CONSTRUCTING THE NOVELTY OF SME COLLABORATION PARAMETER IN GAMIFICATION BASED ON "SILATURRAHMI" CULTURE

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ABSTRACT

Collaboration is one of the essential strategies to maintain Small Medium Enterprise (SME) in facing the global market. However, there has been no agreed formulation of a collaboration model as a benchmark in previous studies, including the parameters used to measure collaboration performance. Weak motivation to collaborate is also an actual problem faced by SMEs. On the one hand, culture is one of the roots of individual thought and behavior as an essential aspect that influences the behavior of SME actors in running their business. Therefore, a culture-based SME collaboration model is proposed in the gamification platform to present a more adaptive model and increase collaboration motivation. This research is focused on building novelty parameters to measure collaboration performance as the primary basis for realizing collaboration gamification models. Based on the literature review, there are four principles of "silaturrahmi" culture that have similar characteristics with collaboration, including Relationship Building (X1), Reciprocal Sustainment (X2), Reciprocal Assistant (X3), and Active Support (X4). The test was started by collecting questionnaire data from 63 respondents who were the movers of SMEs. The theme of the question is about the influence of the four principles of silaturrahmi on collaboration. Data analysis was carried out using the linear regression method and all test requirements (validity, reliability, normality, linearity, heteroscedasticity) to measure the influence of the four principles of "silaturrahmi" (Variable X1, X2, X2, X4) on collaboration (Variable Y). The results show that four variables have met all test requirements for linear regression analysis, resulting in a significance value (sig.) < 0.05, t value > t table, the value of the regression coefficient (B) is positive. It means that the four variables have a positive effect on collaboration because all hypotheses are accepted. The four can be a parameter to measure collaboration performance with the proportion of the role of each variable that can be considered from the R-Square value. Thus, these four parameters can be used as the primary basis for building a collaboration gamification model as a reference for measuring collaboration. To implement the four parameters, they were included in the collaborative gamification mechanics material.

Keywords: *Collaboration Parameters, Silaturrahmi Culture, Collaboration Gamification, SME*

1. INTRODUCTION

The existence of Small Medium Enterprise (SME) is an essential element of the economy of developing countries[1],[2],[3],[4]. Some of the challenges must be solved in facing the global market in the era of disruption and technological development [2],[5],[6],[7],[8]. One of the challenges is the low motivation in collaborating [9],[2]. Collaboration is essential for SMEs, considering its role in generating a sense of togetherness and ownership to positively contribute to the continuity of common goals in the business [10]. Several studies have been carried out, including

creating the idea of symbiotic partnerships in the industry [11], creating a Local Open Innovation (LOI) model by facilitating activities related to collaborative innovation[12], involving collaboration in Enterprise Resource Planning and Supply chain activities and placing it as an essential element of their activities [13],[14] Research [9] has also criticized the existence of studies on collaboration that still lack interdisciplinary involvement, which causes its development to be limited. Meanwhile, research [15] initiated the concept of collaborative development involving culture.

Following the study [15], it can be proposed to involve one of the assimilated cultures in the collaboration model. It needs to be done considering that culture is one of the primary thoughts of individuals in thinking and behaving [10] and has been shown to influence the behavior of SME actors in managing their business [10], [2],[16]. There is a "Silaturrahmi" culture that has the characteristics of fostering a sense of togetherness and ownership [16]. "Silaturrahmi" is one of the cultures originating from Islam that aims to build positive relationships to strengthen a sense of brotherly affection and feelings of mutual help, respect, and trust [17], [18], [19], [20]. The principle of silaturrahmi is to expand one's relationship for collaboration based on the Islamic value of goodwill and fellowship and the ability to expand the bonds of friendship to strengthen brotherhood and mutual solidarity [21].

Therefore, "Silaturrahmi" can be adopted within the framework of SME collaboration, considering the principle of encouraging individuals to take the initiative to establish and maintain positive relationships with others on an ongoing basis which is following the principle of collaboration. Based on the literature review, 4 "Silaturrahmi" principles have similar characteristics with the collaboration principle, namely: Relationship Building, Reciprocal Sustainment, Reciprocal Assistant, and Active Support [22], [17], [23], [24], [18]. Meanwhile, few studies define and analyze the proper parameters to measure collaboration performance precisely [15].

Therefore, this study proposes that these 4 "Silaturrahmi" principles are assimilated into parameters to measure collaboration performance.

