
**Regular and stable industrial buying behaviour :
classification based on the determinants of customer's behaviour**

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- **Summary**

The aim of this research is to propose a model of industrial customer regular and stable buying behaviour distinguishing regular and stable buying behaviour reflecting loyalty and the same buying behaviour reflecting two very different states: retention and inertia.

A review of literature based on the Interactive Stream, the Relationship Marketing researches, and some works on Organisational Buying Behaviour, leads to the proposition of a conceptual model presenting the factors on which the contrast between loyalty, retention and inertia can be made.

This model is, then, tested by a quantitative study on 117 industrial customers.

Key words: loyalty, retention, inertia, satisfaction, trust, commitment, cooperation, dependence.

- **context and objectives**

When they gave their definition of customer loyalty in 1973, Jacoby and Kyner underlined the risk of confusion between simple repeat purchasing behaviour and real loyalty (repeat purchasing behaviour based on positive attitudes toward the exchange partner). Based on an empirical study, they have shown that loyal customers differ from other kind of customers having the same behaviour, on the underlying dynamics of their buying behaviour. They recommended the future researchers to be careful with this distinction in order to avoid confusion and approximation.

Jacoby and Kyner's definition of loyalty has been a reference for marketing researches for thirty years (for both consumer and industrial markets), but it seems that most of the researchers have forgotten their recommendation, considering regular and stable buyers as loyal customers. The study of the literature on industrial customers loyalty reveals, then, incomplete, sometimes ambiguous, and even contradictory results that do not permit to get a satisfactory understanding of the concept.

However, a few authors insist on the importance of a clear understanding of the antecedents of repeat purchasing behaviour. For example, for Gadde and Mattsson (1987) "it is important to analyse the factors causing long-term relations because customer reactions to marketing efforts probably differ depending on these factors". Going further, Dwyer, Schurr and Oh (1987) affirm that "the lack of attention to antecedent conditions and processes for buyer-seller exchange relationships is a serious omission in the development of marketing knowledge".

More, looking closer at the literature, it is easy to put into evidence the existence of two other categories of customers developing regular and stable buying patterns but having motivation to act clearly distinct from loyal customers:

- Customers in a situation of retention: the behaviour is linked to a non-shared dependence from the customer to his supplier. This kind of customers can be compared to hostages (Jones and Sasser 1995), that "have to" stay in the relationship (Bliemel and Eggert 1998). Therefore, their buying behaviour is not linked to positive attitudes toward the supplier (Hening-Thureau and Klee 1997) but to the existence of barriers to switch: lack of alternative, risk and cost of a switching behaviour (Gadde and Mattsson 1987).

- Customers in a situation of inertia: the behaviour is the result of habit, and past buying behaviour is the best explanation for future buying behaviour (Morrison 1966; Chintagunta 1998). For this kind of customers, regular and stable buying behaviour “could result from satisfaction obtained from consuming the brand or from the consumer’s need to routinize behavior so as to minimize the cost of thinking” (Bawa 1990). They show limited interest toward the alternative possibilities of supply and have, then, a limited probability to switch to other suppliers (Assael 1987; Wernerfelt 1991).

The objective of this research is, then, to propose a method to distinct loyal industrial customers from other regular and stable buyers (retained and inert), on the basis of the determinants of their behaviour.

After a literature review presenting the three categories of customers and the determinants of their buying behaviour, we present the results of an empirical study realised on 117 industrial customers in a situation of regular and stable buying behaviour with one of their suppliers.

- Conceptual framework and model

- Business-to-business relationships

Business-to-Business relationships have been a growing concern of marketing researchers over the past two decades. The pioneering frameworks were given by the IMP group (Hakansson 1982), quickly followed by the Relationship Marketing stream (“all marketing activities directed toward establishing, developing and maintaining successful relational exchanges” Morgan and Hunt 1994). One of the common areas of interest of these two streams of literature since the mid 80’s is the study of the length of the relationship between a customer and his supplier(s). Convinced that organizations are more competitive and strength if they develop long-term relationships with their partners, a great number of authors have been studying long term buyer - seller relationships (i.e. relationships that “transpire over time”, Dwyer and al. 1987) for more than 20 years.

Therefore, a great amount of literature exists on this theme, and a great part of the researches deals with the determinants of long-term relationships. The objective of our literature review

is, then, to extract from all these works a reduced number of explicative factors of regular and stable buying behaviour that will easily allow us to differentiate loyal, retained and inert customers.

