement (Hair et al. 2019) which a instrument can be said as reliable if have reliability or alpha as big as 0,6 or more.

3.6.3 Main-Test Data Analysis (Outer Model)

3.6.3.1 Outer Model Analysis

The Analysis Outer Model using program SMARTPLS 3.0 for measure validity and reliabilities. Test for validity and reliability test with Outer Model to show how every variable indicator have correlation with every variable laten (Hair et al. 2019)

a. Validity test

The purpose of Validity is measuring items to reflecting latency. The high score of validity will give more validity on the research (Hair et al. 2019).

1) Convergent Validity

The function Convergent Validity is to measure correlation positive with alternative size from the same construct. Convergent Validity measurement using average variance extracted (AVE). If the data sample have the high outer loading, it is showing the indicator on the research have a high correlation with construct. AVE score showing mean in every variable laten on the reflective model. Hope this research have AVE > 0,5 (Hair et al. 2019).

2) Discriminant Validity

In every scale for Discriminant Validity, the analysis must show the discriminant validity from all other scales (Hair et al. 2019). To measure the validity discriminant there should be cross-loading that showing the construct in this research have discriminant score.

b. Reliability test

For measuring the Reliability test to know how far the variable consist to keep have correlation each other.

1) Composite Reliability

   Composite Reliability can be alternative from Cronbach Alpha for measuring convergent validity as the reflective model. The composite reliability minimal is > 0,60 or > 0,7 (Setiaman 2021).

2) Cronbach's Alpha

   Result of Cronbach Alpha can describes the convergent validity. If the score > 0,8 mean Cronbach Alpha means have a good scale while 0,7 scale still can be accepted and > 0,6 can be said the scale explorative conclude on low estimate (Setiaman 2021).

3.6.3.2 Inner Model Analysis

Every analysis model structural there is some important metric, R^2, f^2, Q^2, and path coefficient.

a. R^2 (Coefficient Determinant)

   The purpose of R^2 is to test every variable laten endogen as the predication power from the structural model. The score from R-Squares is the result of regression linear test that can be explain of exogenous variable. Score of R^2 0,75 showing a powerful model; 0,50 score showing a moderate power; 0,25 showing a weak power, and if less than 0,25 it can be considered as no power in the model structural (Hair et al. 2019)

b. f^2 (Effect Size)

   Effect size f^2 can be seen as substantive influence to endogen construct. 0,3 mean have a big influence, 0,15 medium influence, 0,02 small influence, and under 0,02 show there no influence at all(Hair et al. 2019).

c. VIF (Collinearity)

Collinearity is the term to showing a variable have strong correlation with another variable. The purpose of collinearity test is to know if there any correlation or not. VIF score can show the model regression have multicollinearities symptom or not. If in the research the VIF score >5, the variable need to be remove from the measurement model because have multicollinearities symptom(Hair et al. 2019).

d. Path coefficient

Bootstrapping process is used in the measurement path coefficient to showing the influence every construct variable. Score test of t-statistic used for two tailed is t-value 1,65 with the level of signification 10%' then t-value 1,96 with level signification 5% and t-value 2,58 with signification level 1% (Hair et al. 2019).

3.7 Pre-test Result and Analysis

3.7.1 Validity Test

This is the analysis data pre-test for the validity test (Pearson Correlation and Loading) with using 17 sample:

Table 3.4 Operational Table Variable

No	Variable	Indicator	Pearson Correlation	Validation
1	Social Media Marketing Communication Capability	SMM1	0,676	VALID
		SMM2	0,654	VALID
		SMM3	0,705	VALID
		SMM4	0,753	VALID
		SMM5	0,714	VALID
		SMM6	0,648	VALID
		SMM7	0,711	VALID
		SMM8	0,450	NOT VALID

		SMM9	0,478	NOT VALID
2	Social Media Product Development Capability	SMP1	0.640	VALID
		SMP2	0,550	VALID
		SMP3	0,638	VALID
		SMP4	0,692	VALID
		SMP5	0,899	VALID
		SMP6	0,446	NOT VALID
		SMP7	0,534	VALID
		SMP8	0,546	VALID
3	Innovation Capability	IC1	0,857	VALID
		IC2	0,593	VALID
		IC3	0,853	VALID
		IC4	0,666	VALID
		IC5	0,798	VALID
		IC6	0,308	NOT VALID
		IC7	0,670	VALID
4	Social Media Performance	P1	0,651	VALID
		P2	0,752	VALID
		P3	0,718	VALID
		P4	0,670	VALID
		P5	0,687	VALID
		P6	0,676	VALID
		P7	0,842	VALID
		P8	0,393	NOT VALID
		P9	0,502	VALID

(Source : Research Data Processing)

Table above is the result of validity that consist of Pearson Correlation. The test are valid when the score indicator > 0,50 for every variable (Hair et al. 2019). In the table,

from 32 there is 8 indicator that not fulfil > 0,50 requirement. The 8 indicator SMM8,SMM9, SMP6, IC6, P8 and P9 will get re word for the main test.

3.7.2 Reliability Test

This is the data analysis pre-test for reliability test (Cronbach Alpha) Towards 17 sample:

Table 3.5 Operational Table Variable

No	Variable	Cronbach Alpha	Reliability
1	Social Media Marketing Capability	0,891	Reliable
2	Innovation Capability	0,783	Reliable
3	Social Media Product Development	0,816	Reliable
4	Social Media Performance	0,885	Reliable

Source : Research Data Processing

The research have high reliability if all variable Cronbach's Alpha >0,6 (Hair et al. 2019). From the result above, there can be see all variable in this research have Cronbach's Alpha > 0,6. The conclude is all variable measurement can be reliable dan can be continue for the main-test