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***MAKING THE POINT*.**
THE CHALLENGE OF LOYALTY PROGRAM EFFECTIVENESS MEASUREMENT

Summary
This work is part of a wider reflection on the development of a loyalty marketing orientation among Italian companies. In earlier work we described the adoption of loyalty programs by a growing number of companies across industries, ranging from department stores to supermarkets to gasoline retailers and others, which is following in the path of other countries such as the UK (Ziliani and Bellini, 2004). In order to gain insight into future developments in loyalty marketing, we now investigate marketing managers' perceptions of loyalty marketing challenges, satisfaction with their own loyalty programs and drivers of adoption and measures of effectiveness. Our survey uncovers a gap between assigned goals and expectations on the one hand, and measurement on the other. Measurement practices regarding performance and effects of main loyalty program tools, such as the reward catalogue, appear to be falling short of company needs, especially when the current situation of market maturity and program cost pressure is considered.

We believe that bridging this gap with appropriate measures may help managers overcome their declared uncertainty regarding future directions. We therefore conducted analyses with loyalty program data provided by five retail companies and one promotional agency. The outcome, if confirmed by replication, will shed light on urgent questions for performance measurement for loyalty marketing managers. These questions include: how appealing are the loyalty program main features to customers? Does the desire to obtain a high value reward lead consumers to increase their spending and frequency? How differently do loyalty programs perform across different store formats? What are the benefits of erasing unredeemed loyalty points periodically?

For marketing managers who wish loyalty orientation to be a sustainable strategy in the future, the analysis and experiment are intended as a stimulus to develop and institutionalize continuous and thorough performance measurement routines for their loyalty programs.

Keywords
Loyalty programmes; loyalty cards; retail marketing; effectiveness measurements; Wilcoxon test

1. Introduction and aim of study

Loyalty marketing encompasses a number of marketing practices, ranging from loyalty programs to relational marketing activities. Over the past fifteen years, several factors have contributed to its widespread adoption, to the extent that today almost any action targeting the individual customer is referred to as "loyalty marketing" (Kamakura et al., 2005). Among loyalty marketing practices, loyalty programmes are pre-eminent. Such programmes are defined, in line with previous research (Sharp and Sharp, 1997; Bolton, Kannan and Bramlett, 2000), as *an integrated system of marketing actions, which aims to make member customers more loyal.*

Although they have been on the market for more than one hundred years, loyalty programs have recently undergone an enormous resurgence. Between 2000 and 2007, membership soared from 973 million to 1.3 billion people in the US (Ferguson and Hlavinka, 2007). That is to say, the average household belongs to at least 12 loyalty clubs, or every adult appears in at least six databases.[1] In Canada, 70% of households participate in at least one loyalty program. In Italy, each adult consumer had on average 3.6 cards in her wallet in 2006[2]. Several authors have come to suggest that the loyalty program landscape is showing signs of maturity (Stone et al., 2004; Ferguson and Hlavinka, 2007).

According to Gartner Group, U.S. companies spent more than $1.2 billion on customer loyalty programs in 2003 (Forbes, 2007). In some sectors, these schemes are the only opportunity companies have to get to know their customers "individually". Large retail stores such as department stores, supermarkets and warehouse clubs, routinely collect "buy-o-graphic" information about customers by means of loyalty and payment cards. Purchase information is used by many companies today to take better decisions across different marketing areas, ranging from assortment to store staffing, and from pricing to targeted promotions. Research firm Colloquy (2006) estimates that 64% of supermarkets and 47% of department stores use loyalty data to increase marketing ROI. The best known case of a company going all the way along the loyalty learning curve is probably Tesco, the British supermarket chain. Tesco's approach to decision making based on a customer- rather that the more common product-view of the business, has been publicised by the work of Humby, Hunt and Phillips (2003). Today, insight is no longer simply considered a windfall profit of loyalty

[1] In the US, the airlines, financial services, grocery and specialty retail sectors account for 57% of total loyalty program membership. The first two industries alone count for 37% of the membership base (Ferguson and Hlavinka, 2007).

[2] Figures courtesy of A.C. Nielsen.

schemes, but has become one major reason for the adoption of the scheme in the first place (Day, 2000).

Loyalty programs are an important way for companies to improve customer knowledge and enhance customer loyalty, but companies' (especially retailers') perceptions of this marketing instrument have received little research attention (Leenheer and Bijmolt; 2003). The *first aim of this study* is therefore to fill this gap with regard to the Italian market. By means of a direct survey of 15 major supermarket operators (see Methodology, below) we *investigate marketing managers' perceptions of loyalty marketing challenges, satisfaction with their own loyalty programs, drivers of adoption and measures of effectiveness, in order to gain insight into the future developments of a loyalty marketing orientation in the industry*.

As the survey advanced, it emerged that, in a scenario of "look alike" programs where shoppers receive one point for every euro they spend, loyalty program differentiation effort is mainly concentrated on one particular element of the program design: the "rewards catalogue", i.e. the set of goods, benefits and services that customers can trade their points for. Loyalty programs typically include *a benefit package, offered to members with the goal of activating them and increasing their loyalty by creating an emotional relationship* (Butscher, 2002). These packages comprise several kinds of rewards for members, varying from saving on certain items and targeted offers, to special shopping nights and preferred service treatment. The complete list and description of these benefits often takes the form of a printed catalogue for customers to take home and keep as reference.

Research by Mauri (2002) showed that over time, from little more than promotional leaflets, reward catalogues have evolved into rich communication tools for Italian retailers. They are often the only advertising material about the company that reaches consumers' living rooms and is browsed through by all family members, repeatedly over weeks or months, which tends to create excitement and reinforce store loyalty.[3] Over time, in Italy, the reward catalogue has become synonymous with the loyalty program itself, even more so because for many companies have no other forms of loyalty or relational marketing, * although they in fact collect individual customer information. * So for Italian supermarkets, the best definition of a loyalty scheme is *an integrated system of rewards*, rather than a system of marketing actions taken by the firm. As a consequence, we will argue below that measuring catalogue

[3] Some national Italian chains also print and circulate "house organs" or "store magazines", with a more general focus than that of the loyalty program, providing recipes, housekeeping tips, entertainment and the like.

effectiveness – i.e. the degree to which assigned goals are achieved – is almost the same thing as measuring overall loyalty program effectiveness.