- Determinants of long-term business-to-business relationships

This literature review suggests that five variables constitute the main explicative factors of regular and stable industrial buying behaviours. First, it is generally admitted that “trust, commitment to the exchange relationship and satisfactory performance, are the important characteristics of a good buyer - seller relationship” (Han, Wilson and Dant 1993). Parallel to these variables, the effect of cooperation and non shared dependence (i.e. unilateral dependence of a customer to his supplier) on the length of the relationship have been, too, extensively studied in the literature (see Dabholkar et al. 1995 for an example).

- Definition of the concepts

Although one can find an important number of definitions of industrial customer satisfaction in the literature, the concept “is defined most frequently as a positive affective state resulting from the appraisal of all aspects of a firm’s working relationship with another firm” (Geyskens, Steenkamp and Kumar 1999).

Since 1992, the vast majority of the definitions of industrial customer’s trust towards a supplier is based on the works of Moorman, Zaltman and Desphandé (1992) who present trust as “the willingness to rely on an exchange partner in whom one has confidence”.

As far as commitment is concerned, the concept has been widely investigated in the literature, and the diverse perspectives of the researches have lead to a variety of definitions, creating quite a confusion (Kim and Frazier 1997). Derived from some of the most important researches carried out (Anderson and Weitz 1992; Dwyer, Schurr and Oh 1987; Moorman, Zaltman and Desphandé 1992; Morgan and Hunt 1994), the concept can be defined as the willingness of the customer to develop and maintain his relationship with a particular supplier.

Cooperation and non-shared dependence are the two extremes of a same continuum (the dependence), going from a desired bilateral investment in the relationship to a constrained maintenance of the relationship from one of the two parties regarding the difficulty to replace

his partner (Emerson 1962, Dabholkar et al. 1995). On one hand, cooperation is based on “balance, harmony, equity and mutual support” (Oliver 1990) and combines a very positive state of mind and a very positive behavior on behalf of each of the two partners (Anderson and Narus 1990; Morgan and Hunt 1994; Wilson 1995). On the other hand, non-shared dependence is an unilateral dependence, synonym of “coercion, conflict and domination” (Oliver 1990), and based on an asymmetry of power between the two parties (Dwyer and al. 1987; Geyskens and al. 1996; Wilson 1995).

- Specific determinants of long-term business-to-business relationships for loyal, inert and retained customers

Satisfaction appears in the vast majority of the studies on regular and stable buying behaviour (Anderson, Fornell, Lehman 1994; Churchill and Surprenant 1982; Fornell 1992). It is, very often, considered as the determinant variable of influence on the willingness to continue the relationship (Anderson and Sullivan 1993; Eriksson and Löfmark 1999). Although some recent studies underline that being satisfied is not enough for a customer to develop regular and stable buying behavior (Henning-Thurau and Klee 1997, Reicheld 1996), satisfaction can be considered as a necessary but not sufficient condition for the development of regular and stable buying behaviour.

Many researches also show that trust is “determining in the continuity of industrial relationships” (Guibert 1999). The customer feeling confident won't have any real reason to switch from his supplier and, in this stable relationship, he will easily become a regular consumer. More, as the length of the relationship increases, the feeling of confidence grows (Anderson and Weitz 1992, Donney and Cannon 1997). Trust seems, then, to exist for all the long-term relationship.

The situation is quite different for commitment. As a desire to develop and maintain the relationship, commitment is a determinant of customer's behaviour only for loyal customers (Anderson and Weitz 1992; Dwyer and al. 1987; Moorman, Zaltman, Desphandé 1992; Morgan and Hunt 1994). Behaviour of inert and, above all, retained customers is not driven, by definition, by any commitment

The mechanism of cooperation is very similar to commitment. In fact, the decision to develop cooperative links with a supplier corresponds to a willingness of strong involvement in the relationship (Anderson and Narus 1991) that can only reflect a state of loyalty.

At the opposite, the influence of non-shared dependence consists mainly in a stabilization of the purchases, based on the perceived risk and cost of a change (Fontenot and Wilson 1997). As a hostage of the relationship, the customer develops regular and stable purchases (Jones and Sasser 1997), in other words, he is retained in the relationship.

In conclusion, when the observed behaviour is linked to positive attitudes (satisfaction, trust, commitment), and only in that case, it reflects customer loyalty (Jacoby, Kyner 1973; Jarvis, Wilcox 1977). When this behaviour is mainly linked to a non-shared dependence from the customer to his supplier, it reflects retention (i.e. the customer is retained in the relationship). When the behaviour is the result of habits, that is to say when past buying behaviour is the best explanation for future behaviour, it reflects inertia.