In answering the problem of the weak motivation of SME actors to collaborate, an approach that can generate motivation and increase retention in collaboration is needed. There is a gamification approach that is currently being developed. The gamification approach has become part of the lifestyle of today's society and aims to increase user participation and motivation [25], [26], [27], [28] and try to influence user behavior [29]. Gamification is the process of imitating a fun and even addictive gameplay atmosphere while players complete non-game tasks [25], [26]. Gamification seeks to bring together functionality and engagement to increase functionality, productivity, and satisfaction, create more experiences, drive behavior, and generate positive business impact [30]. Gamification has three main components consisting of Mechanics, Dynamics, Aesthetics where each of these components cannot be separated because the mechanical element (M) will create the dynamics (D) of the game and create an aesthetics atmosphere (A) for the feelings experienced by the players [30], [31], [32]. Therefore, this research is the initial stage that becomes the main foundation of a series of activities to build a collaboration model in the gamification platform. This research focuses on constructing collaboration parameters based on the "Silaturrahmi" culture to test collaboration performance, which will be implemented in the gamification mechanics of collaboration.

2. RESEARCH METHOD

Figure 1 illustrates the research methodology which is divided into 2 groups of activities, firstly determining the candidate parameters for collaboration and secondly, testing the candidate parameters with linear regression analysis.
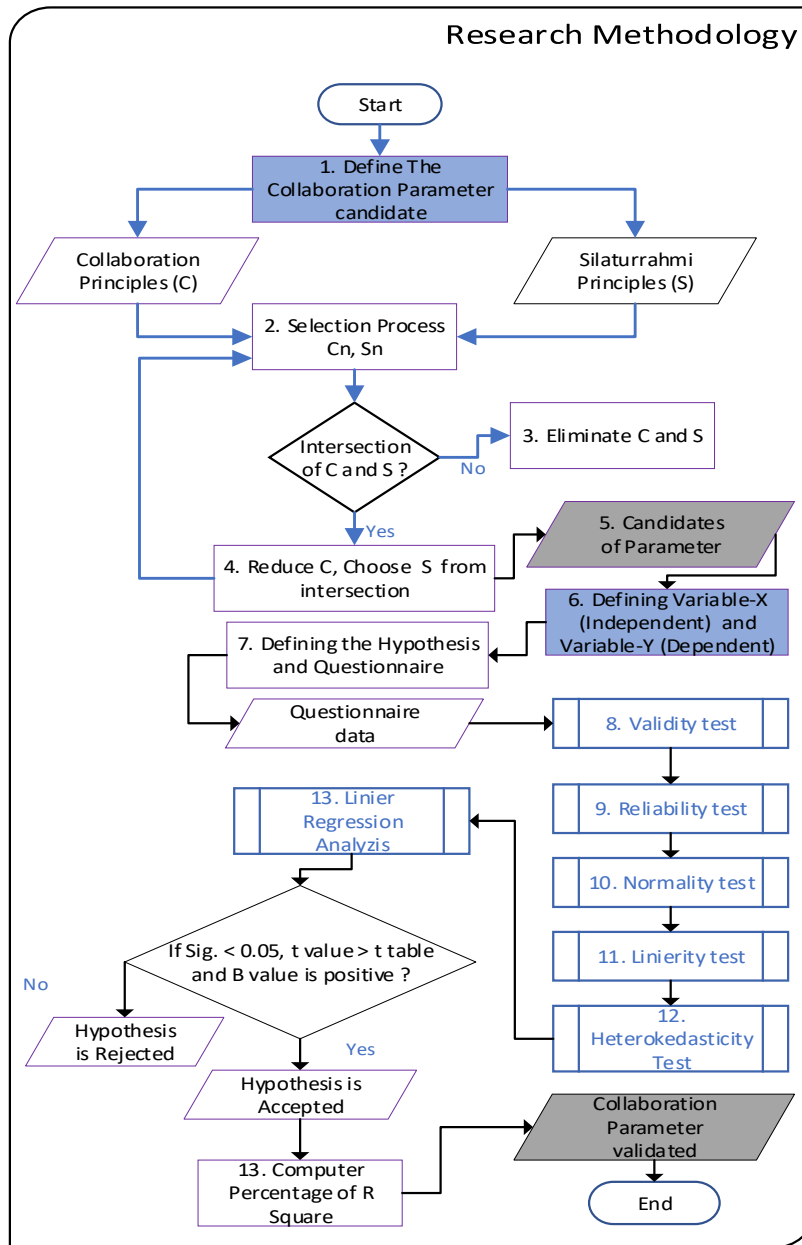
Figure 1. Research Methods

