Analysis of Service Quality, Image,Promotion,Trust and Customer Loyalty

Pradiono[1]IhaHaryani Hatta[2]
[12]Universitas Pancasila, Jakarta, Indonesia
Crousponding Author: Pradiono

Abstract:*Loyal customers can benefit the company so that it can support the sustainability of the company. For this reason, the factors determining customer loyalty need attention. Therefore, research is needed on the factors determining customer loyalty which aims at finding out the influence of service quality, image, and promotion partially toward customer trust and loyalty; the influence of trust toward patient loyalty in private hospitals in Banten Province. This study used 220 patients in 8 private hospitals in Banten as respondents who were randomly selected. The analysis was carried out using structural equation models (SEM) and processed using the Lisrel 8.80 program. The results of the study prove that the quality of service, promotion, and image of each hospital has effect on patient trust and loyalty; trust has effect on patient loyalty. There are 3 paths, but the dominant path is the path of image-trust-customer loyalty.*
Keywords: *service quality, image, promotion, trust, customer loyalty, hospital*

I. Background

Right now conditions of fierce competition, one of the key factors that hospital management must pay attention to is to strengthen loyalty. Customer loyalty is an important pillar that determines hospital success. Loyal patients will tend to continue the visit for treatment or just conduct a consultation or medical check-up to a particular hospital even though they are faced with many alternative hospital competitors that even offer more specific and superior service characteristics. If loyalty has been formed strongly, then it will be an effective and efficient free promotion. Loyal customers generally provide recommendations to relatives or friends to seek treatment at the referral hospital. Loyal customers for hospitals can be free promotions.

The effort to build patient loyalty is not an easy job, because it requires synergy, dedication, hard work, the right strategy, and continuous efforts. This is related to loyalty as an unstable psychological condition, which can change at any time according to external factors that influence it. Some of the problems regarding hospital loyalty include the inability of hospital management to solve the problem appropriately, so that it is actually detrimental to the hospital that is damaging the image of the hospital. The quality of hospital services in Indonesia lacks public trust. Among 1,500 hospitals in Indonesia there are only four hospitals that already have international quality standards. According to World Bank data in 2004, the country's foreign exchange for treatment is around Rp. 70 trillion, most Indonesians seek treatment abroad because they believe the quality of treatment abroad is far better than hospitals in Indonesia. Most hospital nurses in Indonesia are of poor quality.

In the previous research, it was found several things that research on loyalty in the hospital industry is still relatively small, even though patient loyalty can contribute to the growth of the hospital industry; there has not been a simultaneous study regarding the effect of service quality, promotion, and image on trust and its impact on loyalty; there is no consistency in the variables of service quality, image, promotion, trust, and patient loyalty in the hospital industry.

The description above, the proposed formulation of the research problem is: Is there an influence of service quality toward trust and loyalty? Is there an influence of the image on trust and loyalty? Is there a promotional influence on trust and loyalty? Is there able give supporting of trust toward loyalty?

II. Method

This study has populationwas inpatients at private class B hospitals in Tangerang City, Banten Province. The number of respondents is 220 patients. According to Hair et al (2010) the sample amount is between 200 and 300 for a study using Structural Equation Modeling (SEM). Respondents were inpatients at 8 hospitals, namely Usada Insani Hospital, Mayapada Hospital, Awal Bros Hospital, Siloam Hospital, Omni Hospital, Medika Hospital BSD, Eka Hospital, and Primier Bintaro Hospital which were randomly selected.

The variables consist of independent variables namely service quality, image, and promotion. Bateson and Hoffman (2011) explain that service quality is an attitude formed by a long-term and comprehensive

evaluation of a company's performance or appearance. According to Zeithaml, Bitner, and Gremler (2009), indicators of service quality include physical evidence, reliability, responsiveness, assurance, and empathy. Excellent service quality, in the sense of being able to meet patient expectations will bring satisfaction among patients, so patients are interested in seeking treatment again at the same hospital. Services that are full of empathy, reliable, responsive, provide assurance, and supported by adequate facilities can bring patients trust and loyalty. This can be proven in the research of Aydin and Ozer (2005), namely that there is an influence between service quality and trust. Meanwhile, research by Yu, Chang, and Huang (2006) explained that service quality has a positive relationship with loyalty.