Empirical study

Research design

Our model is tested by a quantitative study based on 117 questionnaires filled by industrial buyers characterised by a regular and stable buying behaviour with one of their suppliers. To be sure that the respondents were real regular and stable buyers, we asked five suppliers to make a selection of their customers on this characteristic. 423 customers came out of this process, and nearly 28% sent back our questionnaire.

A two stages research design is used for this empirical study. We first test the validity of our three-parts model dividing our sample into three groups: loyal, retained and inert customers. If the results of this analysis are conclusive, we test the level of the different groups on the five determining variables of the customer's buying behaviour: satisfaction, trust, commitment, cooperation and non-shared dependence.

Validity of the three-parts model

The first part of the empirical study consists on two complementary cluster analyses: a theoretical and an empirical (Chandon, Dano 1998).

Theoretical cluster analysis

The theoretical cluster analysis is based on:

1. the conclusions of the literature review on the different levels of satisfaction, trust, commitment, cooperation and non-shared dependence between loyal, inert and retained customers.
2. the conclusions of a qualitative study on industrial customers and suppliers following two main objectives : to check the global relevance of the model, and to understand the specificity of each kind of customers (loyal, inert and retained).

Using those conclusions, three ideal customers are created: the ideal loyal customer, the ideal retained customer and the ideal inert customer. Those three customers can be described by the following characteristics:

	Satisfaction	trust	commitment	Cooperation	Dependence
Loyal	Very high	Very high	Very high	Medium	Low
Retained	Medium	Medium	Low	Low	High
Inert	High	High	Medium	Low	Low

Table n° 1: « estimation of cluster centres for the theoretical classification »

They are, then, considered as cluster centres and the respondents are allocated (using “Quick Cluster” option on SPSS) to a cluster, on the basis of their proximity with one of the cluster centres. This operation leads to the creation of three groups presenting very different sizes: 41 persons for the first group (loyal customers), 18 for the second group (retained customers) and 58 for the third group (inert customers).

To be sure that the three groups give an exact representation of loyal, inert and retained customers, we use the long term regularity and stability of their future behaviour as a variable of control. A comparison of means between each pair of groups (G1 / G2; G1 / G3; G2 / G3) on this variable, leads to the conclusion that: 1- a significant difference exists between the three groups; 2- loyal customers’ regularity and stability > inert customers’ regularity and stability > retained customers’ regularity and stability

This result respects the logic deduced from the literature and confirms the validity of our three theoretical groups.

Empirical cluster analysis

This theoretical classification is completed by an empirical classification based on the scores of satisfaction, trust, commitment, cooperation and non-shared dependence of the respondents. For this hierarchical cluster analysis, we use the Ward’s method applied to the squared Euclidian distances.

The empirical cluster analysis leads to the creation of three groups containing respectively 34, 18 and 65 persons. Those three empirical groups are very closed to the three theoretical groups: 82% of the respondents are classified in the same way by the two methods:

		theoretical classification			Total
		loyal	inert	retained	
exploratory classification	G1	32	-	2	34
	G2	-	13	5	18
	G3	9	5	51	65
Total		41	18	58	117

Table n°2: « number of respondents in the different groups »

Comparison of the two methods

Before we make any further comments, it is important to analyse the reasons why 21 customers belong to different groups when we apply the two methods. There is two possible reasons: a specificity of those customers or a simple difference of algorithms between the methods.

To verify if the problem is linked to a specificity of the respondents, we make a comparison of the 21 problematic customers and the 96 non-problematic ones focusing on the firms, the relationship and the respondents’ characteristics. A complete analysis of the percentage of missing value, mean, standard deviation, minimum and maximum value, and quartile’s distribution, can’t support the idea of a specificity of the customers. We consider, then, that the percentage of error is linked to the difference of estimation inducted by the different algorithms used by the two methods.

Description of the empirical groups

As the two cluster analyses confirm the existence of three different groups, it is now possible to describe the empirical groups on the five variables of partition: satisfaction, trust, commitment, cooperation and non-shared dependence. This description consists on a comparison of means between each pair of groups for the five variables. The objective of this analysis is to provide a validation of our three categories of regular and stable buyers, and of their characteristics.