2.1 Defining The Collaboration Parameter Candidate

The research methodology (Fig. 1) begins with defining the parameters. The first step is to identify candidate collaboration parameters. There are collaboration principles, collaboration criteria [33], [34], [35] and silaturrahmi principles [24], [22], [17], [23], [18] which are involved to produce collaboration parameters. The detailed steps are as follows:

1. Define the principle of collaboration which consists of two groups: the principle of collaboration (denoted C) and the principle of silaturrahmi (denoted S).

2. The selection process is carried out by looking for similarities in meaning based on the literature review, which focuses on the principle of "Silaturrahmi" as the observed principle.

3. Each principle is processed according to the following criteria:

a) if there is a similarity/intersection between C and S, then C is reduced, and S is recorded as a candidate parameter,

b) if there is no intersection, then C or S is eliminated.

The results of the candidate collaboration parameters are prepared for the validation and weighting test phase, wherein the linear regression analysis phase is described in more detail.

2.2 Validating The Collaboration Parameter

This step determines these candidates to be the parameters of collaboration by selecting the selected candidates who influence collaboration. The test was carried out by defining hypotheses and questionnaire instruments aimed at respondents from SME practitioners who have at least five years of experience and are active in SME networks. The formulation of the hypothesis is to state how the candidate parameter (independent variable / X) has a significantly positive effect on collaboration (Dependent variable / Y).

The data were processed using the linear regression method [36], [37]—next, testing the validity and reliability of the data. The validity test is used to determine the level of accuracy in carrying out its function as a measuring instrument. In contrast, the reliability test is used to measure the level of accuracy, and the size of the measuring instrument can be trusted and relied on in the measurement process [36], [37]. After the validity and reliability values are generated, normality and linearity tests are carried out to see whether the data obtained from the sample are usually distributed. In contrast, the linearity test determines whether the relationship between variable X and variable Y is linear or not [36], [37]. The next step is a heteroscedasticity test that ensures that the linear regression model occurs when there is an inequality of variance from the residuals of one observation to another observation [36], [37].

Next, is to do a multiple linear analysis test on variables X and Y which aims to find out whether the X variable affects Y. There are requirements in the linear regression test:

1. Ensure that the questionnaire data has met the requirements of linear regression: validity, reliability, normality, linearity, and heteroscedasticity tests.
2. Perform linear regression analysis to test the hypothesis if the value of Sig. <0.05, t value > t table and regression coefficient (B) is positive, so X has a significant positive effect on Y (hypothesis is accepted), if it has no effect, the hypothesis is rejected.
3. If X affects Y, then proceed to find the magnitude of the effect of X on Y by looking for the correlation coefficient, then produce a sequence of

X parameters that affect Y in order based on the size of the effect.

3. RESULT AND DISCUSSION

3.1 The Parameter candidates Result

Based on the literature review, five principles of collaboration have been established that have been the basis for consideration for SMEs to collaborate [33], [35], [34] The principles of silaturrahmi have also been defined into four principles based on the study of Islamic laws, which are then assimilated into the culture of countries with a majority Muslim population [23], [18]. The two groups were taken from the slices to be used as a candidate for collaboration parameters. The method used is to examine the similarities of each principle to form an intersection resulting from the meeting of the two groups of principles. Suppose there is a similarity in the characteristics of each item from the two principles. It is recorded as a candidate parameter. Table 1 describes the collaboration principle, while Table 2 describes the silaturrahmi principle. Fig.2 describes the process and results of the intersection of the two groups of principles, and Table 3 describes the reference for each intersection of candidate collaboration parameters.