According to Kotler and Keller (2013), image is a set of beliefs, ideas, and impressions that someone has towards an object. Image indicators according to Schwaiger (2004) are dynamic, character, success, and responsibility. The image of an organization is an important factor that can stimulate the emergence of trust and loyalty. This is evidenced through a research by Ball, Coelho, and Vilares (2006) that image has effect on customer trust. Meanwhile the research of Souiden and Pons (2009) explains that company image has a significant effect toward loyalty.

Lovelock & Wirtz (2010) describes promotional indicators include advertising, sales promotion, and publicity. Promotions that are broadcast through various media prove the existence of a product or organization, so that it can create trust for the community and customers and even loyalty. This was proven in Wang's (2010) study of the influence of advertising on trust and attitude. Meanwhile, the research of Heryanto (2011) revealed that promotion has an effect on loyalty.

The non-independent variables in this study are trust and loyalty. Colquitt, LePine, and Wesson (2009) explan that trust is a desire to depend on an authority based on positive expectations of the actions and attention of the authorities. According to Robbins & Judge (2009), indicators of trust are integrity, competence, consistency, virtue, and openness. High trust in something will encourage loyalty. This is evidenced in the study of Dagger and O'Brien (2010) that there is an influence of trust in reality. Meanwhile, loyalty as explained by Kotler and Keller (2013) is a feeling of affection inherent in a person towards a product, service, and people involved in it. According to Yu & Dean (2001), the indicators of loyalty are word of mouth communication, non-moving behavior, non-complaining behavior, willingness to pay more, and transactions.

This study uses survey methods and data collection uses a questionnaire. According to Azwar (2003) the advantage of using a questionnaire in the survey method compared to other techniques is that the standard data obtained can be accounted for the purposes of a thorough analysis of the characteristics of the population to be studied. The answers to the questionnaire statements are based on a Likert scale with 5 (five) alternatives, namely 5 is strongly agree; 4 is agree; 3 is neutral; 2 is disagree; 1 is strongly disagree.To determine the perception category of the respondents, class intervals are used namely (highest value - lowest value) / number of classes or (5 - 1) / 5 = 0.8. So that the categories of respondents' perceptions of the research variables are as follows: Answers 1.00 - 1.80 belong to very low rating categories or strongly disagree; Answers 1.81 - 2.60 belong to low rating categories or strongly disagree; Answers 2.61 - 3.40 belong to moderate or neutral rating categories; Answers 3.41 - 4.20 belong to the good rating category or agree; Answers 4.21 - 5.00 belong to very good rating categories or strongly agree.

The analysis of this study was in the form of descriptive and inferential analysis. Descriptive analysis illustrates the characteristics of respondents and the level of perceptions of respondents to the observed variables. Inference analysis was carried out using structural equation models (SEM) and processed using the Lisrel 8.80 program. Application of the SEM procedure is as follows: The data quality tests are in the form of validity and reliability tests, and associative hypothesis tests. Validity is related to the accuracy and precision of the measuring instrument in performing its size function. The validity measuring used Pearson Product Moment calculations. The item is said to be valid if it has r-count > r table or has p-value < 0.05. The reliability measurement of the research instruments used the Cronbach Alpha coefficient > 0.5 (Azwar 2003). Meanwhile, the associative hypothesis test is carried out to test the research hypothesis through structural equations generated from calculations with the Lisrel Program. If t count > t table then the hypothesis is accepted. There is also a Goodness of Fit Index (GFI) test, which aims to find out whether the empirical model being tested is according to its theoretical model.There are 7 hypotheses that show the relationship between variables by T test (t_{table}> 1,96).

