CUSTOMER MOTIVATION ANALYSIS ON RETAIL BUSINESS WITH OCTALYSIS GAMIFICATION FRAMEWORK

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ABSTRACT

Small and Medium Enterprises (SMEs) are an important component of the country's economy, but there are still many challenges to be resolved. Some of the common problems of SMEs included limited marketing and service management problem. In the service management problems, it is also important to examine how the customer impression of the services and products offered, therefore, it can be evaluated how the product opportunities are purchased. Adopting the point of view of the gamification octalysis framework, that a behavior occurs because of one or more core drives from within the individual. For this reason, it is necessary to explore any encouragement that affects customer behavior, therefore, the service level can be evaluated which ultimately aims to increase sales. From the studies conducted, the gamification model can increase individual retention and motivation towards the object. Then, the gamification octalysis framework is used in this study to evaluate how the influence of a retail Small Medium Enterprise services on customer motivation. The Likert scale analysis result has concluded that 4 drives are at the "Very High" level and the remaining are at the "High" level, while the range scale consists of "Very low", "Low", "High", and "Very High". While the average value of the octalysis test scale is 8.4 from the lowest value range of 1 and the highest is 10. The recommendations of this study are in general the impression and motivation of customers towards retail Small Medium Enterprise services is high enough, therefore, that companies need to maintain service. Based on the results of this study, it can be recommended that customer motivation analys can use gamification, especially the Octalysis framework to find out which core drives need to be improved or maintained in more detail.

Keywords: *Gamification, Small Medium Enterprise, Customer Motivation, Octalysis Framework*

1. INTRODUCTION

SME is one of the pillars of the country's economy, but there are still many challenges to be resolved [1], [2] [3]. Some of the SME problems include data mining, customer service and limited marketing[2], [4], [3]. Studies on extracting SME data that aim to help companies make strategic decisions have been carried out with various methods and approaches including recommendation systems [5], datamining [1], expert system [6] and others. Meanwhile,

studies of customer service and marketing have been widely conducted and generally investigate the factors that influence customer loyalty including: personality and customer hedonistic behavior [7], [8], [9], company empathy for customers[10] , and company innovation towards service to customers[11]. However, there are still few studies that had been observed how customers motivated to the service, they have a loyal attitude towards the company or vice versa, and these problems is possibility to be a research opportunity. Based on the

importance of analyzing customer behavior and motivation towards company services, it is necessary to explore every drive that affects them. Therefore, new methods or innovations can be carried out in evaluating behavior and motivation with methods that can measure core drives of the customer. Several studies have been conducted from several points of view in order to evaluate customer motivation and satisfaction. Several studies have analyzed that customer motivation depends on product quality[12],[13] price, place and promotion[13]. Although product quality is the most influencing customer motivation, product brand also influences it [14]. However, of all the studies that have been conducted, none has investigated how the types of encouragement from customers themselves contribute to motivating them to be loyal to the company. This is important to determine the right strategy in taking steps for improvement or product development. For this reason, this study focuses on analyzing customer motivation, for example by exploring how customers are interested in shopping, customer impressions of service, or their interest in the products offered so that it can be evaluated how product opportunities are purchased.

The results of a questionnaire distribution survey that has been conducted with the target SME in the retail sector in East Java, Indonesia and taken a sample of 106 respondents representing the population using the Slovin formula[15], has produced an analysis that describes customer impressions of company services. In the questionnaire, customers are allowed to choose more than one option. Table 1 and Figure.1 describe the impression of customers who are dominated by "cheap price" at 65.06%, and "affordable place" at 59.43%. These two options have a large percentage of them because they are the types of options that people are generally likely to be attracted to. Meanwhile, the percentage of customers' impression of services tended to be small, with "a lot of souvenirs" by 2.83%, "a lot of discounts" of 7.55%, "convenient place" of 27.36%, and "Ease of searching goods" of 23.58%. This data distribution has informed that customer impressions of service-related programs tend to be less than optimal for customers.

Table 1: Percentage of Customer Impression

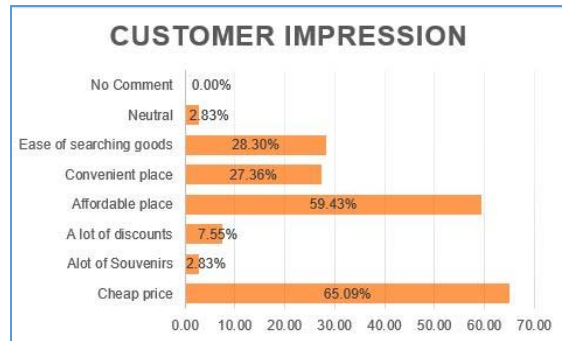| No	Options	%
1	Cheap price	65.09
2	A lot of Souvenirs	2.83
3	A lot of discounts	7.55
4	Affordable place	59.43
5	Convenient place	27.36
6	Ease of searching goods	28.30
7	Neutral	2.83
8	No Comment	0.00

Figure 1: Graph of Percentage of Customer Impression.

Meanwhile, Table 2 and Figure.2 described the percentage of customer expectations for the company. In the questionnaire, customers were allowed to choose more than one option, while five questionnaire questions lead to the service program. All options have value and are almost the same from 19.81% to 23.58%. The distribution of this data can be analyzed that customers expect the service improvement programs offered, but the percentage is not too large. This data is not directly proportional to the "Customer impression" data which significantly describes the customer impression of customer services, which means that current customer service is less than optimal. For this reason, deeper research is needed, one of which is to explore customer motivation in detail and the perceived impression of customer service with a better method or approach.