Our survey found that the catalogue absorbs between 0.5 to 1% of the marketing budget of interviewed companies. Yet we also found that its performance is poorly measured.

This absence of measuring, coupled with news of some companies[4] dropping, or thinking of dropping, their catalogues altogether and moving to simpler rebate programs, explains the climate of uncertainty about the future. With so much marketing money locked into points schemes, sluggish sales, and lots of me-too programs around, it is easy to see why some managers are tempted to follow suit in the catalogue-slashing trend. And given the absence of data on its effectiveness, it is easy to see why others find it hard to justify their "feeling" that the catalogue is beneficial to the company.

Wirtz, Mattila, and Lwin (2007) recently demonstrated that an appealing set of rewards, "condensed" into the catalogue, is a necessary although not sufficient condition to sustain customer participation and regular card use to ensure point collection. Although there might be other reasons for a customer not to show her card every time she shops, failure of the catalogue to engage customers will in all probability result in a low number of transactions captured through the card, with severe consequences on data completeness and significance.[5] Eventually, the number of active customers could slump to a point where data is no longer useful for analysis, preventing the company from reaping the most valuable benefit of a loyalty scheme – actionable customer insight, on which to build a sound loyalty orientation.

But measuring customers' activity and changes in behaviour through the reward catalogue can help marketing managers address catalogue weaknesses in the early stages. This inhibits the vicious cycle described above. Banasiewicz (2005) demonstrated the importance of robust customer insight to loyalty program planning and its ongoing management. Not surprisingly, Cuthbertson and Laine's (2004) survey of loyalty schemes in European retail companies

[4] An internal debate on the future of reward catalogues at Coop Italia, the largest Italian retail chain, animated the loyalty marketing scene during 2006.

[5] Clearly, the reliability of insight from the analysis of such data, and the quality of decisions and action consequently taken, depends on the quality of original data, i.e. the degree to which the data captures actual behaviour in the store. It is not unusual for a customer to forget her card on shopping trips, or just not to bother showing it to cashiers, and this "omission" leads to a missing piece in the customer shopping record. Data-savvy companies in fact instruct till operators to actively remind customers about presenting the loyalty/payment card, thereby improving the completeness of their transaction records, and ability to picture the customer's in store behaviour to the full. We argue that staff behaviour is not sufficient: the loyalty scheme should be attractive enough in itself for customers to present the card spontaneously.

showed that program performance and improvement is indeed among the earliest and most established applications of loyalty data.

We argue, moreover, that "catalogue-related behaviour", if properly captured and analysed, can assist loyalty marketing decisions in areas such as the following:

- catalogue design: better selection of rewards and partners, point threshold definitions, selection of rewards that can be obtained with points alone or a combination of points and cash (Dowling and Uncles, 1997; Jain and Singh 2002; Dréze and Nunes, 2005);
- segmentation of customers based on their interest and responsiveness to rewards (Yi and Jeon, 2003; Kivetz and Simonson, 2002 and 2003);
- targeted marketing activities to selected segments to encourage and/or expand their activity with the catalogue (Rossi et al., 1996);
- catalogue related focus groups and research involving the most appropriate segments of the customer base, as opposed to an undifferentiated sample selection approach (Lugli, 2007);
- program performance monitoring and early detection of "worn-out" signs;
- program performance in terms of acquisition, retention and extension goals (O'Brien and Jones, 1995; Hartmann and Viard, 2007).

We also develop *a second aim* for this work: *to help managers devise measures of effectiveness for their catalogues - and, indirectly, their loyalty programs -, to act as a basis for decision making.* This should ease the uncertainty on the future of their loyalty strategies. Managers we interviewed had several questions that needed to be urgently addressed, such as: how appealing are rewards to customers? And to *best* customers? Does the desire to obtain a high value reward lead consumers to increase their spending and frequency? Does the same loyalty program perform differently across diverse store formats? We discuss below how we used information from our interviews to address these questions.

2. Methodology and contribution of this study

To address the first aim of the study we adopted two methodologies.

a) A survey was conducted during the months of September and October 2006. Marketing/loyalty managers at the top 30 Italian supermarket chains offering a loyalty program were approached by telephone and/or e-mail, in order to obtain consent to a personal or telephone interview with a researcher. A structured questionnaire focusing on four main areas was forwarded as a basis for discussion. The areas were:

i. the company’s loyalty scheme, with specific reference to the characteristics of the reward catalogue, and of rewards;
ii. perception of loyalty marketing scenario, and future strategy, with specific reference to the catalogue;
iii. loyalty scheme assigned goals;
iv. perception of loyalty scheme effectiveness, measures implemented, desirable measures, current measurement practices.

Fifteen interviews were completed, and form the basis for the discussion of findings in the following section.[6] Respondent companies account for a total of 10,360 stores reaching Italian consumers with a loyalty scheme.

b) Semi-structured, in-depth interviews were carried out with three marketing and advertising agencies that design and manage loyalty schemes on behalf of various companies.[7] This qualitative study was aimed at complementing findings from the survey in a), and comparing interviewee responses on performance measures with agencies’ experience of clients’ practices and know-how. We specifically asked the agencies to comment on the following:

- Do their clients assess loyalty program and catalogue performance?
- What performance measures are used?
- Are client-monitored performance indicators aligned with loyalty scheme goals?
- Who initiates the process? Is it the agency that suggests an analysis, or is it the client that requests specific information?
- Do they perceive evolution in their clients’ approach to loyalty marketing performance measurement (i.e. do retailers today request analysis that they did not in the past)?