III.   Results and Discussion

The characteristics of respondents in this study are as follows: Most respondents are married (73.6%); Most respondents aged 41 years and over (40.5%); Most respondents have college education (66.3%); Most respondents have jobs as employees (60.5%).

Patients who were respondents in this study assessed that the quality of hospital services in Tangerang was good (total average of 3.8), starting in terms of physical form, reliability, responsiveness, assurance, and empathy. The overall average for physical evidence indicators is 4.0 which provides a good description of

hospital services starting from the availability of physical facilities for patients and visitors, physical appearance of doctors and nurses and non-medical employees. Then the overall average for the reliability indicator is 4.0 which gives a good picture of hospital services starting from the treatment facilities, rooms, service accuracy and speed. Furthermore, the overall average responsiveness indicator is 3.9 which provides a good description of hospital services starting from the responses of employees, nurses, and doctors in providing the services needed by patients. Meanwhile, the overall average for the assurance indicator is 3.8 which provides a good picture of hospital services starting from the ability of doctors and nurses, non-medical employees, and the implementation of health service standards by hospitals. Finally, the overall average for the empathy indicator is 3.6 which gives a good picture of hospital services starting from the attention of medical staff, doctors and nurses, and non-medical employees.

Meanwhile, respondents in this study assessed that the image of hospitals in Tangerang was good (total average of 3.8), starting in terms of dynamic, character, success, and social responsibility. The overall average for dynamic indicators is 3.8 which gives a good picture of the image of the hospital starting from the improvement of services, facilities and infrastructure, ability to treat. Then the overall average for the indicator of success is 3.8 which gives a good picture of the image of the hospital starting from the success of increasing profits, better known, and discipline. Furthermore, the average overall character indicator is 3.8 which gives a good picture of the image of the hospital starting from collaboration, innovation, and following developments. Finally, the average overall indicator of social responsibility is 3.8 which gives a good picture of the image of the hospital starting from being able to keep secrets, not disturbing the environment, and help the surrounding community.

Respondents in this study assessed that the promotion carried out by hospitals in Tangerang was good (total average of 3.7) starting in terms of publicity, sales promotion, and advertising. The overall average for publicity indicators is 3.7 which gives a good picture of hospital promotion starting from publicity about health activities and information carried out by the hospital. Then the overall average for the indicator of sales promotion is 3.6 which gives a good description of the promotion carried out by the hospitals starting from the discounted price of services and products. Finally, the average overall indicator of advertising is 3.6 which provides a good description of the promotion carried out by the hospitals starting from advertising services and products.

Patients who were respondents in this study had good trust in hospitals in Tangerang (average total 3.8), starting with integrity, openness, competence, and consistency. The overall average for the integrity indicator is 3.8 which gives a good picture of trust in the hospitals starting from the honesty of the hospitals, doctors and nurses, and non-medical employees. Then the overall average for the indicator of openness is 3.8 which gives a good picture of trust in hospitals starting from information provided by hospitals, doctors and nurses and non-medical employees. Furthermore, the average overall indicator of competence is 3.7 which provides a good picture of trust in hospitals that starts from the ability of non-medical employees, hospitals, doctors and nurses. Finally, the overall average for consistency indicators is 3.7 which provides a good picture of trust in hospitals that starts from hospital services, non-medical employees, doctors and nurses.

Patients who were respondents in this study had good loyalty to hospitals in Tangerang (total average of 3.6) starting from complaints behavior, word of mouth communication, moving behavior and willingness to pay more. The overall average for the complaint behavior indicator is 3.8 which gives a good picture of loyalty to the hospitals that the hospitals receives input and criticism. Then the overall average for the word of mouth communication indicator is 3.7 which gives a good picture of hospital loyalty that respondents are willing to recommend relatives and provide good information about the hospitals. Furthermore, the average overall indicator of moving behavior is 3.6 which gives a good picture of loyalty to hospitals, namely respondents will continue to seek treatment at the hospitals even though the service is less pleasant and there are competitors. Finally, the overall average for the indicator of willingness to pay more is 3.4 which gives a good picture of the loyalty to the hospitals, which is to continue treatment at the hospitals even though the service and medical costs rise.