Table 2: Percentage of Customer Expectation

No	Options	%
1	Goods availability	22.64
2	Member card availability	19.81
3	Program availability for customer motivation	20.75
4	Discount availability	33.02
5	Ease of searching goods	23.58
Average		23.96

Figure 2: Graph of Percentage of Customer Extectation

One approach that can be used to explore customer motivation is gamification. Various studies, implementing and developing gamification are not only aimed at increasing motivation and user retention, but it is used to measure the strength of motivation[16],[17]. Gamification is an approach that comes from gaming techniques and thinking to solve non-game field problems which generally aims to encourage and motivate users to be involved in gamified systems[18],[19]. Many developments in various fields involve gamification, including the fields of education[16],[17], health[20], business[21]. There are several gamification frameworks including MDA (Mechanics Dynamics Aesthetics), MDE (Emotional Dynamics Mechanics), SGD (Sustainable Gamification Design), and Octalysis [22],[23]. In particular, octalysis has a mechanism to measure user motivation by observing the "core drives" behind the action [22],[23].

Octalysis was created the idea that the "core drive" is the background for a person to do activities [24], [25]. In Octalysis there are 8 core drives, which are grouped into two groups: the right brain which characterizes creativity, and the left brain which characterizes analytical thinking. Octalysis also divides the 8 core drives into 2, namely the upper half of the White-hat and the lower half of the Black-hat [24], [25], [22]. Octalysis has a mechanism scale and a test scale to measure motivation through "8 core drives", therefore, octalysis can measure customer motivation in more detail. The evaluation results are expected to present recommendations to SME managers to evaluate and improve the service system to customers.

2. LITERATURE REVIEW

2.1 Customer Motivation

The level of customer motivation is closely related to the level of customer loyalty [7],[8],[9]. Many studies that examine customer loyalty generally investigate the factors that influence customer loyalty to the company. Some of the factors that affect customer loyalty include: The first is the personality and behavior of customer hedonism, where this behavior has an effect on increasing the quantity of shopping[7],[8],[9]. Second, company empathy to customers affects customer loyalty[10]. And the third is the company's innovation on customer service affects customer loyalty[11].

2.2 Gamification.

Gamification is a game-thinking technology approach to improve the performance of non-game systems by increasing user motivation and retention[22], [19],[18]. Gamification mechanisms focus on solving the problem of increasing user acceptance of the system, participation, retention and user motivation[22], [19],[18]. Of the four existing frameworks, MDA (Mechanics, Dynamics, Aesthetics) is the basis of the gamification framework[26].
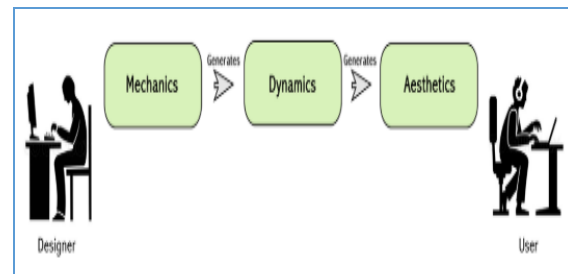

Figure 3: MDA Framework [22]

Figure. 3 describes each of the basic components of gamification. Mechanic (M) is a series of rules that can be an algorithm that regulates the player to perform an action, usually in the form of components such as genre, rating, level, and goal [27], [26], [28]. Dynamics (D) is the result of the interaction between the mechanics and the players in the game. The dynamics determine what happens to the player when the mechanism works. If the mechanics are not visible to the player, but can direct the player to the right path of play, dynamics are part of the mechanics that can be seen by the player [27], [26], [28]. Aesthetics (A) is

related to the player's response to the dynamics of a game, especially with the emotions that will be generated by the player when playing the game. The aesthetic is abstract and the emotional response that the player wants, where each player will have a different response to the game being played[27], [26], [28].

2.3 Octalysis Gamification Framework.

Figure. 4 describes each part octagon with 2 kinds of division. The Octalysis is part of gamification frameworks, which states that 8 core drives are the background of people to perform actions [22],[24],[25]. In other words, according to the Octalysis framework, it is believed that an action will not be performed if there is no push from at least one of the 8 core drives [24], [25]. The core drive of the octalysis is divided into 2 parts, the first is the right-left, consisting of the right-brain (expression and creativity) and the left-brain (analytical thinking) [22],[24], [25]. The second division is top-down, consisting of white hat in the top and black hat in the bottom. The white-hat is associated with positive motivation, control, and control over a greater sense of meaning, whereas the black-hat acts as a negative drive that inspires or provides balance in achieving desired goals [22],[24], [25].
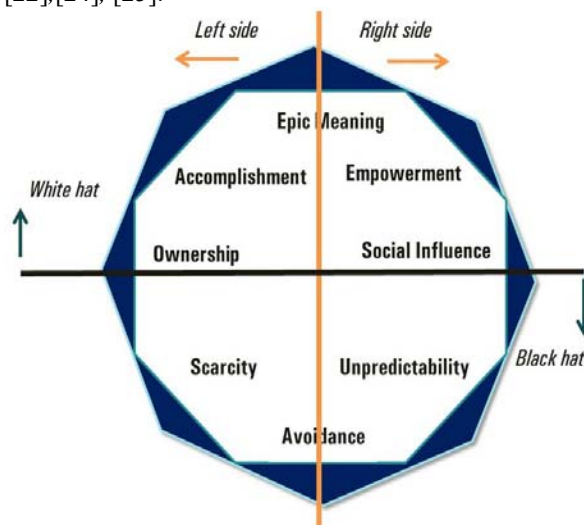

Figure 4: Octalysis Framework[24]

The description of 8 core drives octalysis [24]:
1. Epic Meaning
Someone is motivated to take action because of the motivation that what is done is involving interests that are greater than their own interests.
2. Development and Accomplishment
Someone takes action because they are motivated to achieve certain achievements.

