

The Influence Of Digital Social Networks On Consumer Behaviour, The Case Of Banking Services In Madagascar

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Abstract : This research is based on the impact of digital social networks on the behaviour of users of banking services. To carry out this study, a sample of 200 users of banking services was surveyed. The objective is to justify whether social networks positively influence users' loyalty towards banking services on the one hand and their purchasing behaviour on the other hand through interpersonal factors such as commented opinions on these services. The structural equation modeling (SEM) was adopted due to its international trend. From these results, it is important to argue that banks in Madagascar should value digital social networks in their communication strategy.

Keywords : behaviour, digital social networks, loyalty, banking services

I Introduction

The date of 12 March 1989 should not be forgotten by mankind, when the Internet was first introduced¹. The Internet has revolutionised the world of communications. The world has changed and kept pace with existing innovations in the digital age.

It is both a capacity for worldwide broadcasting, a mechanism for distributing information, and a means of collaboration and interaction between individuals and their computers, regardless of geographical location. Progress is always a difficult concept to grasp. Technological leaps are sometimes chaotic, but they always end up establishing innovations through new uses that occasionally supplant older ones. In recent years, a new phenomenon has appeared in Madagascar and throughout the world. It is digital social networks, with tools such as Facebook and YouTube. They are a major source of information and account for a significant proportion of time spent on the internet. Half of the world's population is present there. In this sense, it has been noticed the remarkable increase of users of these tools on the one hand, as well as the exponential pace of use of its communication channels. A figure of 2.8 million people, or 10.7% of the Malagasy population, is recorded in August 2020 as the size of the audience of social networks, specifically Facebook in Madagascar². They have revolutionised the way we communicate. Some researchers have even classified them as an opportunity to establish a close relationship with the desired targets. They allow to follow in real time the facts in the world, the position of banks in its market but especially the feedback of its message receivers. However, despite the growing interest of communication researchers in the phenomenon of behaviour, its study based on the online context is limited and fragmented. Digital networks can indeed influence the behaviour of its users, as well as help to make or break the communication efforts made by banks. This influence is of significant value and importance because the tendency nowadays is to trust more in the commented opinions of users than in the object of the message transmitted itself.

II Theoretical framework, materials and methods

II-1 The communication

In its foundation, "we cannot not communicate because a behaviour has no opposite, there is no non-behaviour. One cannot not behave and therefore not communicate. All behaviour, whether we like it or not, takes on the value of information for the observer".

According to Alex Mucchielli, communication is a fundamental human activity. Its meaning, value, appreciation and evaluation depend essentially on the subjectivity of the people who use it. It carries different meanings depending on the subjects who have to deal with it and also depending on the contexts in which communication and actors are inserted.

It is always established according to the same reference points, whatever form it takes (text, image, music, web, etc.). The following image by the linguist Roman Jakobson in the 1960's illustrates this situation well.