Service quality variables are described by 5 indicators (physical evidence, reliability, responsiveness, assurance, and empathy) with $p-value < 0.05$ and composite value > 0.5. This shows that the five indicators have good validity and reliability to measure service quality variables (X1). Image variables are described by 4 indicators (dynamic, success, restraint, and social responsibility) have good validity and reliability for measuring image variables (X2). Promotional variables are illustrated by 3 indicators (advertising, sales promotion, and publicity) have good validity and reliability for measuring promotion variables (X3). While the trust variables are described by the 4 indicators (integrity, competence, consistency, and openness) have good validity and reliability to measure the trust variable (Y1). Meanwhile, the loyalty variable is described by 4 indicators (word of mouth communication, complaint behavior, non-moving behavior, and willingness to pay more) have good validity and reliability for measuring loyalty variables (Y2).

The structural model only shows latent variables and coefficients that show the magnitude of the influence of one variable on the other variables outlined in the structural equation model in table 1.

Table 1.
Structural Equation Model

No.	Structural Equation	R^2
1.	Y1 = 0.24 X1 + 0.39 X2 + 0.33 X3	0.81
2.	Y2 = 0.28 X1 + 0.27 X2 + 0.22 X3 + 0.24 Y1	0.87

Source: data processing results

From table 1 it can be said that equation 1 explains the variables of service quality, image, and promotion can explain the trust variable of 0.81 or 81% (R^2). Other variables not in this research model can explain the trust variable of 0.19 or 19% (R^2). While equation 2 explains the variables of service quality, image, promotion, and trust can explain the loyalty variable of 0.87 or 87% (R^2). Other variables not in this research model can explain the loyalty variable of 0.13 or 13% (R^2).

The GoF (Goodness of Fit) test, it can be seen that through RMSEA < 0,08, GFI, AGFI, NFI, NNFI, CFI, IFI, RFI have respectively a value of > 0.90. See Table 2.

Table 2.
GoF Test

No.	Index	Standard Value	Description
1.	Chi-Square (P=0.0)	> 0.05	Not Good
2.	Root Mean Square Error of Approximation = 0.04	<0.08	Good
3.	Goodness of Fit Index = 0.91	> 0.90	Good
4.	Adjusted Good-ness of Fit Index = 0.88	> 0.90	Marginal
5.	Normed Fit Index = 0.98	> 0.90	Good
6.	Non-Normed Fit Index = 0.98	> 0.90	Good
7.	Comparative Fit Index = 0.99	> 0.90	Good
8.	Incremental Fit Index = 0.99	> 0.90	Good
9.	Relative Fit Index = 0.98	> 0.90	Good