3. Empowerment of Creativity and Feedback
Someone takes action because they want to do something new or do a creative process.
4. Ownership and Possesion
Someone takes action to be pushed because they want to take ownership of something and try to improve it.
5. Social Influence and Relatedness
Someone takes action because they are motivated by the desire to interact socially both in terms of competition and cooperation so that they can motivate their actions to achieve goals.
6. Scarcity and Impatience
A person takes action out of impulse to engage in an exclusive, rare, and unattainable state.
7. Unpredictability and Curiosity
A person takes action because he is motivated to engage in unpredictable circumstances.
8. Loss and Avoinance
Someone takes action because they are motivated to become involved in a state of fear of missing an opportunity.

2.4 Related Works.

Several studies on gamification, especially the octalysis framework, have been carried out in various fields. In the field of management, research[21] Octalysis is used to observe customer shopping motivation, whereas[2] uses Octalysis to measure the level of CLV (Customer Lifetime Value). In education [29],[30] and [31] using Octalysis to measure student achievement and learning motivation. In the health sector[20] octalysis has been used to measure a person's motivation to exercise. And in the field of government, octalysis is used to measure and evaluate Citizen Relationship Management[32]. Even though it is applied in various fields, the studies that have been carried out have similarities in solving motivation problems by measuring and evaluating the motivation of users on a gamified system that aims to increase their participation.

3.   RESEARCH METHODOLOGY

Figure 5 described the research methodology has been conducted in this study.
[1] Literature review.
This stage focuses on literature review related to customer motivation, gamification and the octalysis. The data were grouped based on the method of distributing questionnaires to 106 customer respondents who were samples of the SME retail network "Al-Hikam" scattered in the province of East Java - Indonesia.
[2] Determining of Questionnaire

This stage is carried out by weighting the questionnaire with a Likert scale[15] with 5 criteria. The sample size calculation followed Slovin guidelines [15].

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

n = sample, N = population, e = standard error 5%, then the calculation result of determining the sample of the two samples (N = 145) is n = 106. Questions are divided into 2 groups, namely numbers 1 to 7 digging data on gender, distance between customers and SME, their impressions and expectations of SME, while groups 8 to 15 dig customer motivation data based on 8 core drives.

[3] Each Core Drive Analysis.

This stage performs the process of calculating each core drives with Likert scale testing. The next step is to classify the calculation results into 5 groups with ranges resulting from the difference in multiplication against the weight of the criteria and the number of respondents.

[4] Likert Scale Result Measurement Analysis.

This stage is to combine all the Likert scale test results of each core drives in one table, so that it can be analyzed and compared the minimum or maximum value of core drives.

[5] Converting and Analyzing Result Measurement of Octalysis Scale Test

This stage is to convert the Likert scale value of each core drives into the octalysis test scale value, then determine the octagon pattern by filling in the core drives values from the previously generated table. At this stage, it produces a gap between the octagon pattern that is formed and the ideal octagon pattern octalysis.
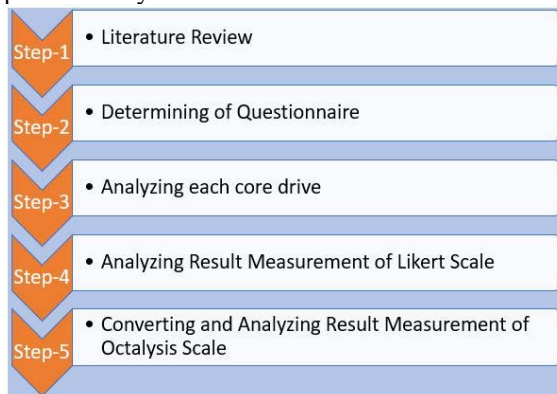

Figure 5: Research Methodology

4. RESULT AND DISCUSSION

4.1 Determining of Questionnaire.

The process begins with data mining, where determining a questionnaire that accommodates customer identification, impressions and expectations of SME as supporting data for analysis, and 8 questions that accommodate 8 core drives octalysis. Respondents were selected with a sample distribution representing customers of the SME retail network "Al-Hikam" and a total of 106 customers were determined to fill out the questionnaire. The distribution of questionnaires was carried out for 1 week in September 2020. The measurement scale is 5 levels, with the lowest score 1 and the highest 5 as in Table 3.