The second aim of the study was to devise a method of evaluation based on available in-company loyalty data to help managers address their most urgent question: *how can we assess whether the catalogue is successful in engaging our customers?*

As we opted to use loyalty card data to address the problem, *we defined “customer engagement with the catalogue” as behaviour recoded in the database: in other words, point redemption.*

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[6] The following companies partecipated: Agorà, Conad, Coop, GS-Carrefour, Gruppo PAM, SMA, Coralis, Interdis, Sigma, Aspiag-Despar, Iperal, Nordiconad, RealcoSigma, SISA, Unicomm. Their combined turnover exceeds 40 billion euros (ADEM Lab Università di Parma, 2007).

[7] Our survey found that only 40% of retailers manage their loyalty program completely in-house; 60% outsource one or more activities (e.g. catalogue design, rewards procurement, delivery management) to loyalty marketing agencies.

Following the hypothesis that a customer redeeming points for a reward is showing engagement with the catalogue, i.e. with the loyalty program, we performed analyses that could answer the following three questions:

Q1: How many customers redeem points for catalogue rewards out of the whole customer base?

Q2: Are the customers who redeem rewards "good" customers, in terms of spending and frequency and, on average, are redeeming customers better than non-redeeming ones?

Q3: Do customers modify their behaviour to collect enough points for a specific reward from catalogue?

The loyalty card databases of a retail company, spanning 1.5 years of purchase history[8] of a total of 54,111 consumers, and occasional information provided by managers during the interviews, provided the basis for replies to the three questions.

For many managers, it was the first time they had been confronted with customer-based insight on their catalogue performance. In fact, as we discuss below, catalogue effectiveness has up to now been analysed inventorywise, by means of item-based measures such as "total number of rewards distributed to customers" and "most appreciated rewards, i.e. gifts that received highest number of customer requests".

This study contributes to research on loyalty programs in several ways.

Firstly, we address the topic of loyalty program effectiveness from the retailers' perspective, and use a survey methodology to do so. Research on loyalty program effectiveness has proliferated in recent years, but by far the most common perspective has been that of consumers. A notable exception is the work of Leenheer et al. (2002) and Leenheer and Bijmolt (2003). In taking the retailers' perspective, we stress the importance of a preliminary reflection on what definition of effectiveness would be most relevant for the company/industry.

Secondly, as far as the second aim of helping decision-making is concerned, we *use loyalty card data*, as opposed to *ad hoc* experimental data, as in the Dréze and Nunes (2004)

[8] Data was from the period January 2005 - July 2006.

experiments with students/volunteers making decisions about rewards of fictional loyalty schemes, or costly customer surveys,[9] or panel data. On panel data, Lugli (2007) points out that A.C. Nielsen's and IHA consumer panels in Italy cannot support a retailer's analysis of individual loyalty scheme performance because the sample size is insufficient. Because of the high cost and / or absence of external data, we suggest that marketing managers should turn to a yet largely unexplored source of insight, customer purchase data collected by means of loyalty cards.

Thirdly, we analyse effects at individual level. Data analyzed at the aggregate level (e.g. Sharp and Sharp, 1997) may mask the individual-level effects of loyalty programs. Individual-level indicators, moreover, can be appended to customer records in loyalty databases to serve micro segmentation and targeting purposes.

Fourthly, we focus on *the loyalty program design element of most relevance to Italian companies: the reward catalogue.* We examine its effectiveness in engaging a high percentage of customers, especially high spending customers, in the redemption of points.

Fifthly, we suggest management practices that can help sustain performance of loyalty programs. Specifically, we suggest monitoring the level of customer engagement in the program with the aid of simple measurements such as the ratio of redeemed/earned points, percentage of "gold" customers who redeem points, and redemption activity above different point thresholds (see 'Discussion of findings' below). We also suggest segmenting customers according to their redemption activity. This would allow stores to target customer groups with different gift-claiming histories by using marketing communication to attract their interest towards higher reward thresholds, or simply to sustain their interaction with the catalogue and, indirectly, their loyalty card use.

3. Discussion of findings

Description of programs

Interviewed companies have been offering loyalty programs for an average of ten years, with the oldest scheme dating back to 1989, and the most recent one to 2002.

[9] One respondent reported that in 2006 customers were mailed an invitation to take part in a loyalty scheme survey, and received a 5 € voucher valid for any purchase in store as incentive. But despite the attractiveness (and cost) of the reward, less than 10% customers took part.

The most frequent point collection mechanism is “one point for every euro spent in store”, above a minimum spending threshold of one or, in a few cases, two or five euros. Points can be redeemed for gifts from a catalogue. The catalogue is valid for one year at 60% of stores, other stores offer a four- or nine-month catalogue and one company offers an 18-month catalogue.

Point collection can be accelerated by purchasing items that award extra points (100% of companies) or on selected days/periods (90%). Paying by (store) payment card also entitles customers to more points.

65% of companies declare they erase unredeemed points when the catalogue expires, others see this practice as “doing wrong” to the customer, and simply pass point totals down when the new catalogue promotion begins.

Reward options,[10] excluding deals with partner companies and rebates, range from 24 to 216 items[11]. The average catalogue offers 68 different gifts in categories such as china, cutlery, cookware, textiles, toys, travel accessories and home appliances.

Points can be converted into vouchers at only 40% of companies. Typically, 1000 points are exchanged for a 10 euro voucher, but some companies offer vouchers for 20, 21 or 25 euros in exchange for 2000 points. We believe that different voucher values are intended to make point value less transparent and hinder comparison of schemes by customers.