Table 1. Collaboration Principle

No	Name of Principle	Definition	Ref.
1	The closeness of relationship	Considering the relationship closeness between SMEs and their partners	[33]
2	Time of Collaboration	Considering the length of time that has been spent in collaborating	[33]
3	Positive Dependency	Considering the stimulation of a positive sense of dependence to achieve common goals	[35]
4	Social Activity	Considering how much SME activities in socializing	[35]
5	Group Activity	Consider how satisfied SMEs are part of the group's efforts to achieve goals	[35]

Table 2. Silaturrahmi Principle

| No	Name of Principle	Definition	Literature
1	Active Support	consider how many active mutual support actions SME actors take in the collaborative process	[22], [17], [23], [24], [18]
2	Reciprocal Sustainment	Considering the strength of mutual protection between colleagues in the scope of collaboration	[22], [17], [23], [24], [18]
3	Reciprocal Assistance	Considering the strength of reciprocal assistance between colleagues in the scope of collaboration	[22], [17], [23], [24], [18]
4	Relationship Building	Considering the strength of relationship between colleagues within the scope of collaboration	[22], [17], [23], [24], [18]
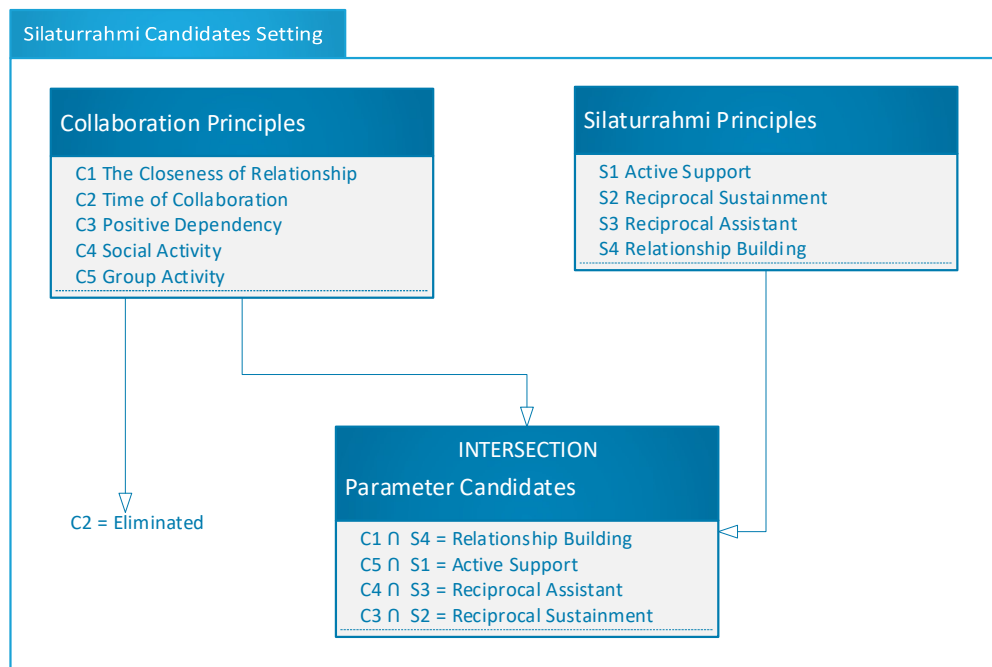
Figure 2. Process of Parameter Candidates Intersection

Table 3. Literature Review of Parameter Candidates Intersection

Collaboration Principles	"Silaturrahmi" Principles	Literature
The Closenest of Relationship	Relationship Building	[33],[22], [17], [23], [24], [18]
Positive Dependency	Reciprocal Sustainment	[35],[22], [17], [23], [24], [18]
Social Activity	Reciprocal Assistant	[35],[22], [17], [23], [24], [18]
Group Activity	Active Support	[35], [22],
		[17], [23], [24][24], [18]

From the intersection results between the two groups of collaboration principles and the "Silaturrahmi" principle, the candidate parameters are determined according to the similarity of definitions. The principle of friendship is as follows: "relationship building" has similarities with "The closeness of relationship," "Reciprocal sustainability" has similarities with "Positive Dependency," "reciprocal assistant" has similarities

with "Social Activity" and "Active Support" has similarities with "Group Activity." A collaboration principle is eliminated, namely "Time of Collaboration," considering that it does not have a similar definition.

3.2 The Validated Collaboration Parameters

3.2.1 *Hypothesis, Variable Operationalization and Sampling*

Parameter candidates have been processed to the testing and validation stage to get validated collaboration parameters. The declared variables consist of 4 independent variables: X1 = Relationship Building, X2 = Reciprocal Sustainment, X3 = Reciprocal Assistant and X4 = Active Support, meanwhile, Dependent Variable Y = Collaboration. Definition and operational variables and are described in Figure 3 with 4 hypothesis statements as follows:

H1: Relationship Building (Variable-X1) has a significant positive effect on Collaboration (Variable-Y),

H2: Reciprocal (Variable-X2) Sustainment has a significant positive effect on Collaboration (Variable-Y),

H3: Reciprocal Assistant (Variable-X3) has a significant positive effect on Collaboration (Variable-Y),

H4: Active Support (Variable-X4) has a significant positive effect on Collaboration (Variable-Y).