Table 3: Measurement of Questionnaire

Value	Declaration
1	Very Strong
2	Strong
3	Neutral
4	Weak
5	Very Weak

The weighted score is used to give weight to the resulting score by multiplying the two. The overall score results are totaled and given a predicate according to predetermined categories. Determination of the predicate by the following mechanism:

- Finding the minimum range point is obtained from the number of respondents (N) multiplied by the minimum score weight (value = 1), denoted N x 1 (106 x 1 = 106).
- Finding the maximum range point is obtained from the number of respondents (N) multiplied by the maximum weight score (value = 5), denoted N x 5 (106 x 5 = 530).
- Finding the range difference obtained from the maximum range minus the minimum range (530 - 106 = 424).
- Looking for the range value obtained from the range divided by the maximum weight value (424: 5 = 84.8), rounded up to 85. The range value acts as a reference for the distance between levels in the measurement scale.
- Determine the predicate from 5 levels of measurement scale by applying the value range that has been previously generated (85) as the difference between the predicates. The resulting predicates are as follows:
Very Low is 106 until 191,
Low is 191 until 276,
Medium is 276 until 361

High is 361 until 446,
Very High is 446 until 531.

4.2 Analyzing Each Core Drive.

This stage is to analyze the 8 core drives that are tested for each core drive with a Likert scale calculation. The following is the analysis of core drives 1 to 8:

✓ Core Drive-1: Epic Meaning and Calling.

The question:
"*By carrying out shopping activities, customers have contributed to support charitable foundations that are shaded by the company*"

Table 4: Result of Core Drive-1

Response	Respondents-Num	Value	Σ
Very Strong	60	5	300
Strong	39	4	156
Neutral	6	3	18
Weak	1	2	2
Very Weak	0	1	0
Σ	106		476

Table 4 described the total score for Core Drive-1 is 476 with the predicate "very high". Based on this data, it can be concluded that in core-drive-1 (Epic Meaning and Calling), customers are motivated to buy products at the company because they can contribute to supporting charitable foundations that are shaded by the company. These core drives need to be maintained, for that we need efforts to maintain consistency in customer motivation.

✓ Core Drive-2: Development and Accomplishment.

The Question:
"*The company has various programs such as product discounts that motivate customers to buy.*"

Table 5: The result of Core Drive-2

Response	Respondents-Num	Value	Σ
Very Strong	44	5	220
Strong	44	4	176
Neutral	16	3	48
Weak	2	2	4
Very Weak	0	1	0
Σ	106		448

Table 5 described core Drive Development and Accomplishment achieved a total score of 448 with the predicate "very high". Therefore, it can be concluded that discounts or similar programs can motivate customers to buy products optimally. Maintaining this condition is highly recommended, for example by increasing the provision of rewards and similar new programs

✓ Core Drive-3: Empowerment of Creativity and Feedback.

The question:
"*The facilities provided by the company make customers free to choose goods and service models.*"

Table 6: Result of Core Drive-3

Response	Respondents-Num	Value	Σ
Very Strong	40	5	200
Strong	53	4	212
Neutral	12	3	36
Weak	1	2	2
Very Weak	0	1	0
Σ	106		450

Table 6 described core drive-3 Empowerment of Creativity and feedback achieved a total score of 450 with the predicate "very high". Therefore, from this data it can be concluded that the customer is very compatible with the facilities that provide flexibility in choosing goods and service models. Maintaining this condition is highly recommended, such as by always controlling the facilities associated with these core drives running properly.

✓ *Core Drive-4: Ownership and Possession*

The Question:
"*The company's service facilities give the impression that customers are treated as valued and maintained customers*"

Table 7: The Result of Core Drive-4

Response	Respondents-Num	Value	∑
Very Strong	48	5	240
Strong	46	4	184
Neutral	12	3	36
Weak	0	2	0
Very Weak	0	1	0
∑	106		460

Table 7 described core drive-4 ownership and possession achieved a total score of 460 with the predicate "very high". From this data, it can be concluded that customers are very comfortable with company services by treating customers as valuable persons for the company. Companies need to maintain this condition, for example by always ensuring that service facilities related to core drives are running well.

✓ *Core Drive-5: Social Influence and Relatedness.*

The question:
"*Company services provide opportunities and facilitate customers to interact with other customers.*"

Table 8: The Result of Core Drive-5

Response	Respondents-Num	Value	∑
Very-Strong	26	5	130
Strong	43	4	172
Neutral	32	3	96
Weak	4	2	8
Very Weak	1	1	1
∑	106		407

Table 8 described the core drive-5 social influence and relatedness reaching 407 with the predicate "high". From this data, it can be concluded that customers are quite facilitated to interact with other customers. This condition needs to be improved, for example by creating customer community facilities so that they are accommodated in social relations.

✓ *Core Drive-6: Scarcity and Impatience*

The question:
"*Customers anticipate not to miss information about the product promotion programs offered by the company.*"

Table 9: The Result of Core Drive-6

Response	Respondents-Num	Value	∑
Very Strong	26	5	130
Strong	59	4	236
Neutral	19	3	57
Weak	2	2	4
Very Weak	0	1	0
∑	106		427

Table 9 described core drive-6 scarcity and impatience achieved a total score of 427 with the predicate "high". From this data, it can be concluded that customers have sufficient interest in the surprise gifts service facility, so that they are encouraged to always anticipate the event so that they are not missed. This condition needs to be improved by evaluating the program that has been implemented for its shortcomings.

✓ *Core Drive-7: Unpredictability and Curiosity.*

The question:
"*The company has a raffle program that customers always want to participate in.*"

Table 10: The Result of Core Drive-7

Response	Respondents-Num	Value	∑
Very Strong	21	5	105
Strong	53	4	212
Neutral	28	3	84
Weak	4	2	8
Very Weak	0	1	0
∑	106		409

Table 10 described core drive-7 unpredictability and curiosity has produced a total score of 409 with the predicate "high". From this data it can be concluded that, customers are quite interested in programs that are presented randomly or that provide surprise gifts. This condition stimulates customers to tend to want to participate. Considering that the achievement is still not optimal, this needs to be improved, for example re-evaluating the current program and looking for weak points to be improved.