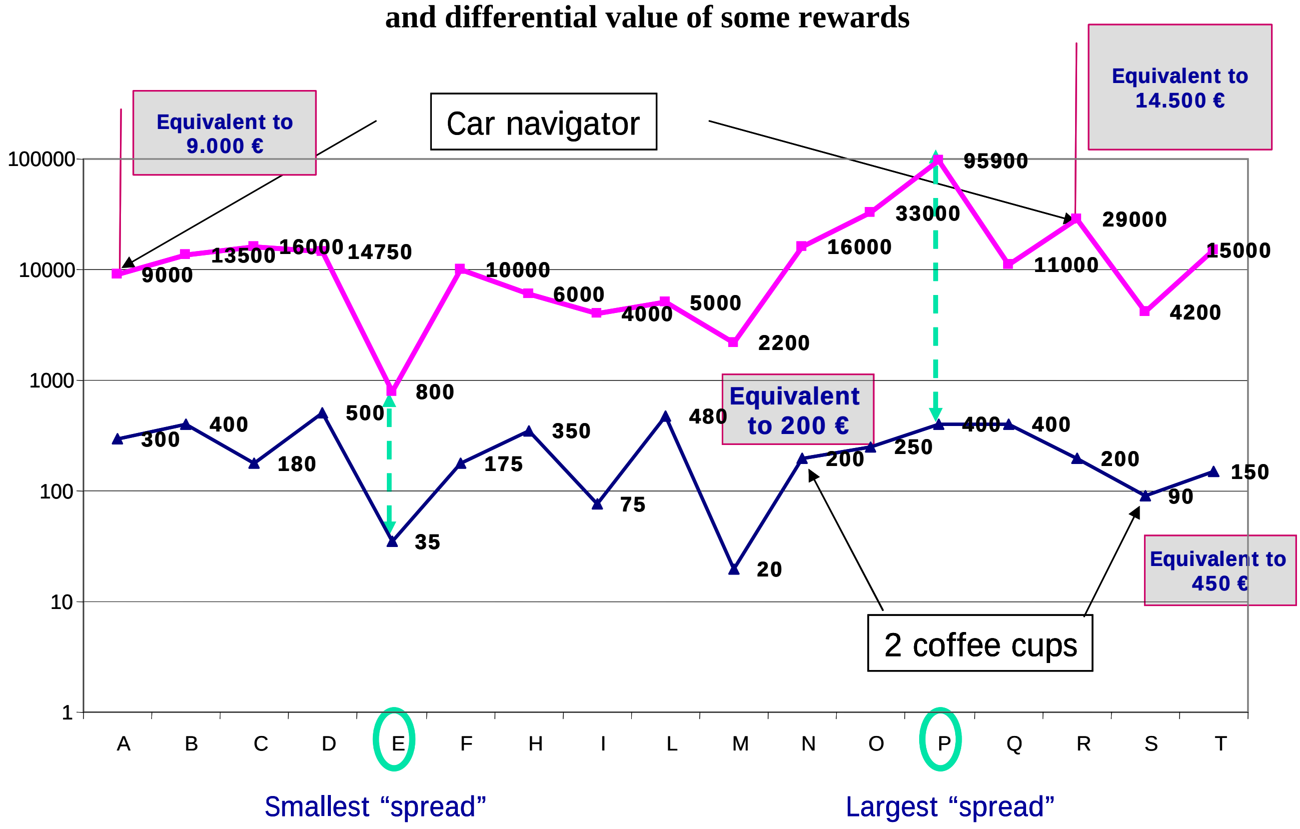
An elementary comparison is presented in Figure 1. The lower line indicates the number of points required for the entry level reward (i.e. the item that can be redeemed with the smallest amount of points) in each catalogue (A to T). The upper line indicates the highest number of points required for a single reward. We call the distance between lines for each catalogue the “spread”. Figure 1 shows that catalogue “E” offers rewards within a small spread, and others such as “P” present a much larger spread. It would be interesting to test consumer reaction to different spreads, whether this affects the scheme’s image, and customers’ willingness to become involved.[12]

[10] This data was derived from direct observation of catalogues, websites, press releases and instore communication, from a sample of 20 loyalty programs.

[11] At Esselunga, whose catalogue is considered “best in class” in the industry, according to interviewees.

[12] Dréze and Nunes (2005) define the process by which a customer becomes involved in point collection in order to reach a goal. If external inducements like rewards are to influence behaviour, they must first be transformed into “personal goals” through a process of “goal acceptance”. Goal acceptance is a type of “goal commitment” referring to a goal that is externally assigned. Goal commitment, on the other hand, refers to the individual’s determination to reach a goal and his or her persistence in pursuing it over time. As acceptance increases, there is a greater congruence between the assigned goal (reward) and a personal goal (intention).

Figure 1 – Catalogue comparison: minimum and maximum point thresholds, "spread" and differential value of some rewards



Another interesting observation concerns the different amount of effort required to redeem the same reward under different programs (Figure 1). Entry level rewards have been proved to play an important role in getting customers involved in the scheme (Dowling and Uncles, 1995; Jain and Singh 2000). Customers can redeem a set of two coffee cups for 200 points from catalogue "N" or, if they choose catalogue "S", for as little as 90 points. But the apparent "affordability" in "S" vanishes when we compute how much spending is necessary to earn the points: 90 points at store "S" are equivalent to 450 euros ... for two coffee cups! At store "N", the apparent high volume of points required – 200 – can be saved by spending "only" 200 euros. Similar comparisons were made for "high end" rewards, such as the "sat nav" in Figure 1.

We suggest companies investigate customer perception of the "real" value of rewards compared to the number of points required. It would also be useful, where consumers are exposed to more than one catalogue, to investigate their awareness of these differences and to what extent they calculate the different attainability of rewards. Only one of the companies we interviewed had ever tested their customer base on these matters.