This comparison of means reveals that :

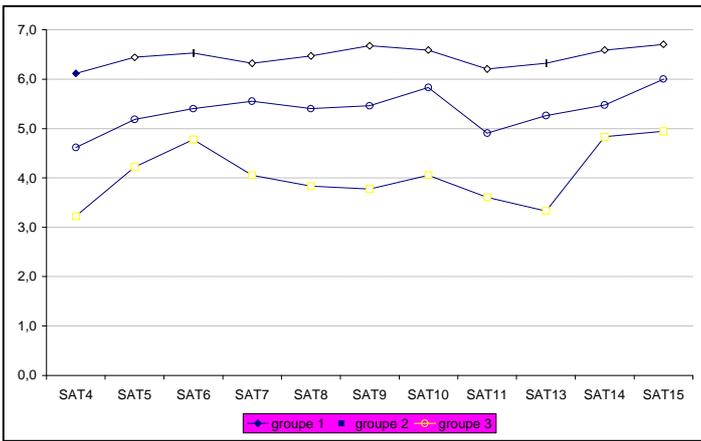
- group 1 presents very high levels of satisfaction, trust and commitment; low levels of dependence; and (for a part of the items) high levels of cooperation.
- group 2 presents medium levels of satisfaction and trust; low levels of commitment; high levels of dependence; and medium to low levels of cooperation.
- group 3 presents high levels of satisfaction and trust; medium levels of commitment; low levels of dependence; and medium to low levels of cooperation.

More, the graphical representation of the mean value on each item of the five variables for the three groups (figure 1), suggests that:

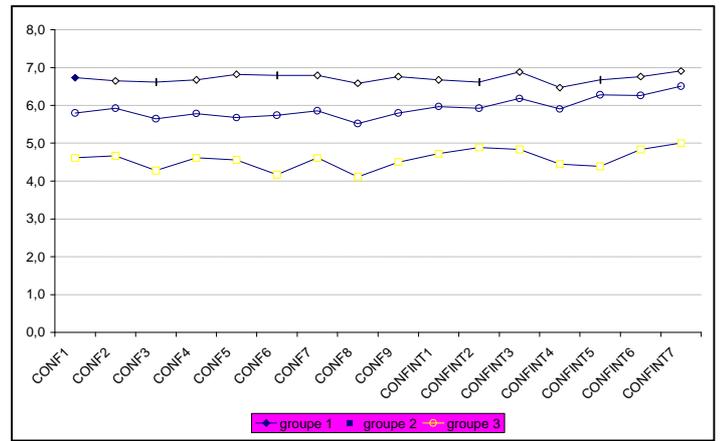
- For satisfaction, trust and commitment: group 1 > group 2 > group 3
- For cooperation: group 1 > group 2 = group 3
- For non-shared dependence: group 3 > group 2 > group 1

If we consider that group 1 represents loyal, group 2 retained and group 3 inert customers, the characteristics of the three empirical groups seem, then, to be very similar to the theoretical characteristics of loyal, retained and inert customers.