✓ *Core Drive-8: Loss and Avoidance*

The question:
"*Customers always check so they don't miss information on item discounts.*"

Table 11: The Result of Core Drive-8

Response	Respondents-Num	Value	∑
Very Strong	15	5	75
Strong	54	4	216
Neutral	32	3	96
Weak	4	2	8
Very Weak	1	1	1
∑	106		396

Table 11 described core drive-8 loss and avoidance produces a total score of 1167 with the predicate "high". From this data, it can be analyzed that enough customers are interested in always checking for discount opportunities in the hope that they always want to join the program, and this will have a positive impact on the opportunities for goods to be purchased. This condition still needs to be improved, for example by expanding the information on the announcement of the programs being offered.

4.3 Likert Scale Analysis.

Table 12 described the 8 predicates of each computed core drive.

Table 12: Conclusion of Likert Scale Test for 8 Core Drive

Octalysis-Core-Drive		Predicates
1	Epic-Meaning-and-Calling	Very High
2	Development-and-Accomplishment	Very High
3	Empowerment-and-Creativity	Very High
4	Ownership-and-Possession	Very High
5	Social-Influence-and-Relatedness	High
6	Scarcity-and-Impatience	High
7	Unpredictability-and-Curiosity	High
8	Loss and Avoidance	High

Questionnaire analysis of testing 8 core drives on a Likert scale yielded 4 core drives "very high" and 4 of the remaining "high". Regarding the 8 core drives that have the potential to dig deeper into user motivation, this should be a concern. The results of the analysis can be used to evaluate and initiate customer service programs. Of the 8 core drives tested, it is likely that the results of the predicate are different or contradictory to one another, so testing

from different data or increasing the amount of data tested is highly recommended.

4.4 Converting and Analyzing Result Measurement of Octalysis Scale Test.

The next step is testing the data with an octalysis scale, this is necessary to compare the consistency of the results obtained for the evaluation and recommendation process. The octalysis scale test was obtained from the conversion of the questionnaire results into the octalysis scale formula. The count starts from determining the value of the score where each core drive is 1 (lowest) and 10 (highest). Here are the octalysis scale conversion steps:

- Finding the lowest point of range is the result of the number of respondents (N) multiplied by the weight of the lowest score (value = 1), namely N x 1 (106 x 1 = 106).
- Finding the highest point of range results from the number of respondents (N) multiplied by the weight of the highest score (value = 5), where N x 5 (106 x 5 = 530).
- Calculating the range difference obtained from the reduction of the highest range to the lowest range (530 - 106 = 424).
- Looking for the range value obtained from the range difference divided by the highest octalysis score (424: 10 = 42.4), rounded up to 42. This value is a reference for the range between levels of the measuring scale.
- Determine 10 levels of measuring scale using the results of the calculation of the range reference in the previous calculation, which is equal to 42. The level of the measuring scale is described in the data:
  Scale-1 is 106 until 148,
  Scale-2 is 148 until 190,
  Scale-3 is 190 until 232,
  Scale-4 is 232 until 274,
  Scale-5 is 274 until 316,
  Scale-6 is 316 until 358,
  Scale-7 is 358 until 400,
  Scale-8 is 400 until 442,
  Scale-9 is 442 until 484,
  Scale-10 is 484 until 526.

The next step was to determine the octalysis score of the 8 core drives that were tested based on the questionnaire scores that had been calculated previously by the data conversion process with the level of the measuring scale (Table 13).

Table 13: Conclusion of Octalysis

Octalysis-Core-drive	Questionnaire Score	Octalysis Scale	Octalysis Score
Epic-Meaning-and-Calling	476	9	81
Development-and-Accomplishment	448	9	81
Empowerment-and-Creativity	450	9	81
Ownership-and-Possession	460	9	81
Social-Influence-and-Relatedness	407	8	64
Scarcity-and-Impatience	427	8	64
Unpredictability-and-Curiosity	409	8	64
Loss-an- Avoidance	396	7	49
		Total score	565

Fig. 6 and Fig. 7. described the octalysis scale pattern and the octagon graph of the calculated data.
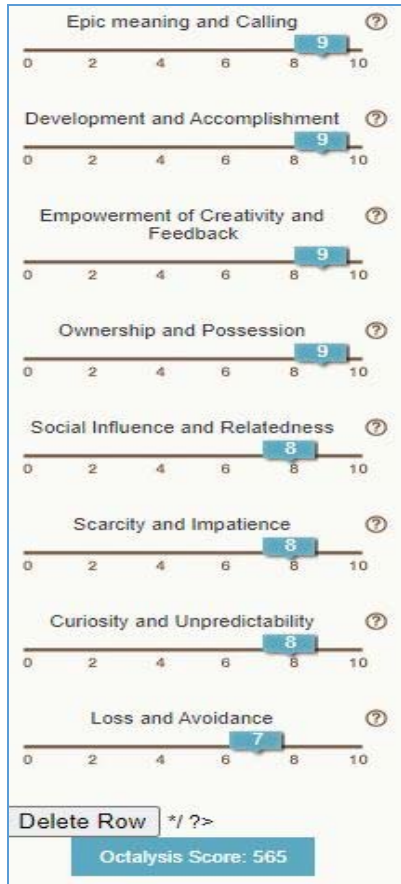

Figure 6: Octalysis Scale

Figure. 6 describes the scale of each octalysis score from Table 13, the scale measurement line is drawn

in the position of the value according to the results in TABLE XIII. Reference to the octalysis scale comes from the official website of octalysis https://yukaichou.com/octalysis-tool/ [33].