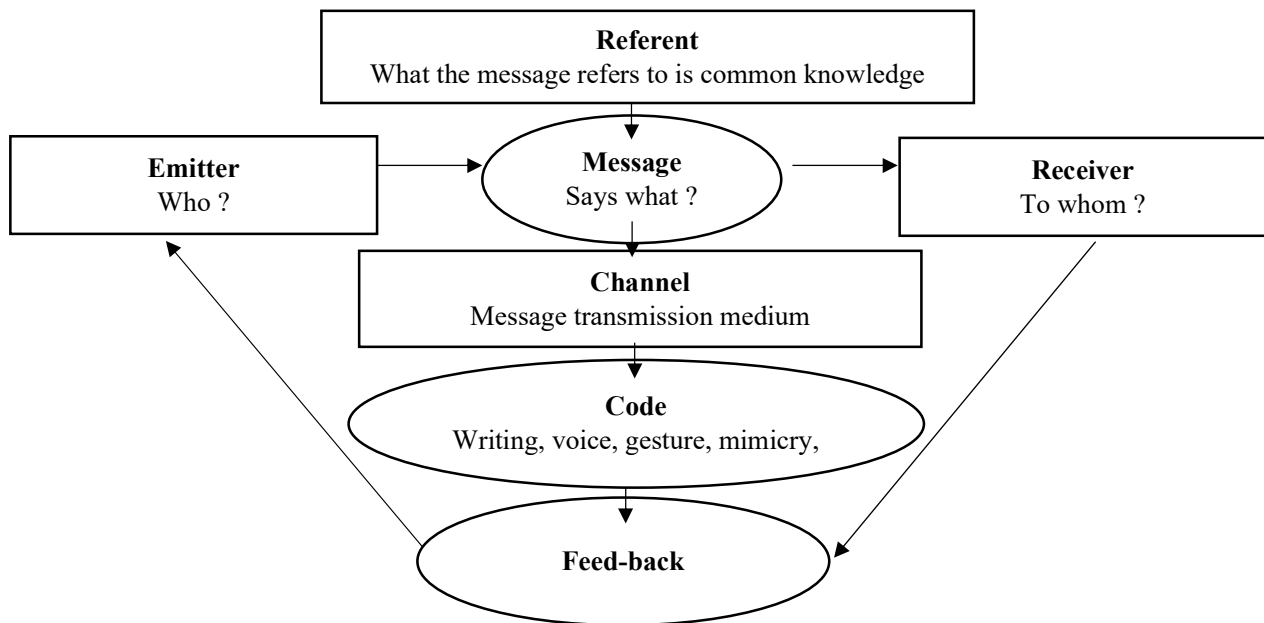


Figure 1 : general outline of the communication

In this figure, for the sender, the act of communication consists of transmitting a concept, an idea, a thought, an information to the receiver. To do this, he/she will have to express it through a message. In order to be understood, a message must be transmitted using a common code which can be composed of signs such as sounds (linguistic code), written signs (graphic code), gestures, images, symbols (logo), mechanical signals (Morse code). This message uses a channel (medium) that allows contact with the recipient. The fact that the receiver of a message can respond to it is called feedback. Communication is the sharing of meaning in the exchange of information. Its process is defined by its technology, the characteristics of the senders and receivers of the information, their cultural codes of reference, and also their protocols. All actions whose purpose is to transmit one or more predefined messages are communication actions.

II-2 Social Network

II-2-1 Definition

Before the digital age, the term "social network" was defined as a group of people with a common affinity or interest. In the technological world, a social network is a service that brings people together to share information on a particular topic. In the virtual world, it is a website that allows users, whether professionals or individuals, to share information (text, photos, videos, links). Access to this site is conditioned by the creation of a personal profile. Several people are interconnected, regardless of their geographical location. They are called users.

II.2.2 Digital social networking practices

Everyone could define the practice of social media according to the stated purpose. The most used tool is Facebook with an exploding figure of 2.9 billion active accounts in the fourth quarter of 2021. This figure highlights how important communication has become in digital social networks. For strictly professional use, LinkedIn is mentioned. Instagram focuses more on the visual (photos and videos) with a strong presence of artistic creations. Celebrities communicate with their followers mainly on Twitter. YouTube is the reference platform for viewing and downloading videos.

II.2.2.1 Communicating on social networks

In communication, there is the art of conveying a message to a target in an effective and intelligible way. This seemingly simple principle nevertheless represents a major challenge for the senders of a message. In this aspect, the primary purpose is to exchange and develop relationships while boosting visibility for professionals. Banks send a message to their customers or prospects, not only to get it across but also to get feedback from them.

II.2.2.2 Using social networks for commercial purposes

Some people focus their time on advertising or launching a new product.

Facebook offers to run advertisements with sponsored programs that allow for very precise targeting. The aim is to share information at hyper-powerful speed for multiple viewings around the world to increase brand awareness and fan engagement.

II.2.2.3 Digital influencers

The influence of social networks on the act of purchasing is becoming more and more marked in all services offered in the various markets. When interested in an offer, a product or a service, the consumer goes through several phases during which a brand must be present. For a considered purchase, a social network user or internet user will generally go through the pre-selection and decision phases. He will then try to find out what is being said about the brand or the offer concerned. To do this, he will particularly rely on the commented opinions, preferences and choices of individuals called social network influencers. In Madagascar, these are opinion leaders such as people with many subscribers or followers (stars, artists, athletes, comedians, specialists, talented people, simple influencers, ...) who relate their experiences through social media.

Influence of online reviews on buying behaviour:

According to a study conducted by SmartFocus, on an online publication, people are more interested in reading the comments than in researching the subject of the message itself.