In operational variables, indicators [33], [22], [17], [23], [24], [18], [35] have been described which are used to explore questionnaire data according to each candidate parameter.
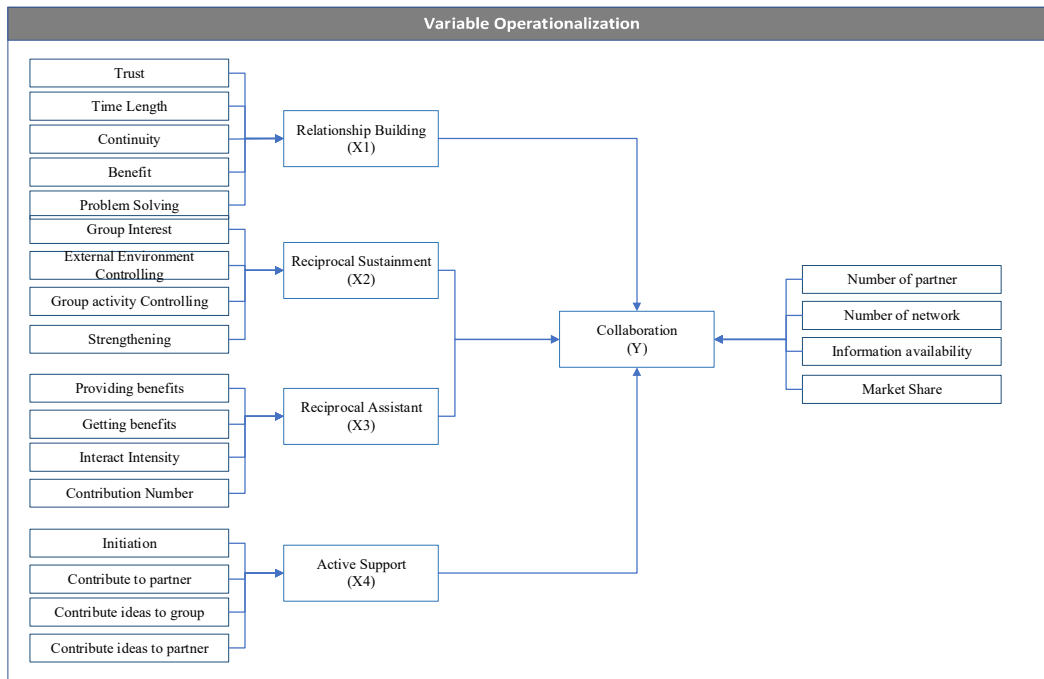

Figure 3 Variable Operationalization

The data obtained are in ordinal form, with a Likert scale measuring 5 answer choices with each score value, namely: 1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree and 5 = Strongly Agree [38], [39]. Determination of the sample using the formula Slovin [40], [41]

$$n = \frac{1}{1+N e^2},$$ (1)

where n = Sample Number, N = Population Number, e = Deviation standard. So, in 76 populations, 64 samples were produced as respondents.

3.2.2 *Validity Test*

Based on the validity test results on each question item in the questionnaire, a significant (2-tailed) value and an *r*-value (Pearson Correlation) have been produced, described in Table 2. Total sample (N = 64) with a significance of 5% where df = N-2, then the value of df = 64 -2 = 62 and the degree of alpha = 0.05, therefore in the distribution table the value of r

table = 0.246. Based on the validity test requirements that the questionnaire is considered valid if the value of sig < 0.05 and the value of Pearson Correlation > r table [42], [43], then the results of the validity test on each item of the questionnaire question have met the requirements and can be declared valid (Table 4).