Managers' satisfaction with loyalty scheme and reward catalogue

Companies are modestly satisfied with their loyalty schemes, averaging a score of 3 on a scale of 1= totally dissatisfied to 5= totally satisfied. Among reasons for dissatisfaction, catalogue management issues ranked first, with 60% of companies citing the complexity of successfully creating and managing a catalogue. Diverse skills are required, from creativity to right choice of rewards, from procurement for correctly forecast reward redemption rates, to logistic challenges with inventory keeping and timely delivery of gifts. Obsolescence of high-tech products used as rewards, such as cell phones or PCs, also poses challenges. Retail "centrals", i.e. those companies managing marketing strategy for a range of retail firms operating different formats/banners, also face additional challenges in managing several catalogues at the same time. Associated companies' support for loyalty program strategy also varies widely, because of the diversity in IT infrastructures and marketing skills, not to mention a different level of involvement between proprietary and franchised stores.

The second problem facing retailers is competitor imitation (50%).[13] Retailers lament the lack of distinctive character of catalogues, and their proliferation in the marketplace. But up to now they do not appear to have put much effort into seeking a distinctive positioning for their programs. This is clear from the overlapping of reward categories we mentioned above. 50% of respondents find differentiating the catalogue "difficult".

Future strategy for the catalogue

The perceived competitive pressure and need to differentiate their proposition explains 27% of respondents' intention to innovate catalogue rewards in the near future. Figure 2 shows the differentiation options retailers are considering: one important change will be expanding customer choice by adding more aspirational rewards in travel, holiday packages and health and beauty services (90%), exclusive, personalised rewards (27%) or branded goods unique to the company's catalogue (55%). Other innovative rewards are also on the way, such as music downloads (45%) and point redemption options at partner companies (27%). These announced intentions confirm findings from other countries (Stone et al., 2004; Ferguson and

[13] Other reasons cited for dissatisfaction were catalogue effectiveness (30%), problems with suppliers of rewards (20%), program cost (20%), problems with partners (10%).

Hlavinka, 2007): as the loyalty marketing environment matures, if the loyalty investment is to pay off, the search for unique benefits of high perceived value becomes a priority.

Figure 2 – Differentiation options for the catalogue in near future

	respondents (%)*
Expand “service” vs. “goods” rewards area (e.g. travel, holiday, health & beauty services, charities)	90
Exclusive brands (unavailable to competitors by agreement with suppliers)	55
Innovative categories of rewards (e.g. music download, free telephone traffic)	45
Expand “partnership” area of catalogue offer (more partners from more industries)	27
Adding excitement to catalogue with sweepstakes and games	27
Aspirational, emotional rewards (e.g. exclusive, personalised experiences)	27
Adding short term point earning/redeeming acceleration activities (e.g. mini-catalogues)	9

*Multiple answers were allowed

Alongside innovation on the “product” side, some companies are also considering “process” innovation: 9% intend to change the balance between insourcing and outsourcing of catalogue management activities. It is worth noting that agencies and retailers pointed to “more insourcing” as a response to high procurement costs: retailers have a core skill in product sourcing, and are likely to leverage it in the future to procure goods and services for their catalogues, in an effort to drive cost down. Agencies, on the other hand, see their role in procurement being challenged in the future, and feel a need to create value for their retail customers in analysis and targeted marketing, and support client stores with research and insight in order to survive. We argue that this scenario in loyalty consultancy, coupled with retailers’ experience curve with loyalty data, might support the development of a more information-intensive, customer-centric approach to loyalty programs in the future.

Last, but not least, as far as future directions are concerned, it surprised researchers that 55% of respondents had no clearly defined plan for the near future: they excluded the possibility of cancelling the catalogue altogether, but had not yet decided what strategy to follow.

Loyalty program and catalogue goals

Figure 3 shows answers to the question on the explicit goal of running a reward catalogue. Given the premises in our Introduction, we believe that the wording of the goal assigned to the catalogue gives a clear indication of the firm's overall loyalty marketing orientation. After the most frequent answer, "increasing loyalty" (80% of respondents), it is interesting to note that 20% of marketing managers admitted they "happened" to have the program in place and "did not pursue specific goals".

Figure 3 – What is the goal of running a reward catalogue?

	respondents (%)*
Increase customer loyalty	80
Stabilize sales	50
Increase sales	30
Increase amount spent on each store visit	20
Expand number of active cards	20
There are no specific goals: "we just do it out of habit"	20
Other: *Stabilize level of active cards, i.e. make customers use the card every time they shop*	5

*Multiple answers were allowed

On the other hand, at one company, the catalogue was "instrumental to keeping customers engaged with the use of their cards", thus providing a continuous stream of data for analysis and targeted marketing activities. Managers at that company also said that one third of points redeemed by customers had been earned by responding to targeted offers, not simply by doing their routine shopping with the retailer. We find this view of a catalogue's role particularly meaningful. The relationship between the catalogue and a loyalty marketing orientation is one of mutual support that begins on a “macro marketing” level, but can move up to a more effective, less imitable micromarketing one. A well-designed catalogue is a mass marketing promotional tool that drives customers to use their cards; but regular card use provides insight for targeted activities that may well go in the direction of customising point collection and redemption options for different customer segments, hence turning the catalogue into a micro marketing tool at the same time.

Measures of effectiveness

We mentioned above that an inventorywise, product-view of the catalogue’s effectiveness prevails among Italian supermarkets. Figure 4 shows that 62% of respondents assessed the catalogue “success in engaging the customer” by counting the number of redeemed gifts. There is no doubt that such information is vital to catalogue management activity, but it says very little about the customers’ acceptance[14] of the catalogue or about its ability to engage “good” customers.

Figure 4 – Measures of effectiveness for the catalogue

	respondents (%)*
Total number of rewards delivered	62
% cardholders redeeming from catalogue	54
Redeemed/earned points ratio (average)	23
Spending or frequency before/during/after catalogue	8

*Multiple answers were allowed

Many companies use loyalty data to compute indicators of effectiveness. Specifically:

- 54% measure “*catalogue penetration*”, defined as percentage of cardholders redeeming at least one reward from the catalogue. However, no company had looked at the profile of redeeming cardholders as opposed to non-redeeming ones;

[14] See note 12.