This reflex highlights the importance that commented reviews have for users. They have become a source of information in their own right and are becoming more and more influential in consumer decision-making. (Purchase, advice, vote...)

II.3 Behaviour

According to Paul Watzlawick and Bateson, behaviour is communication.

It is an action or reaction of an individual resulting from his or her attitude towards someone or something. In psychology, it is a whole set of reactions that can be observed in an individual in his or her environment and in given circumstances.

II.3.1 Consumer behaviour

Several researchers are interested in the subject, and the common idea in different studies is that consumer behaviour focuses mainly on the psychology of customers, the motivation to buy and their behaviour. In the field of banking, it is about making an analysis that includes how customers reason and how they feel and act when presented with a choice.

II.3.2 Purchase intention

A first group of definitions of intention focuses on planning. On this basis, purchase intention could be defined as the planning of a purchase. In marketing, this concept is highly developed. Phillip Kotler defines it as the result of a desire or need, which is cognitively processed, and which leads to purchase planning. It starts with customers asking questions about the product and their behaviour and ends with action. Intentions can be instructions to oneself to behave in a certain way. It involves ideas like: "I must do", or "I will do..." or "I will do...".

II. 4 Loyalty

A term in everyday use, it is the quality of an individual who is attached to something or someone. It can have different meanings in different contexts. In the field of management sciences, loyalty can be defined as a behaviour by which a consumer repeats purchases or choices for the benefit of the same brand or the same entity. Loyalty therefore includes the actions taken to make customers loyal. It concerns the field of customer relations.

II. 5 Banking services

This refers to the basic services of opening a bank account, maintaining it, using its means of payment and closing it. Choosing a bank is a real obstacle course. Customers or prospects refer to various factors or actors before deciding on a banking service. (Influential factors or actors) Nowadays, in Madagascar, the eleven existing banks are running various campaigns in the market in order to develop their customer portfolio, notably on account opening or entry with preferential conditions (free account management fees for a certain period, reduction of fees and commissions, ...), on low rate credits, on related services useful to our daily lives (bancassurance, Mvola service, and services related to the internet). All of this is being developed via digital networks. According to a document published by the World Bank on the diagnosis of the private sector, only 18% of households in Madagascar have access to banking services.

II.6 Structural equation models

Structural equation modelling (SEM) is an analytical technique that simultaneously combines measurement models (e.g. factor analyses) and prediction models (e.g. regressions).¹⁰ It is used to confirm pre-existing assumptions. Theories generating SEM's tend to stipulate causal links between one or more variables. These are the observed or measured variables and the unobserved or latent variables. SEM's are accompanied by a universally recognised graphical notation in the field, a graph that is informed by the results of the analysis.