Table 4 Validity Test Result

Variable	Pearson Correlation	Sig. (2-tailed)	Validity
X1 (Relationship Building)			
X1.1 (question-1)	0.761	0.00	Valid
X1.2 (question-2)	0.717	0.00	Valid
X1.3 (question-3)	0.767	0.00	Valid
X1.4 (question-4)	0.709	0.00	Valid
X1.5 (question-5)	0.666	0.00	Valid
X2 (Reciprocal Sustainment)			
X2.1 (question-6)	0.814	0.00	Valid
X2.2 (question-7)	0.775	0.00	Valid
X2.3 (question-8)	0.668	0.00	Valid
X2.4 (question-9)	0.722	0.00	Valid
X3 (Reciprocal Assistant)			
X3.1(question-10)	0.776	0.00	Valid
X3.2 (question-11)	0.797	0.00	Valid
X3.3 (question-12)	0.760	0.00	Valid
X3.4 (question-13)	0.817	0.00	Valid
X4 (Active Support)			
X4.1 (question-14)	0.799	0.00	Valid
X4.2 (question-15)	0.738	0.00	Valid
X4.3 (question-16)	0.782	0.00	Valid
X4.4 (question-17)	0.775	0.00	Valid
Y (Collaboration)			
Y1 (question-18)	0.786	0.00	Valid
Y2 (question-19)	0.806	0.00	Valid
Y3 (question-20)	0.714	0.00	Valid
Y4 (question-21)	0.750	0.00	Valid

3.2.3 Reliability Test

This test uses the Cronbach Alpha reliability test to measure the stability and consistency of respondents in answering questions related to questions that are the dimensions of a variable and are arranged in a questionnaire form [42]. The reliability test can be carried out simultaneously on all questions. Based on the reliability test requirements that the questionnaire is considered reliable if the Cronbach Alpha value > 0.06 [42], then the reliability test results on the questionnaire have met the requirements so that it is declared reliable (Table 5).

Table 5. Reliability Test Result

Variable	Cronbach Alpha	Reliability
X1 (Relationship Building)	0.757	Reliable
X2 (Reciprocal Sustainment)	0.729	Reliable
X3 (Reciprocal Assistant)	0.786	Reliable
X4 (Active Support)	0.760	Reliable
Y (Collaboration)	0.737	Reliable

3.2.4 Normality Test

This test has used the Kolmogorov Smirnov normality test, which assesses the data distribution in data group or variables that are normally distributed or not by testing whether the residual value of the regression is normally distributed or not. A good regression model has a customarily distributed residual value [43]. Based on the requirements of the normality test that the questionnaire is considered generally distributed if the significance value is > 0.05 [42], [43]. The normality test in this study resulted in a significance value of 0.200, and it can be stated that the research data were normally distributed.

3.2.5 Linierity Test

This study has conducted a linearity test aimed at testing whether the relationship between the independent variable (X) and the dependent variable (Y) is linearly significant [42], [43]. Based on the requirements of the linearity test, the variable X and variable Y are considered to have a significant linear relationship if the significance value is > 0.05, and the f value is < f table [42], [43]. Therefore, in the linearity test in this study, the four X variables have a significant linear relationship with the Y variable (Table 6).

Table 6. Linierity Test Result

Relationship	Sig.	F	F Table	Linierity
X1 → Y	0.166	1.563	(7;75) 2.20	Linier
X2 → Y	0.224	1.493	(5;57) 2.37	Linier
X3 → Y	0.74	2.140	(5;57) 2.37	Linier
X4 → Y	0.148	1.595	(8.54) 2.10	Linier

3.2.6 Heterokedasticity Test

To investigate heteroscedasticity, the Glejser test was performed to see if there is an inequality of variance between the residual values of one observation and the residual value of another observation in the regression model. Homoscedasticity is defined as the assumption that the variance between the residual values of one observation and the residual value of another observation is constant. Heteroscedasticity occurs when the residual value of one observation differs from that of another. Heteroscedasticity and homoscedasticity should not be present in a good regression model. [42], [43]. The regression model does not have heteroscedasticity (homoscedasticity) if the value of Sig > 0.05 and the results of the Glejser test that have been carried out can be stated that in the tested regression model, there is no heteroscedasticity (homoscedasticity) (Table 7).