- 23% look at "*redeemed/earned points ratio*" as an indicator of the catalogue success in engaging the customer (saving points suggests the customer hasn't found anything in the catalogue that is worth trading them for). As remarked on above, passing point totals down from year to year prevents more that 35% of companies from being able to calculate this indicator in a meaningful way;
- Last, but not least, only 15% of companies have an established routine of surveying customers directly about their attitude and satisfaction with loyalty scheme, and with the catalogue in particular.[15]

Agencies confirmed that interest in catalogue performance measures based on customer data was very recent among their clients, and limited to a handful of companies. Little attention was paid to the number and type of performance reports the agency was required to provide during negotiations on outsourcing contracts to agencies.

Stimulated by reflecting on the gap between needed and available insight on their loyalty efforts, some companies were willing to share data with us for our analysis of catalogue effectiveness measures. Below, we present findings regarding the three questions we asked in Methodology (above).

Q1. How many customers redeem points for catalogue rewards, out of the whole customer base?

Catalogue penetration, i.e. the proportion of program members redeeming at least one reward from the catalogue, varies among companies. Five companies agreed to disclose the value of this indicator, as shown in Figure 5. These values can be used as benchmarks by other companies. If a 47% participation rate of customers in redemption is possible, what are the reasons behind the disappointing performance of company A? Even when socio-demographic characteristics of customers and competitive conditions are considered (see below), there might still be room for questioning the appeal of rewards, the availability of the catalogue in store, communication effectiveness and other possible causes. This is true particularly when catalogue penetration rates are calculated for different years at the same company: sharp variations should trigger further analysis.

[15] See note 9.

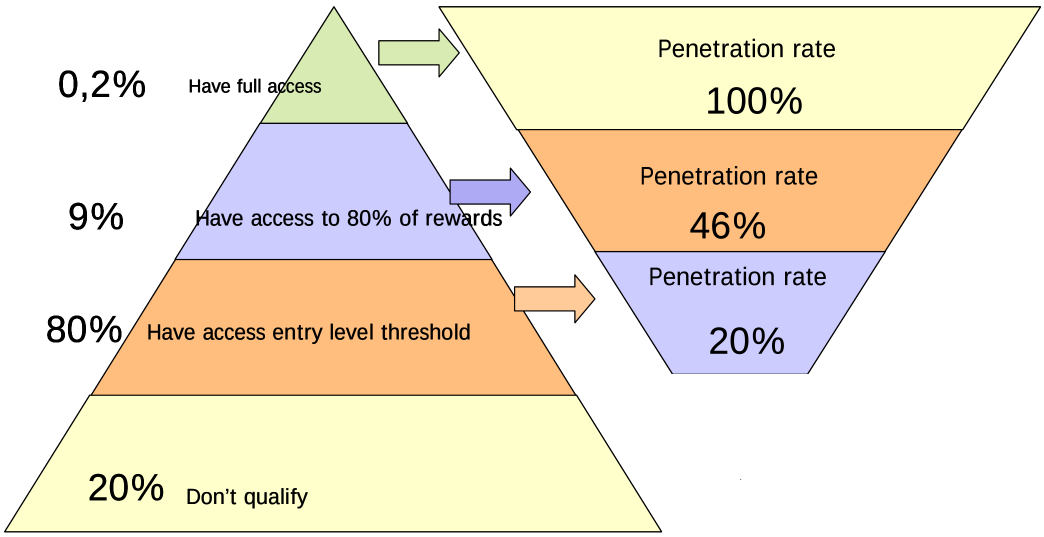
Figure 5 – "Catalogue penetration"

Company	A	B	C	D	E
% of redeeming customers	8%	16%	27%	46%	47%
% of sales accounted for by redeeming customers	*32%*	*36%*	-	-	-

Catalogue penetration is affected by several factors including: a) *degree of inclusiveness*, i.e. spending levels that are required to attain rewards, and b) spending patterns of the specific retailer's customer base.

To represent inclusiveness in the calculation of a proper measure for catalogue penetration, we built a "*reward pyramid*" by calculating the accumulated point-total necessary to reach the redemption threshold for respectively 10%, 80% and 100% of rewards in the catalogue of company "B" (Figure 5). We then calculated the percentage of customers who eventually redeemed, among those who had saved enough points for each threshold. A total of 54,111 customer records across 26 stores were analysed. Results are shown in Figure 6. Catalogue "B" shows a high degree of inclusiveness; 80% of cardholders earn enough points to redeem the entry level reward. Discrimination is built in at subsequent levels, which only 9% and 0.2% of cardholders qualify for. The left-hand side pyramid could be employed to monitor program inclusiveness over time and possible changes reflecting changes in customer spending, and, more significantly, to assess the inclusiveness of competitor catalogues.

Figure 6 – The "catalogue penetration pyramid"



When penetration rates are calculated separately for each customer group, what is striking is the unexploited potential (right-hand side pyramid). Only 46% of the customer segment that could access 80% of rewards eventually redeem some of their points.

We suggest that targeted marketing communication could be used to selectively stimulate redemption.

Q2: Are the customers who redeem rewards "good" customers, in terms of spending and frequency, and are redeeming customers better than non-redeeming ones?

As far as the characteristics of customers participating in loyalty schemes are concerned, research has repeatedly found that high spenders are more likely to participate than low spenders (see Meyer-Waarden, 2007), where participation is defined in ways such as "having subscribed to the company loyalty card" or "using the loyalty card at least x times in a certain period". Here, we focus on a comparison between "redeemers" and "non-redeemers", i.e. cardholders who requested at least one reward from the catalogue during the year, versus those who did not redeem any points at all.