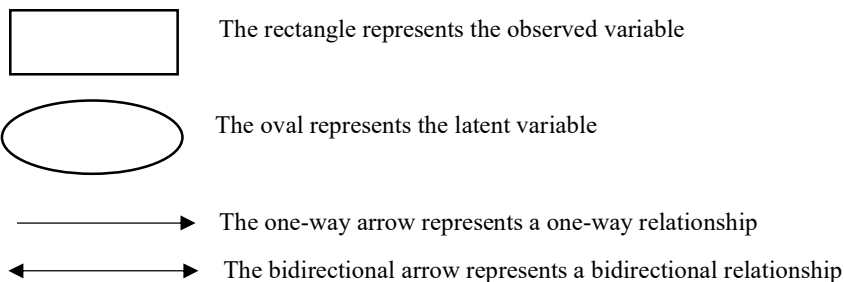


Figure 2 : Symbolic notation for MES

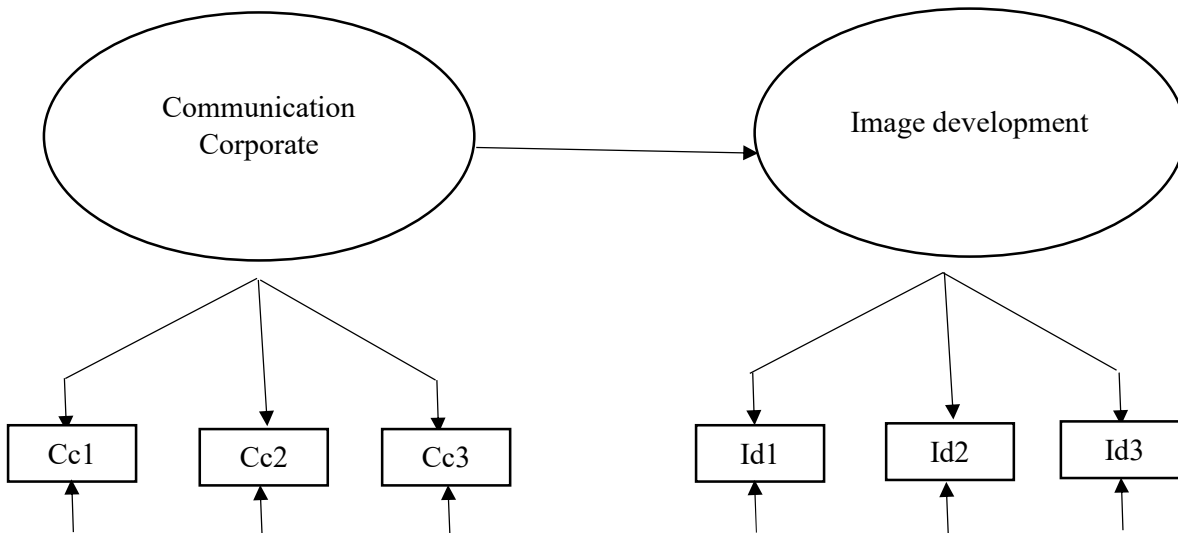


Figure 3: Illustration of a diagram showing the links between corporate communication on social networks and the development of a bank's image

From this figure, it can be deduced that the efforts made in corporate communication on social networks predict the commercial development of a bank.

III. Methodology of the empirical study

III.1 Sample size and data collection

Madagascar, through its INSTAT service (National Service of Malagasy Statistics), does not have an usable database of digital social network users. Therefore, the non-probability sampling method was adopted; a sample of 350 individuals was selected. A questionnaire survey allows this study to arrive at reliable results thanks to the standardisation of responses via closed questions. A pre-test was conducted with 20 M2 students at the University of Vakinankaratra in Antsirabe (IES-AV) to ensure that the questionnaire was well understood. Once validated, the administration of the questionnaire was done in two methods: face-to-face via a field trip to Antsenakely Antsirabe (downtown, a place where banks gather in Antsirabe) and online via Facebook. The survey was conducted between August 2021 and the end of April 2022. Of the 350 individuals surveyed, a return of 300 valid questionnaires marked this study. (Those who have access to banking services and who are both users of digital social network).

III.2 Measurement scales and study questionnaire

Likert-type scales ranging from 1 to 5 were used, containing a series of items adopted in the measurement of various dimensions that concern the variables studied, constructed by ourselves on the basis of literature reviews and then adapted to our study.

Table 1 : Likert-type response scale

Rating	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
Degree	1- 1.80	1.81- 2.60	2.61- 3.40	3.41- 4.20	4.21- 5.00

In this study, the following are the research hypotheses:

H1: Social networks positively influence users' loyalty to customer banking services

H2: Social networks positively influence the intention to recommend banking services to other users

H3: Social networks positively influence users' purchase intention.

III.3 Data analysis: Structural Equation Modelling (SEM)

Several statistical methods have been developed to analyse the data, among them Structural Equation Modelling (SEM), which is a technique for estimating the dependency relationships observed in a set of concepts and constructs. For this research, we opted for the PLS or Projection to Latent Structure (PLS) approach, an approach described as flexible modelling and particularly suitable for exploratory research. This is more reliable and meets the needs of this study. Digital social networks can be described as an exogenous construct that is equivalent to a latent independent variable that is not directly measurable or observable but is represented by the biases of two observed or measured variables (impersonal factors and communication actions).