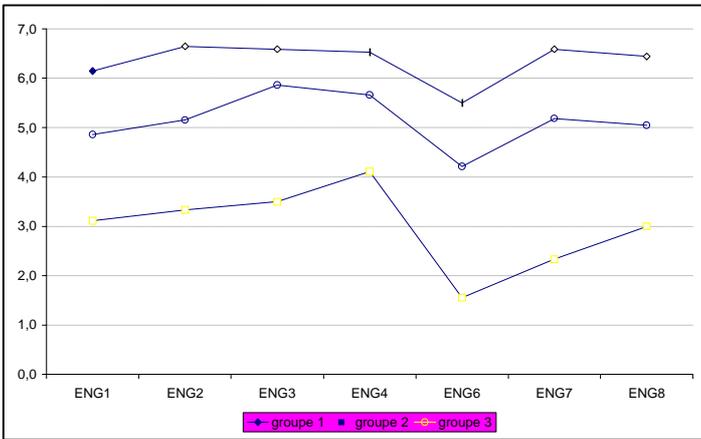
Satisfaction



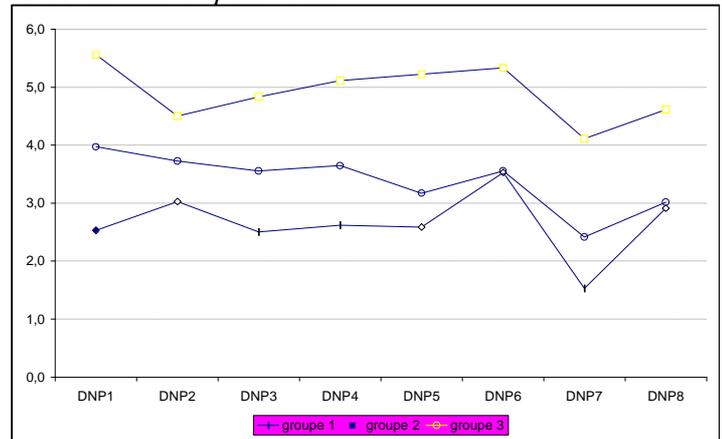
Trust



Commitment



Non-shared dependence



Cooperation

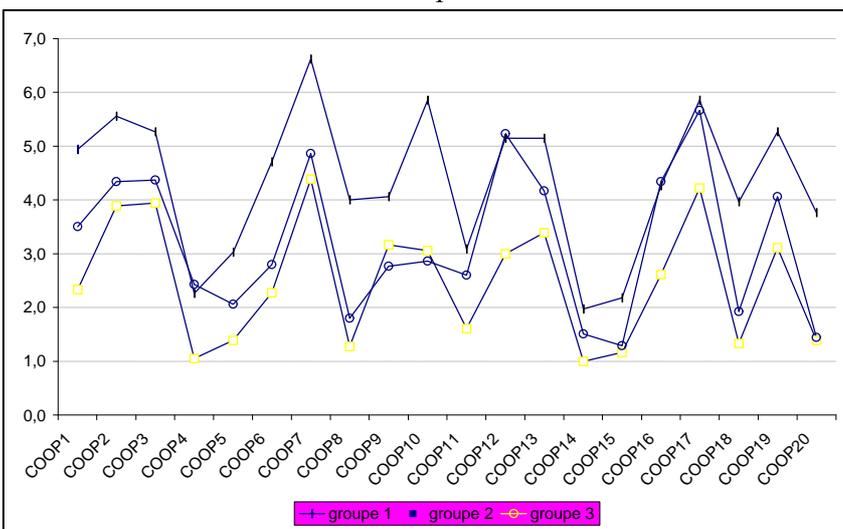


Figure n°1: « mean value on each item of the five variables for the three groups »

The results of the F tests for each pair of groups confirm these suggestions:

	Group 1 / Group 2	Group 1 / Group 3	Group 2 / Group 3
Satisfaction	R (11/11)	R (11/11)	Rp (9/11)
Trust in the firm	R (9/9)	R (9/9)	R (9/9)
Trust in the sales-representative	R (7/7)	Rp (6/7)	R (7/7)
Commitment	R (7/7)	R (7/7)	R (7/7)
Cooperation	Rp (15/20)	Rp (10/20)	NR (4/20)
Non-shared dependence	Rp (7/8)	NR (1/8)	Rp (5/8)

Table n°3: « F tests by pair of groups »

R (11/11) = H0 rejected (rejected for the 11 items)

Rp (9/11) = H0 partially rejected (rejected for 9 of the 11 items)

NR (1/8) = H0 Non rejected (rejected for 1 of the 8 items)

Therefore, the three empirical groups represents the situation revealed in the literature: only one part of regular and stable buyers is loyal (group 1), some of them are retained in the relationship (group 2), and others just act by inertia (group 3).

Conclusion

This empirical study confirms the validity of the hypotheses deduced from the literature review. The analyses are consistent with the recommendation of Jacoby and Kyner on the necessity to differentiate loyal customers from other customers having the same buying behaviour for different reasons.

The cluster analyses put into evidence that all regular and stable industrial buyers are not loyal customers. The empirical cluster analysis provides a division of the sample into three groups very similar to the groups obtained by the theoretical cluster analysis. The structure loyal / inert / retained is, therefore, acceptable.

More, the comparison of means between the empirical groups gives a validation of the determinants of customer behaviour for the three kinds of customers.

- Contributions

This research extends our understanding of industrial customer regular and stable buying behaviour by modelling the difference between loyalty, retention and inertia. We wanted to

design a model which was clear to understand and easy to apply to the reality of industrial buying situations.

The quantitative study provides a validation of the structure of the model as well as a validation of the levels of each group on satisfaction, trust, commitment, cooperation and dependence.

On a managerial perspective, the modelling of three different concepts characterised by the same behaviour makes it interesting for the managers who really want to understand their customers. They find an operational tool they can apply to their situation and use to build customer loyalty policies. As a matter of fact, using this method, any supplier can be able to analyse his portfolio of customers and the repartition between loyal, retained and inert firms. He can, therefore, decide of the kind of policy he has to build with each of his customer, depending on his real state and not only on his behaviour.

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