We were able to calculate the different economic value of the two groups for store B. Redeemers (16% of cardholders) spent on average 2460 € over the year 2005, more than twice cardholders' average (1090 €) and three times as much as non-redeemers (828 €). This results from higher frequency (100 visits against an average of 46 and 36 for non-redeemers) and, to a lesser degree, higher spending (25 € against 21 € and 20 € respectively).

When focussing on the top 30% of customers, or "gold" customers, the difference is even greater. Among gold customers, redeemers visit 167 times in a year, spending 30 € each time, whilst non-redeemers visit 85 times and spend 25 €.[16]

Of course, these simple calculations cannot prove any causal link between catalogue patronage and spending patterns. It is of practical use to know, however, that the redeemer segment mainly consists of customers whose spending patterns place them in the "gold" category (70%), while 29% are "silver" and only 1% of redeemers can be classified as "bronze".[17]

This concentration of valuable customers in fact justifies the printing of full colour glossy catalogues, for example, and the use of costly direct media.

So far, we have discussed catalogue involvement as a dichotomy, by splitting cardholders into redeemers and non-redeemers. It is likely however that different customers display different degrees of participation in the catalogue, as is suggested by the variance in the number of rewards redeemed per customer. Although 44% of customers[18] redeem only one reward in a year, 16% redeem two; 12% redeem in the range of 6-9 rewards and there is even a 0.4% segment that manages to collect over 30 items.

More revealing of the catalogue's success than the number of rewards, though, is the above mentioned "redeemed/earned point ratio". Company "D" (Figure 5) provided their values for this indicator: 65% of points are redeemed, on average, taking into account store and format differences. The ratio ranges from 63-83% in smaller stores (less than 800 sq m) to 60-71% for supermarkets (800-1500 sq m). It is worth noting, though, that these values are calculated on aggregate level, by simply dividing total redeemed points at store by total distributed ones.

By contrast, we calculated the ratio for each of the 54,111 customer records in company B's database, and the results are displayed in Figure 7. When the ratio is close to zero, the customer is saving most earned points, thereby suggesting that there were no reward options in the catalogue that appealed to her. Or, as may well be the case, the company failed to make the customer aware of the accumulated points and/or redemption options. In any case, we

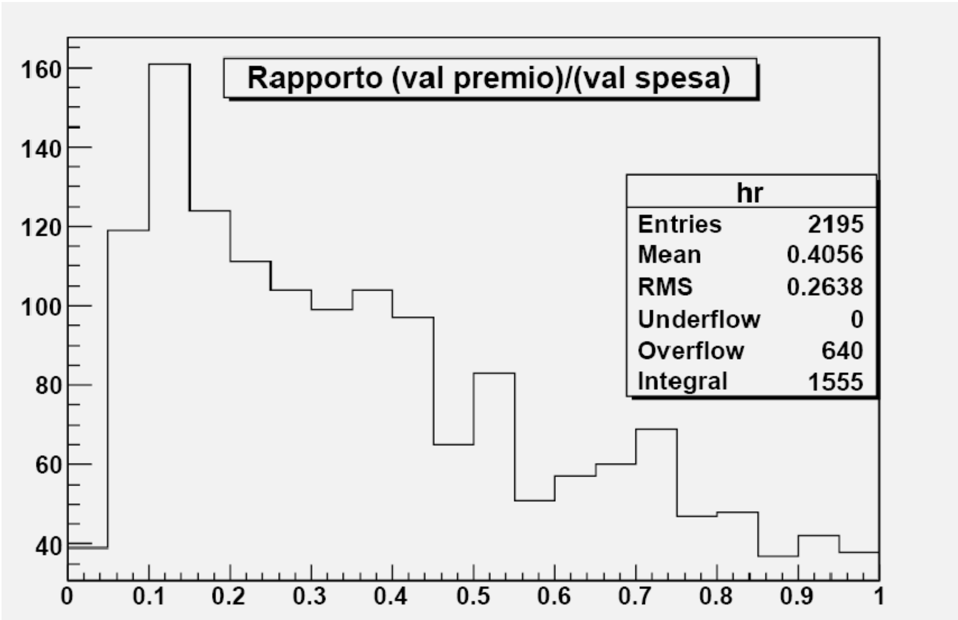
[16] On average, the top 30% cardholders visited 107 times and spent 26 € each time.

[17] A contrasting picture with the composition of the non-redeemers segment where only 23% customers are "gold", 42% are "silver" and 35% are "bronze".

[18] Calculated over a population of 8.574 redeeming customers at company B.

suggest that targeted marketing activities could be employed to selectively sustain redemption for customers scoring low in a redeemed/earned points ranking.

Figure 7 –Redeemed/earned points ratio



Q3: Do customers change their behaviour to earn enough points for a specific reward from the catalogue?

So far, we have discussed customer engagement with the catalogue from a rather “passive” viewpoint, by analysing what customers do with the points they have earned. It would be even more interesting to measure “active” engagement, i.e. the degree to which customers change their behaviour to earn more points in order to reach their redemption goals.

We decided to test company B’s redeemers (8,574 cardholders) for significant differences in their frequency and spending levels before and after claiming a high or very high threshold reward. The “pyramid” in Figure 6, in fact, shows that lower thresholds are attainable for the majority of customers by simply doing their routine shopping.

We analysed points thresholds in company B’s catalogue, identified the top three thresholds that signalled “high value rewards” and computed the number of cardholders who had redeemed above those thresholds June 2005 – June 2006 (Figure 8).

The monthly spending and frequency means and medians for each group were calculated in the month before reward redemption, during the month of redemption and in the following month.