Source: data processing results

The relationship of influence between variables based on the T test can be seen in Table 3. The significance of the effect depends on the value of the t count. If the value of t-count is greater than t-table for alpha = 5% i.e. 1.96, then there is an influence between these variables.
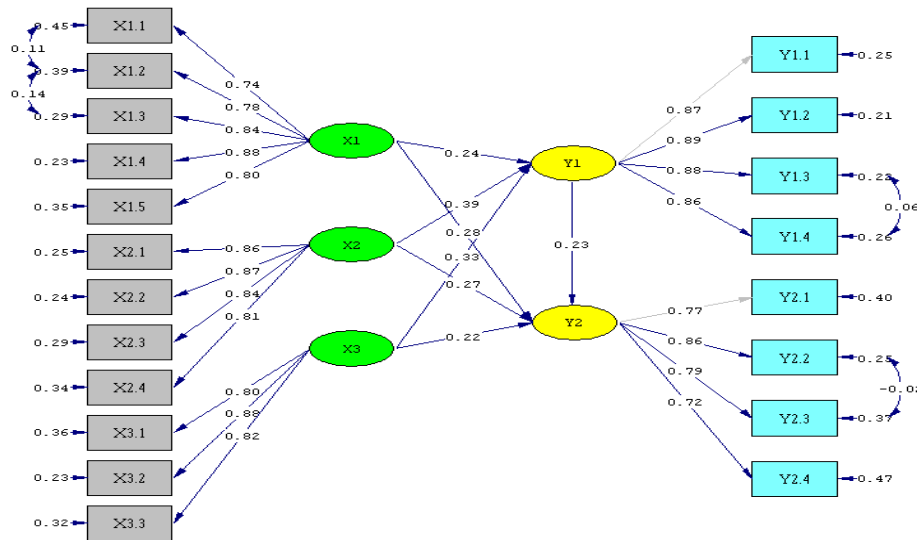
Figure 1: Effect Path Coefficients between Research Variables

Table 3.

The Amount of Influence between Research Variables

From Variable	On Variable	Value t count	Significance, α = 5%, t table =1.96
Service Quality (X1)	Trust (Y1)	2.79	Significant
Service Quality (X1)	Loyalty (Y2)	3.14	Significant
Hospital Image (X2)	Trust (Y1)	3.32	Significant
Hospital Image (X2)	Loyalty (Y2)	2.23	Significant
Promotion (X3)	Trust (Y1)	3.22	Significant
Promotion (X3)	Loyalty (Y2)	2.08	Significant
Trust (Y1)	Loyalty (Y2)	2.11	Significant

H1 and H4 are accepted, because t count for H1 = 2.79 and t count for H4 = 3.14. The value of t count is > 1.96. This means that indicators on service quality variables have effect toward customer trust and loyalty variables. Understanding of service quality variables has a partial effect on customer trust and loyalty variables. The diversity of values of service quality, trust, and loyalty variables able explain the relationship these variables. This study are consistent with Yu's research, Chang and Huang (2006) who found that service quality has a partial effect toward trust so loyalty.

H2, H5 are accepted, because t count for H2 = 3.32 and t count for H5 = 2.23. The value of t count is > 1.96. This means that indicators on image variables have effect toward trust and loyalty variables. Understanding of image variables has a partial effect toward trust and loyalty variables. The diversity of values of image, trust, and customer loyalty variables can explain the relationship between these variables. The results of Flavian's research, Guinahu, Torres (2005) which explains that corporate image has a significant effect on trust. Also in accordance with the results of research by Cengiz, Ayyildiz, and Bunyamin (2007) which concluded that corporate image had an effect toward loyalty.

H3 and H6 are accepted, because t count for H3 = 3.22 and t count for H6 = 2.08. The value of t count is > 1.96. This means that indicators on promotion variables have a significant effect toward trust variables and customer loyalty variables. Understanding of promotion variables has a partial effect on customer trust and loyalty variables. The diversity of the values of promotion, trust, and loyalty variables can explain the relationship between these variables. The results of Wang's research (2010) which prove the influence of advertising on trust and attitude. Also in accordance with the results of Hair's research, et al (2010) which showed that advertising as part of promotion had a significant effect on loyalty.

H7 is accepted, because t count for H7 = 2.11. The t count value is > 1.96. This means that indicators on trust variables have effect toward loyalty variables. Understanding of trust variables has a partial effect toward customer loyalty variable. The diversity of the variable values of the trust and customer loyalty can support the relationship these variables. The research of Ndubisi (2009) which proves that trust influences customer loyalty.