The results of the octalysis scale are depicted in the octagon graph (Figure. 7). The octagon graph illustrates how to visualize the balance of core drives based on actual values based on questionnaire data. The value of octalysis in this analysis is 565, which means that current customer motivation has a good balance between right-brain and left-brain, and also means having a good balance between Extrinsic and Intrinsic Motivation. However, it must be noted that inappropriate extrinsic motivation can destroy intrinsic motivation.
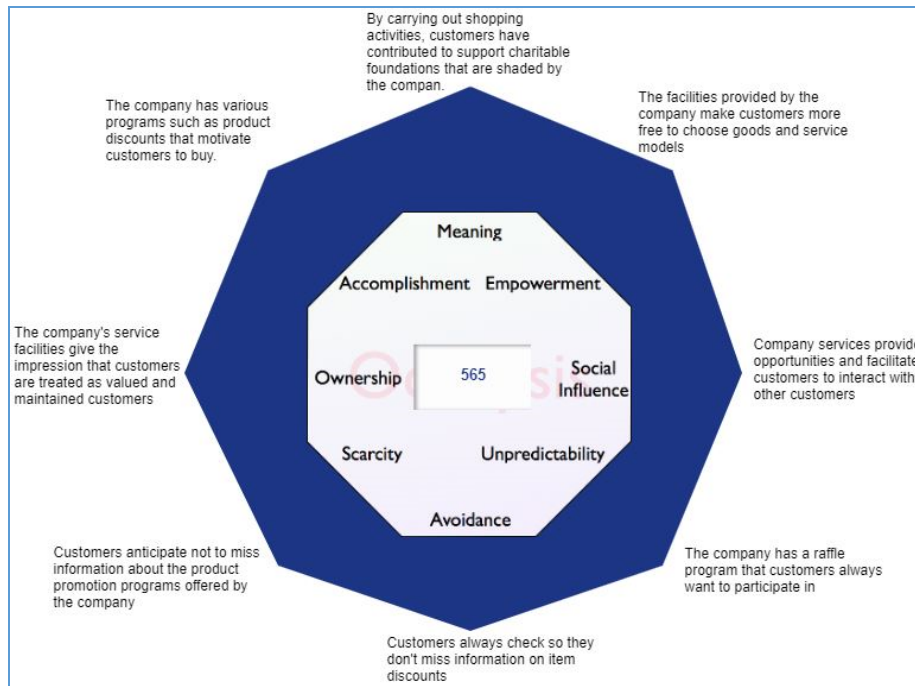
Figure 7: Octagon Graph of Customer Motivation

4.5 GAP Analysis of Customer Motivation

Table 14 : Gap Analysis of Customer Motivation with Likert Scale

	Octalysis Core drive	Actual	Target
1	Epic-Meaning-and-Calling	High	Very-High
2	Development-and-Accomplishment	High	Very-High
3	Empowerment-and-Creativity	High	Very-High
4	Ownership-and-Possession	Very High	Very-High
5	Social-Influence-and-Relatedness	High	Very-High
6	Scarcity-and-Impatience	High	Very-High
7	Unpredictability-and-Curiosity	High	Very-High
8	Loss-an- Avoidance	High	Very-High

Table 15 : Gap Analysis of Customer Motivation with Octalysis Scale

	Octalysis Core drive	Actual	Target
1	Epic-Meaning-and-Calling	9	10
2	Development-and-Accomplishment	9	10
3	Empowerment-and-Creativity	9	10
4	Ownership-and-Possession	9	10
5	Social-Influence-and-Relatedness	8	10
6	Scarcity-and-Impatience	8	10
7	Unpredictability-and-Curiosity	8	10
8	Loss-an- Avoidance	7	10
	Average	8.4	

In Table 14, Table 15, and Figure 8 a GAP has been generated between the actual condition of customer motivation and the desired condition. For this reason, it is important to carry out analysis and evaluation of GAP based on the Octalysis framework.

1) Epic Meaning and Calling.
Target statement: Very High
Target Octalysis scale value: 10

Service to customers has succeeded in giving information to customers to participate in a mission or activity that is bigger than themselves.
Actual Statement: Very High
Actual Octalysis scale value: 9
Service to customers has succeeded in giving messages to customers to participate in helping charity activities for educational institutions shaded by the company, becoming an intrinsic motivation for customers to shop. This condition is ideal and needs to be maintained when referring to the actual statement "Very High" and the actual value "9" from the target value of 10.

2) Development and Accomplishment.
Target statement: Very High
Target Octalysis scale value: 10
A good customer service program motivates customers to always increase shopping intensity optimally, through price discount programs and surprise gifts.

Actual Statement: Very High
Actual Octalysis scale value: 9
Evaluation of the octalysis value obtained can be concluded that the discount and surprise gift programs implemented have motivated customers to increase shopping intensity optimally. The implemented programs are quite optimal and need to be maintained because based on the results of the acquisition of the target value "Very High" and the results of the Octalysis scale have reached 9 out of the maximum value of 10.