Table 5. Heterokedasticity Test Result

Variable	Sig.	Heterokedasticity
X1 (Relationship Building)	0.500	Homokedasticity
X2 (Reciprocal Sustainment)	0.552	Homokedasticity
X3 (Reciprocal Assistant)	0.773	Homokedasticity
X4 (Active Support)	0.165	Homokedasticity

3.2.7 Linier Regression Analysis

Based on the results of the linear regression requirements test and the classical assumption test that have been carried out, it can be concluded that the data to be analyzed has met all the requirements. The data is valid, reliable, normally distributed, the regression model has a linear relationship, and there is no heteroscedasticity. Next, the linear regression analysis process is carried out with the requirement that the variable X is considered to have a significant positive effect on the variable Y if the value of Sig < 0.05, t value > t table, and the coefficient regression value (B) is positive [42], [43]. The total sample (N = 64) with a significance of 5% where df = N-2, then the value of df = 64 -2 = 62 and alpha degree = 0.05, and in the distribution table the value of r table = 0.246. Therefore, the results of the linear regression analysis test that has been carried out have fulfilled these requirements, and it can be stated that four X variables have a significantly positive effect on the Y variable so that all hypotheses are accepted (Table 7).

Table 7. Hypothesis Test Result

Hypothesis	*Sig.*	*t* value	(B)	Conclusion
H1- Relationship Building (RB) affects Collaboration	0.005	2.882	0.331 (Positive)	H1 Accepted
H2- Reciprocal Sustainment (RS) affects Collaboration	0.000	4.050	0.638 (Positive)	H2 Accepted
H3- Reciprocal Assistant (RB) affects Collaboration	0.000	4.746	0.683 (Positive)	H3 Accepted
H4- Active Support (AS) affects Collaboration	0.000	6.230	0.661 (Positive)	H4 Accepted

Furthermore, to determine the magnitude of the influence of variable X on variable Y using a formula to find the coefficient with the formula (2):

$$R_{xn} = Beta_x \times Coeficient \times 100\%$$
(2).

The percentage value of the weight of the influence of each parameter described in Table 8. The results show that Active Support has the highest influence weight for collaboration, while the second place is Reciprocal Assistant, the third is Reciprocal Sustainment and the last is Relationship Building.

Table 8. Coefficient Correlation Test Result

Parameter	Beta Value	Coefficient	Weight
A1 - Relationship Building	0.344	0.344	11.8
A2 - Reciprocal Sustainment	0.457	0.457	20.9
A3 - Reciprocal Assistant	0.516	0.516	26.6
A4 - Active Support	0.620	0.620	38.5

3.3 Discussion

The linear regression analysis results produced four collaboration parameters: Relationship Building, Reciprocal Sustainment, Reciprocal Assistant, and Active Support. The results of this study can answer the importance of studies that build and develop a collaboration model suitable for SMEs [9],[15]. Specifically, the results of this study are the establishment of reference parameters for measuring collaboration performance adapted to the community's culture. For further research, the four parameters that have been built can be used as the primary material in the preparation of the collaboration model by implementing them in the collaborative gamification mechanics material.

From the results of linear regression analysis on candidate collaboration parameters, two important knowledges are discussed in this study. Active support has the highest weight value (38.5%), where this parameter is related to the active activities of players providing assistance to partners without having to be asked first, and closely related to the concern of each player for the progress of their partners, as well as the size of each active role each player takes the initiative to provide assistance for mutual progress [22], [17], [23], [24], [18], [35]. Therefore, more activities related to Active Support are recommended to improve collaboration performance.

While the smallest weight is the parameter "Relationship building" (11.8%) where this parameter relates to the closeness and strength of the relationship between collaboration partners [33], [22], [17], [23], [24], [18]. From the results of this test, it can be interpreted that there is a lack of awareness of building relationships between collaboration partners due to several things that still need to be studied in the future. However, what can be pursued in this research is to anticipate activities related to Relationship Building by prioritizing the convenience of establishing relationships with partners and providing information intrinsically and extrinsically about the benefits of Relationship Building.

Based on the issues raised in this study, the collaboration parameters have been generated from the assimilation of "Silaturrahmi" culture and can be used to measure collaboration performance. Meanwhile, to increase motivation in collaborating, the parameters need to be implemented in a gamified system with a gamification approach by including them in the scenario of collaboration gamification mechanics. It is hoped that this research will produce a more attractive and adaptive collaboration model.

4. CONCLUSION

Based on the testing and analysis of the data from this study, it can be concluded that the "Silaturrahmi" culture can be assimilated into the SME collaboration model, considering that it has a relationship with collaboration characteristics. Four "Silaturrahmi" Principles that have been validated into collaboration parameters include: Relationship Building, Reciprocal Sustainment, Reciprocal Assistant and Active Support based on a series of tests and analysis of relevant data can be used as parameters to measure collaboration performance. The test results can also be seen as the weight of the influence of each parameter on collaboration. So that it can be used as a consideration to determine the priority of activities related to these four principles in supporting collaboration, and this condition is expected to optimize the results of collaboration performance. In order to optimize the performance of the resulting collaboration parameters, the four validated parameters are included as a reference for the direction of the collaboration gamification mechanics scenario.