From table 4 it can be said that service quality variables provide a direct influence on the loyalty variables (0.28); service quality variables provide an indirect influence on loyalty variables through the trust variables (0.05); the total effect between these variables is 0.33 (0.28 + 0.05). Furthermore, table 4 also explains that the image variables have a direct influence on the loyalty variables (0.27); Image variables provide an

indirect influence on loyalty variables through the trust variables (0.09); the total influence between these variables is 0.36 (0.27 + 0.09). Furthermore, the table also explains that the promotion variables have a direct influence on the loyalty variables (0.22); Promotion variables have an indirect influence on loyalty variables through the trust variables (0.08); the total influence between these variables is 0.30 (0.22 + 0.08). So the dominant path is the image, trust, and loyalty variables, because the path has the greatest total influence (0.3597).

Table 4.
Results of Direct, Indirect, and Total Influence Analysis

No.	Path	Intervening Variable	Direct Influence	Indirect Influence	Total Influence
1	Service Quality (X1) ⟶ Loyalty (Y2)	Trust	0.28	0.24 x 0.23 = 0.0552	0.3352
2	Hospital Image (X2) ⟶ Loyalty(Y2)	Trust	0.27	0.39 x 0.23 = 0.0897	0.3597
3	Promotion (X3) ⟶ Loyalty(Y2)	Trust	0.22	0.33 x 0.23 = 0.0759	0.2959

Source: data processing results

Several implications for hospital management. First, hospitals will put service quality as a key factor for hospital success. Quality of service can have positive implications for building patient trust and loyalty. Therefore every hospital must create an excellent service program and need to apply the concept of integrated quality management (Total Quality Management). Second, the image of the hospital is also a determining factor for the patient's trust and loyalty. Hospitals must be more intensive to develop programs that can build a positive image of the hospitals, among others, improving the implementation of corporate social responsibility in the community. Third, promotion also determines the increase in patient trust and loyalty. This fact requires hospitals to make effective and efficient promotional programs. Fourth, trust is an important factor that influences patient loyalty. This fact requires hospitals to have full commitment and responsibility to help people obtain satisfactory health services.

IV.   Conclusion

The quality of services provided by hospitals through physical evidence, reliability, responsiveness, assurance, and empathy can arouse patient trust and loyalty. The better the quality of services the hospitals provide, the more it increases patient trust and loyalty. Also the image of hospitals that is built dynamically, with character, success and with responsibility can arouse patient trust and loyalty. The more positive the image of the hospitals, the greater the potential for increased patient trust and loyalty. Meanwhile, promotions carried out adequately by hospitals through advertising, sales promotions, and publications can arouse patient trust and loyalty to the hospitals. The more frequent and adequate promotion carried out by hospitals, the more trust and loyalty of patients to hospitals. Meanwhile, patients' trust in hospitals built through integrity, competence, consistency, virtue, and openness can encourage patient loyalty. The higher the level of trust of patients in the hospitals, the more it can encourage patients to be loyal to the hospitals. Loyal customers are willing to communicate by word of mouth, complaint behavior, behavior not to move, and are willing to pay more. This can support the progress of the hospitals.

The trust variable is an intervening variable both for service quality, image, and promotion variables, each of which affects the loyalty variable. From the 3 paths that are produced, namely the variable path of service quality - trust - loyalty; the variable path of image - trust - loyalty variable, and variable path of promotion - trust - loyalty, the dominant variable path is the image - trust - loyalty variable.

Hospital managers must conduct periodic evaluations related to the quality of service, image, and promotion carried out so that the trust and loyalty of patients can increase, among others, non-medical employees, doctors and nurses must pay attention to patients for their illnesses and desire to recover, the hospitals provide ease of meeting the needs of patients and visitors, and hospitals also need to provide information about medicinal products and discounted prices of these products.

References

Books:
[1].   Azwar, Saifuddin. 2003. *Penyusunan Skala Psikologi*. Yogyakarta: Pustaka Pelajar
[2].   Batesson, John E.G., dan K. Douglas Hoffman. 2011. *Service Marketing*. Ontario: South-Western Cengage Learning.
[3].   Colquitt, J. A., J. A. LePine dan M. J. Wesson. 2009. *Organizational Behavior*: *Improving Performance and Commitment in the Workplace*. New York: McGraw-Hill.
[4].   Hair Jr, J. F., Anderson, R.E., Latham, R.E., dan Black, W.C. 2010. *Multivariate Data Analysis with Readings*. New Jersey: Prentice Hall, Inc.