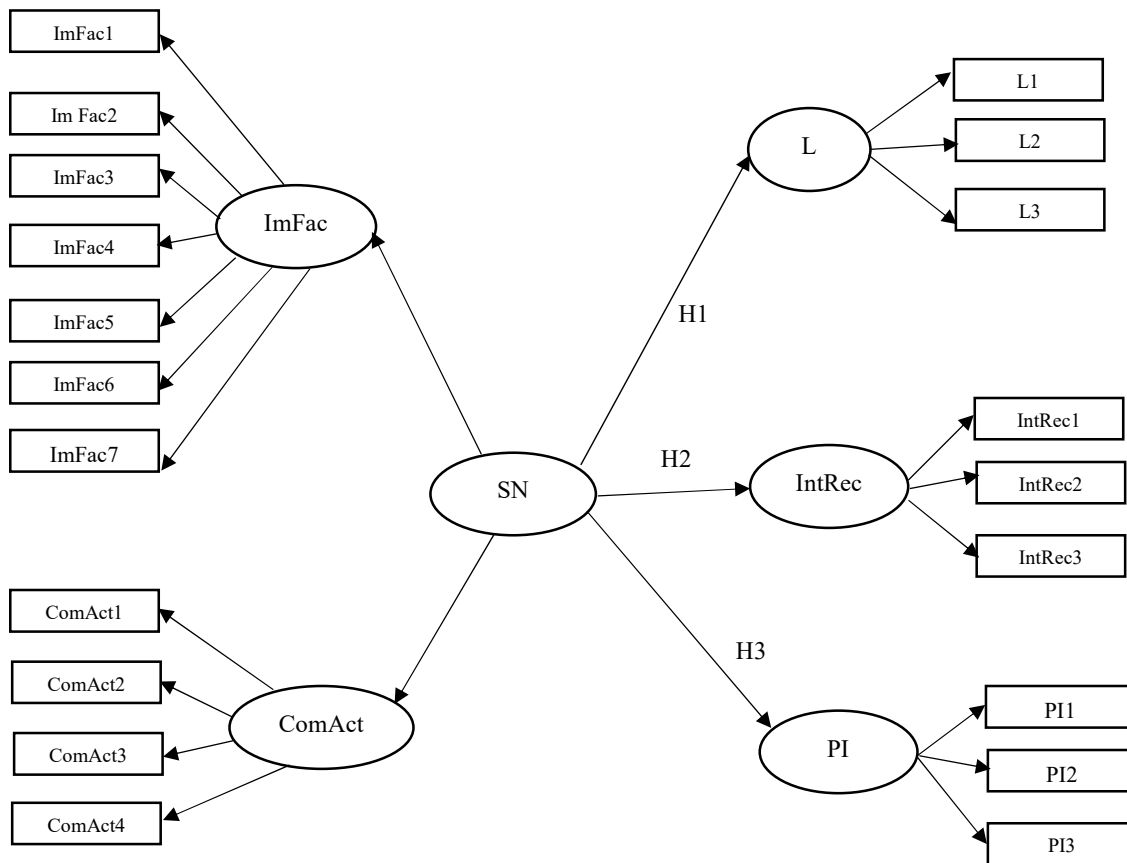


Figure 4 : Conceptual model of the study

For consumer behaviour, Sphinx version 5 software was borrowed for data collection and descriptive analysis and Smart PLS version 2 software for data processing and hypothesis testing.

IV Research results

IV.1 Descriptive analysis

In this section, the results of the descriptive analysis related to the socio-demographic characteristics of the sample are presented: gender, age, income, CSP, education level.

Table 2 : Socio-demographic characteristics of the sample

Features		Quotes Nb	Freq. %
Gender	Man	108	36
	Woman	192	64
Age	Under 18s	5	1.7
	18-25	100	33.3
	25-40	165	55
	40-55	28	9.3

	55-65	2	0.7
	Over 65s	0	0
Education level	Primary	0	0
	Secondary	18	6
	Academic	282	94
Income	Under 400 000 ar	72	24
	400 000 à 500 000 ar	91	30.3
	500 000 à 600 000 ar	59	19.7
	Over 600 000 ar	78	26
	No revenue	0	0
CSP	Student	36	12
	Private employee/official	188	62.7
	Self-employed person	74	24.6
	Retraité	2	0.7

IV.2 Assessment of the reliability and validity of the measurement model

IV.2.1 Assessment of model reliability

Reliability is the degree to which the instruments used consistently measure the construct under study. The table below presents the results obtained for the reliability of the constructs which shows that the constructs are reliable, according to the results all constructs exceed the critical thresholds of 0.6 (Cronbach's α) and 0.7. (CR).