3) Empowerment of Creativity and Feedback.
Target statement: Very High
Target Octalysis scale value: 10
The flexibility of facilities provided by the company, such as the flexibility to choose goods and choose service facilities, can increase customer motivation to shop.
Actual Statement: Very High
Actual Octalysis scale value: 9
Evaluating the value of the octalysis obtained, it can be concluded that the facilities or programs that are implemented, such as the freedom to choose goods and choose service facilities, can increase customer motivation to shop optimally. Companies need to maintain this program so that the customer's core drive remains in its current state because actually the target value achieved reaches the status of "Very High" with the Octalysis scale value reaching 9 out of the maximum value of 10.

4) Ownership and Possession.
Target statement: Very High
Target Octalysis scale value: 10
The company's service facilities give the impression that customers are treated as valued and maintained customers so that it becomes a motivation for customers to keep shopping.
Actual Statement: Very High
Actual Octalysis scale value: 9
Evaluating the value of the octalysis obtained, it can be concluded that the company's service facilities for existing customers have succeeded in optimizing the 4th core drive (Ownership and Possession) where a sense of being valued and maintained raises the motivation of ownership and becomes part of the company. For this reason, this condition needs to be anticipated to be maintained if evaluating the actual target value has reached the status of "Very High" with the Octalysis scale value has reached 9 from the maximum value of 10.

5) Social Influence and Relatedness.
Target statement: Very High
Target Octalysis scale value: 10
The company's service system provides opportunities and facilitates customers to interact well with other customers. Implementing community facilities that can encourage social relationships between customers according to suitable motivations to be strengthened, which in turn can increase the quantity of shopping and customer loyalty.
Actual Statement: High
Actual Octalysis scale value: 8

Evaluation of the octalysis value obtained shows that service facilities that are oriented towards increasing the core drive "Social influence and relatedness" have not fully met the expected targets. Even though the target score reaches "high" status, the octalysis scale value is still at a score of 8 from a maximum score of 10.

6) Scarcity and Impatience.
The implementation of discount programs and surprise gifts can create a sense of satisfaction with the scarcity of opportunities that are obtained, for that customers always take anticipatory steps by always following any information released by the company.
Actual Statement: High
Actual Octalysis scale value: 8

Evaluation of the octalysis value obtained shows that the discount and surprise gift programs offered are quite attractive to customers but have not fully met the expected targets. Even though the target value reaches the "high" status, the octalysis scale score is still at a score of 8 from the maximum score of 10. For this reason, programs that improve this core drive need to be further explored.

7) Unpredictability and Curiosity.
Target statement: Very High
Target Octalysis scale value: 10
Implementing discount programs and surprise gifts can create customer curiosity. The condition of uncertainty creates a sensation of satisfaction if you get it because it trumps curiosity, so that it stimulates customers to always follow every latest information released by the company.

Actual Statement: High
Actual Octalysis scale value: 8
Evaluation of the value of the octalysis obtained shows that the discount program and surprise gifts offered are sufficient to generate the core drive of "unpredictability and Curiosity" but it has not fully met the expected target. Even though the target

value reaches the "high" status, the octalysis scale score is still at a score of 8 from the maximum score of 10. For this reason, programs that improve this core drive need to be further explored.

8) Loss and Avoidance.
Target statement: Very High
Target Octalysis scale value: 10
The implementation of discount programs and surprise gifts can create the desire to maintain participation in the programs offered by always checking the latest information. The condition of uncertainty creates a sensation of worry if you don't get it, so it stimulates customers to always follow every latest information released by the company.
Actual Statement: High
Actual Octalysis scale value: 7
An evaluation of the value of the octalysis obtained shows that the discount and surprise gift programs have not fully met the expected targets. This is evidenced by the target value is still in the "High" status and the octalysis scale value is still at a score of 7 from the maximum score of 10. For this reason, programs that improve the core drive need to be explored further.
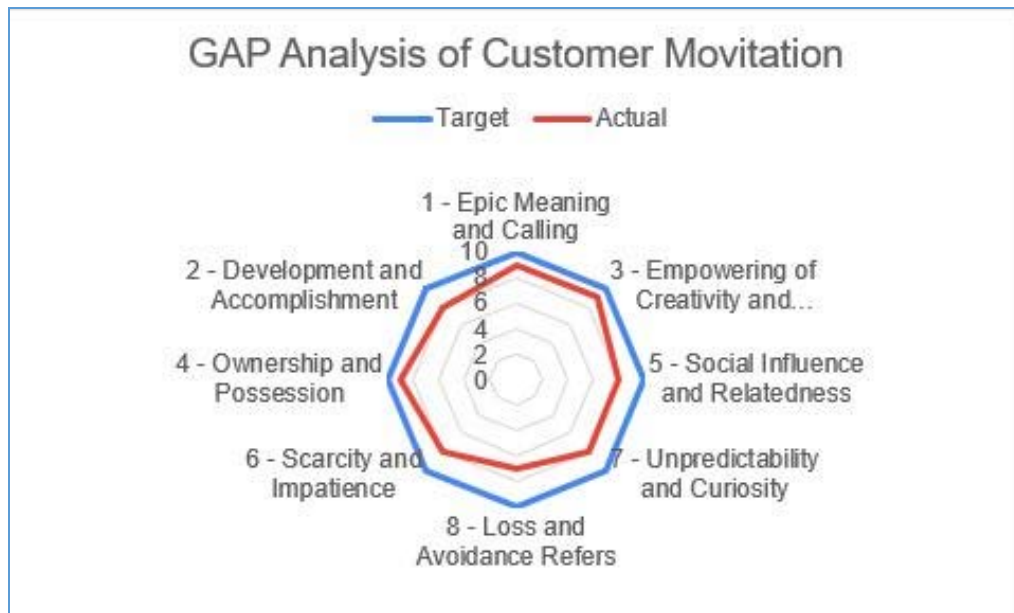