[5]. Kotler, Philip dan Kevin Lane Keller. 2013. *Marketing Management*, 13th edition. New Jersey: Pearson Education.
[6]. Lovelock, Christopher dan Jochen Wirtz. 2010. *Services Marketing*: *People, Technology, Strategy*. New York: Prentice Hall.
[7]. Robbins, Stephen P. dan Timothy A. Judge. 2009. Organizational Behavior. New York: Prentice-Hall Jersey.
[8]. Zeithaml, Valarie A. dan Mary Jo Bitner. 2009. Service Marketing: Integrating Customer Focus Across the Firm. New York: McGraw-Hill.

Journal:

[9]. Aydin, Serkan, dan Gokhan Ozer. 2005. The Analysis of Antecedents of Customer Loyalty in The Turkish Mobile Telecommunication market. *European Journal of Marketing*, Vol. 39, No. 7/8; 910 – 925.
[10]. Ball, Dwayne, Pedro S. Coelho, dan Manuel J. Vilares. 2006. Service Personalization dan Loyalty. *Journal of Services Marketing*, 20/6; 391 – 403.
[11]. Cengiz, Ekrem, Hasan Ayyildiz, dan Bünyamin Er. 2007. Effects of Image dan Advertising Efficiency on Customer Loyalty dan Antecedents of Loyalty: Turkish Banks Sample. *Banks dan Bank Systems*, Vol,2, Issue 1.
[12]. Dagger, Tracey S. dan Timothy K. O'Brien. 2010. Does Experience Matter? Differences in Relationship Benefits, Satisfaction, Trust, Commitment, dan Loyalty for Novice and Experienced Service Users. *European Journal of Marketing*, Vol. 44, No. 9/10; 1528 – 1552.
[13]. Flavian, Carlos, Miguel Guinaliu, and Eduardo Torres. 2005. The Influence of Corporate Image on Customer Trust: A Comparative Analysis in Traditional versus Internet Banking. *Internet Research*, Vol. 15, No. 4; 447 – 470.
[14]. Heryanto. 2011. Effect of Marketing Strategy on Consumer Loyalty Bajapuik Savings at PT. BPR Berok Gunung Pangilun Padang. *International Journal of Learn Thinking*, Vol. 2, Issue 1; 59 – 87.
[15]. Ndubisi, Nelson Oly. 2007. Relationship Marketing and Customer Loyalty. *Marketing Intelligence and Planning*, Vol. 25, No. 1; 98 – 106.
[16]. Schwaiger, M. 2004. Components and Parameters of Corporate Reputation: An Empirical Study, Schmalenbach Business Review, Vol. 56, No. 1; 46 – 71.
[17]. Souiden, Nizar, and Frank Pons. 2009. Product Recall Crisis Management: The Impact on Manufacturer's Image, Consumer Loyalty and Purchase Intention. Journal of Product and Brand Management, 18/2; 106 – 114.
[18]. Wang, Alex. 2010. The Practices of Mobile Advertising Disclosure on Consumer Trust and Attitude. *IJMM Winter*, Vol. 5, No. 2.
[19]. Yu, Yi – Ting, and Alison Dean. 2001. The Contribution of Emotional Satisfaction to Consumer Loyalty. *International Journal of Service Industry Management*, Vol. 12, No. 3; 234 – 250.
[20]. Yu, Chang – His, Hsiu – Chen Chang, and Gow – Liang Huang. 2006. Study of Service Quality, Customer Satisfaction and Loyalty in Tawanese Leisure Industry. The Journal of American Academy of Business, Cambridge, Vol. 9, No. 1.