Table 3 : Correlation of latent variables; CR, AVE; Cronbach's α

Constructs	CR, CRR	AVE	α	1	2	3	4	5
1 Loyalty	0.8866	0.6917	0.8265	0.8317				
2 ImFact	0.8603	0.6880	0.7623	0.3102	0.8295			
3 ComAct	0.8625	0.5382	0.7129	0.1708	0.2692	0.7336		
4 PI	0.8402	0.6278	0.7402	0.7706	0.3965	0.3865	0.7923	
5 IntRec	0.8902	0.6622	0.8163	0.1865	0.3712	0.3215	0.3622	0.8138

Legend: CR, CRR: reliability of constructs; AVE: average shared variance; Cronbach's α ; ImFact : Impersonal Factors ; ComAct : Communication Actions ; PI : Purchase Intention ;

IV.2.2 Model validity assessment

The shared mean variance or the AVE above the value 0.5 ($AVE > 0.5$) represent the critical thresholds of the results obtained. This is the case in Table 3: most of the item values are equal to or above the recommended threshold of 0.70.

Table 3 illustrates the discriminant validity test. The values on the diagonal of the correlation matrix, marked in bold, represent the square root of the AVE. To test the discriminant validity between the interpersonal factors and purchase intention, the correlation between these two elements must be compared by calculating the square root of their respective AVE. The square root of the AVE of purchase intention is 0.7923 and that of the interpersonal factors is 0.8295; both values are well above the correlation of 0.3965. In conclusion, the items in the measurement scale are overall valid and reliable and therefore allow the structural model to be tested.

IV.3 Diagnosis of the structural model

The GOF (Godness of Fit) calculation presented by Henseler and Sarstedt¹⁴ allows this study to assess the fit of the structural model, according to the following formula

$$GOF^2 = AVE \times R^2$$

From Table 3, the calculations show that $GOF = 0.47$ and this is based on the following data: $R^2 = 0.42$ (the average of the R^2 of the variables presented in Table 4 below) and $AVE = 0.53$ (average of the AVE of the variables of the model to be multiplied by the number of items of each variable), which leads us to conclude that the goodness of fit of the structural model is good and it is therefore possible at this stage to proceed to the hypothesis test.

Table 4 : Overall assessment of predictive power

Variable	R Square
Loyalty	0.3252
Impersonal factors	0.4727
Communication Actions	0.3863
Purchase Intention	0.2532
Intention to recommend	0.6721

IV.4 Hypothesis testing

This section is dedicated to the presentation of the results of the hypothesis testing. In order to test these hypotheses, the Student Test (T-Statistics) has been deployed.

The following table 5 shows that the T-Statistics of the three hypotheses are all greater than 2 and positive. According to the results obtained, the structural model is acceptable and therefore we can confirm the hypotheses (H1, H2 and H3), i.e. that digital social networks have a significant effect on consumer behaviour.

Table 5: Results of the structural model

Hypothesis	Coef	T-Statistics	Results
H1	0.04	5.47 > 2	Accept
H2	0.08	4.38 > 2	Accept
H3	0.07	3.78 > 2	Accept

II Conclusion

Although their services are particularly sought after for their convenience, low price and unique customer experience, it is important to note that they have received a fair amount of publicity from their users through social networks. This is why it is particularly interesting to consider why they drive many of the choices we make every day, including the decision to consume, or not, a product or service.

The results obtained in this study show us that consumers have integrated digital social networks into their behaviour and purchasing decisions. The results illustrate that consumers, before making a purchase, search for information on the products and brands they want to buy on the official pages of the banks, and that they consult the opinions and comments left by other members of the page, which can influence their purchase decision, and in the case of negative comments, they prefer to do other research. In this case, the opinions of influencers on social networks are very significant and could impact the product or the communication made by the banks.

Complaints launched online by a customer have an effect that could be irreparable for a company, be it its nature of reliability as information deemed as experiences and lived pass so quickly. Nevertheless, it is important to emphasise the importance of advertising on digital social networks and its effect on consumer behaviour. In this context, we encourage banks and other financial institutions or companies to consider the effects of social networks to facilitate communication with customers or to promote their product.

From a managerial point of view, this study could be exploited by company managers or professionals insofar as it allows them to understand the consumer's behaviour and to identify his expectations and needs to attract him, influence his purchase, ensure his satisfaction and thus his loyalty.

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