Figure 8: Graph Of GAP Analysis Of Customer Motivation

4.6 Recommendation

The GAP in Figure 8 depicts the position of each core drive of the customer's actual motivation against the target achievement. Each core drive has its own characteristics and can also be evaluated for the following recommendations:

1) When a company has the potential to generate "Epic Meaning and Calling" core drives, efforts are needed to increase and maintain this potential. Core drive is more dominant in the intrinsic motivation approach that leads to the necessary intrinsic motivation. With an octalysis scale value of 9 and the predicate "Very High", this condition needs to be maintained such as providing clear announcements or information and ensuring that it reaches a broad target so that customers know clearly about their shopping involvement to contribute to a noble mission.

2) Company programs that can stimulate customers to increase turnover have been implemented and have met the target quite optimally, as evidenced by the octalysis scale value reaching 9 from the highest score of 10, and the predicate "Very high". For this reason, this condition needs to be maintained by ensuring that programs run as they should. There is nothing wrong if the company makes similar programs that have the same effect so that there is no burnout, so that the target to be achieved is always stable. The mechanics approach can be adopted from the types of mechanics, including the customer point system, and the customer level as a model for presenting customer achievement in the hope that it will be more attractive.

3) Customer discretion over the services provided by the company has played a significant role in optimally increasing the drives for "Empowerment and Creativity", as evidenced by the octalysis scale value of 9 from the highest score of 10 and the predicate "Very high". For this reason, this condition needs to be maintained by ensuring that these programs run properly. In "Empowerment and Creativity", someone needs the media to express creativity and also see the results, as well as receive feedback, and respond in turn. The mechanical approach can be adopted from various types of mechanics, including accommodating customers with user personalization to give customers the opportunity to freely manage their personalization areas.

4) Customer service facilities that optimize the core drive "Ownership and Possession" have been running optimally, this is evidenced by the octalysis scale score reaching 9 with the predicate "Very high". For this reason, this condition needs to be maintained and ensure that the service programs associated with this core drive are running properly. In the core drive of "Ownership and Possession", customers participate in a motivated program because they feel they are part or components that share the system being followed. When a player has a sense of belonging, he wants to always improve or improve what he has. Several approaches can be applied such as imposing avatars as customer identities according to turnover and performance, or imposing customer levels aimed at increasing ownership.

5) Service facilities related to the running core drive "Social Influence and Relatedness" have not been explored optimally, as evidenced by the octalysis score is still in the range of 8 from the highest score of 10 and the predicate "high". Social Influence and Relatedness evokes encouragement that a person's behavior is inspired by the achievements of others. This applies to cooperation or competition. For this reason, exploration of the core drive needs to be done, for example by implementing a virtual customer community program that provides opportunities for customers to interact with each other.

6) The ongoing program of discount offers and gift surprises has not been sufficient to generate the "Scarcity and Impatience" drive as evidenced by the Octalysis score which still reaches 8 with the predicate "high". The drive "Scarcity and Impatience" generates encouragement that a person's behavior is inspired by the fact that a program that is followed is hard to find and rare, thus motivating customers to want to have it. Companies need to explore the mechanics of this core drive such as "Appointment Dynamics". And "countdown timer", both of which can be used as a model for announcing discounts or surprise prizes with a certain difficulty level that aims to motivate customers to always follow them.

7) The ongoing program of discount offers and gift surprises has not been sufficient to generate a drive of "Unpredictability and Impatience" as evidenced by the Octalysis score still reaching 8 with the predicate "high". The drive "Unpredictability and Impatience" evokes encouragement that a person's behavior is inspired by the fact that a program that is followed is not.

4.7 Conclusion and Future Works.

Based on the GAP analysis, the implementation of service facilities for SME customers in the retail store sector, especially in Indonesia, is quite optimal. This is evidenced by the results of the GAP analysis on the questionnaire test of 8 core drives, namely 4 core drives with a rating of "very high" and the rest with a "high" rating. While the average score obtained from the Octalysis scale reaches 8.4 from the scale range 1 to 10. Then this actual condition needs to be maintained even though it still needs development because it has not reached the maximum score of octalysis. Innovations for development are needed to generate customer core drives so as to increase customer loyalty and purchase quantity.

Thus, gamification can be used to evaluate customer motivation, especially to explore any impulses that strengthen or weaken customers from their attitude towards the product. So that companies can anticipate in revising products and services more precisely. This is expected to support increased customer motivation if implemented and handled seriously and with full commitment.

This is based on psychology, customers really need interesting refresher programs, or new things that can package an object to feel interesting and always developing[32]. In the Octalysis framework presented a large selection of mechanics to explore customer service programming models that aim to optimize and generate core drives. Guidance on how each octalysis core drive works can be followed in the official guide available on the website link https://yukaichou.com/octalysis-tool/[33]. Future research could contribute to mechanical applications that adapt to the requirements of gamified systems, with the aim of increasing the optimization of customer motivation core drives.

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