This research has not explored how big the role of each parameter in building collaboration motivation. For this reason, an approach or method is needed that can be used as a criterion for measuring motivation more specifically and a method that can rank parameters based on motivation criteria. It is useful for developing activities in realizing increased motivation to collaborate so that it is more targeted. Respondents in this study were still limited to SME movers. For that, in future research, it is necessary to conduct experimental tests for SME respondents in general with a larger number of samples. This research is still being conducted in a developing country (Indonesia) based on the literature review. The collaboration parameters built can be tested in other developing countries or the wealth countries.

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Appendices

Appendix 1. Operationalization of Variable

Variable	Indicator	Source
Relationship Building (X1)	1).Trust / Strong trust with partners 2).Time Length / The length of time to collaborate 3).Continuity 4).Benefit / Benefit from each other 5).Problem Solving / Solving problems together	[33], [22], [17], [23], [24], [18],
Reciprocal Sustainment (X2)	1).Group Interest / Play an active role in group interests 2).External Environment Controlling/ Take an active role in monitoring the external environment that affects group interests 3).Group activity Controlling/ Actively controlling group programs 4).Strengthening/ Strengthening each other	[33].[22], [17], [23], [24], [18]
Reciprocal Assistant (X3)	1) Providing benefits / The number of benefits 2) Getting benefits 3) Interact Intensity 4).Contribution Number / The number of contributions to solving partner problems and team program problems	[33], [22], [17], [23], [24], [18]
Active Support (X4)	1) Initiation / Number of aid initiatives 2) Contribute to partner / The number of roles to partner needs 3) Contribute ideas to group / The intensity of giving ideas for group programs 4) Contribute ideas to partners / The intensity of giving ideas to partners	[33],[22], [17], [23], [24], [18]

Variable	Indicator	Source
Collaboration (Y)	1) Number of partners / Increased number of partners 2) Number of network / Network upgrade 3).Information availability / Improved information availability 4) Market Share / Increase in market share	[33], [22], [17], [23], [24], [18]

Appendix 2. Instruments of Collaboration Parameter with Five Scale of Answer.

Variable	Question
Relationship Building (X1)	1.In collaborating, trust in partners is the central aspect. 2.The length of time in collaborating determines the strength of the cooperation. 3.Continuity of cooperation with partners is one of the guarantees for successful collaboration. 4.One of the goals of collaborating is wanting to take advantage of each other. 5.The purpose of the collaboration is to solve common problems
Reciprocal Sustainment (X2)	1.One of the tangible forms of mutual care in collaborative activities is to play an active role in carrying out group interests. 2.One of the tangible forms of mutual care in collaborative activities is to play an active role in monitoring the external environment that can affect the interests of the group. 3.To keep each other in collaboration, each individual needs to actively control the development of the joint program that is being implemented. 4.One of the tangible forms of mutual care in collaboration is the commitment to mutually reinforcing one another.
Reciprocal Assistant (X3)	1.One of the tangible manifestations of mutual assistance activities is the many benefits in the form of ideas and solutions. To partners and teams. 2.One of the tangible manifestations of successful collaboration is the many benefits that each individual feels in ideas and solutions during the

Variable	Question
	collaboration.
	3.One of the tangible manifestations of efforts to help each other is with the intensity of interaction / socializing in the team.
	4.One of the tangible manifestations of mutual assistance activities is to contribute to solving problems experienced by partners and problems from joint programs.
Active Support (X4)	1.One form of providing active support in collaborating is the many initiatives that offer assistance to partners and teams.
	2.One form of providing active support in collaborating is that the number of roles/contributions to partners does not have to benefit themselves.
	3.One form of providing active support in collaborating is to provide many ideas for group needs.
	4.One form of providing active support in collaborating is to provide many ideas for partners' needs even though it does not have to benefit themselves.
Collaboration (Y)	1.The success of collaboration can be determined by increasing the number of partners.
	2.Collaboration success can be determined by increasing the number of collaboration networks
	3.The success of collaboration can be determined by increasing the availability of information for SME actors.
	4.The success of collaboration can be determined by increasing the number of market shares.