Figure 8 – Spending and frequency levels before, during and after redemption of high threshold reward

Threshold	Number of redeemers	Mean	Before	Redemption month	After
3900 points	416	Spending	44.2 €	45.7 €	44.9 €
		Frequency	12	15	12
5400 points	319	Spending	46.8 €	48.3 €	46.3 €
		Frequency	13	15	13
7500 points	263	Spending	49 €	51 €	48.5 €
		Frequency	13	16	13

To determine whether the differences observed between means resulted from casual fluctuation in shoppers' behaviour, we introduced a statistical test. We opted for a non-parametric test,[19] the Wilcoxon signed-rank test, that provides a non-parametric alternative to the paired Student's T-test for the case of two related samples or repeated measurements on a single sample (Mood, Graybill and Boes, 1991). Non-parametric tests have less power than the appropriate parametric tests. They are however more robust when the assumptions underlying the parametric test, such as normal distribution of observations, are not completely satisfied, which is true of company B data set.

We collected three sets (one for each of the three thresholds) of 2*n* observations, two observations of each of the *n* subjects. The test was performed on:

a) the paired observed values of shopping frequency in the month of redemption (y_i) as opposed to the previous one (x_i)

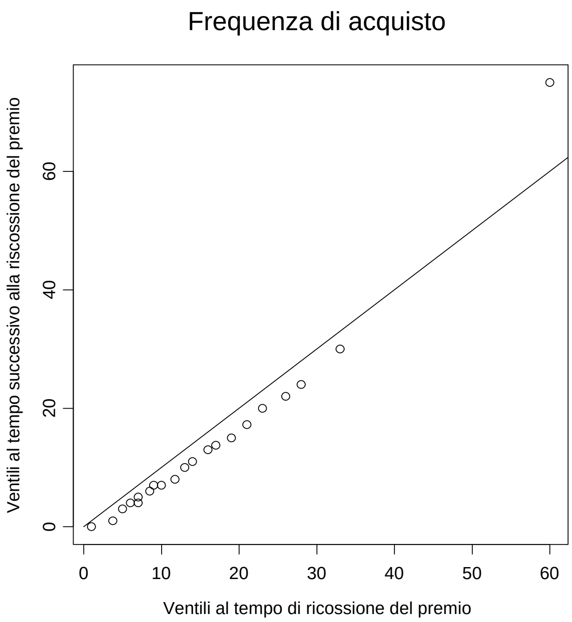
and then on;

[19] Non-parametric (or distribution-free) inferential statistical methods are mathematical procedures for statistical hypothesis testing which, unlike parametric statistics, make no assumptions about the distribution of the variables being assessed.

b) the paired observed values of total spending in the month of redemption (y_i) as opposed to the previous one (x_i).[20]

The result of the test was as follows: the difference was significant at any threshold, with *p-value*, i.e. the probability of type I error, decreasing from 0.0584 for the 3900 points threshold to 0.0225 and 0.0062 respectively for the two higher thresholds. This excludes random fluctuations as a cause of the increased spending in redemption month. In order to have a better understanding of the differences between customer behaviour in Figure 9 we plot the relationship between the quantiles of observed shopping frequencies during the redemption month and those observed in the previous month. Figure 9 shows clearly that the impact of a high threshold reward goal on shopping frequency is diffused throughout the sample, and is not limited to particular quantiles.

Figure 9 – Impact of high threshold reward goal on shopping frequency



[20] The assumptions of the Wilcoxon test are:

- that the paired values of X_A and X_B are randomly and independently drawn (i.e., each pair is drawn independently of all other pairs);
- that the dependent variable (e.g., a subject's probability estimate) is intrinsically continuous, capable in principle, if not in practice, of producing * measurements expressed to the n[th] decimal place; and
- that the measures of X_A and X_B have the properties of at least an ordinal scale of measurement, so that it is meaningful to speak of "greater than," "less than," and "equal to" (Wilcoxon, 1945).

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So it appears that in a scenario where competitive loyalty program memberships are an important concern for loyalty program effectiveness, (Kopalle et al., 2000), retailers could use these findings to stimulate consolidation of shopping, by inducing aspiration for high end rewards and accelerating point collection of responsive customers, by means of a segmentation based on catalogue-adoption related variables.

4. Limitations of the study and stimuli for further research

This study is limited first by its industry and nationwide focus. Further research is needed at cross-industry and cross-country level to put our findings into perspective. The same is true of the survey sample: despite its absolute relevance in terms of sales and number of stores, it excludes smaller, local companies that might have adopted distinctive and as yet unnoticed approaches to loyalty marketing.

A second limitation is the almost exclusive attention paid to the reward catalogue, while ignoring other aspects of loyalty programs, such as points collection mechanisms or communication. This focus stems from three factors: a) the observation that in the current situation of the Italian supermarket industry, the catalogue is the commonest and most prominent feature of most retail companies' marketing activities, and main driver of customers' participation (or lack of participation) in loyalty schemes;[21] b) the paper's main aim of helping to predict the future of loyalty marketing, which will be heavily dependent on retailers' ability to capture customer behaviour through loyalty scheme participation; c) the intent to stimulate managers to address as quickly as possible the issue of customer engagement with the catalogue, i.e. catalogue effectiveness, if they want to use loyalty data to leverage decision making and target media for customer retention and extension.

A third limitation lies in the use of the behavioural variable "points redemption" as a measurement of catalogue effectiveness. The same three reasons a), b) and c) determined this choice, as did the decision to use loyalty data (see Methodology).

[21] We are aware that there are demographic and attitudinal factors, specific to the individual, that may determine different levels of adoption of loyalty schemes (Palmatier at al., 2006), as well as local competitive conditions (Palmer, Mcmahon-Beattie and Beggs, 2000) local and national social and income conditions (De Wulf, Odekerken-Schröder and De Cannière, 2003), not to speak of other marketing activities taking place before or at the same time of catalogue.

Last, but not least, in this study we are suggesting best practices[22] and possible uses of catalogue-related behaviour analyses. But it is not our intention to suggest that monitoring and improving the reward catalogue will necessarily and automatically result in sustained customer participation in loyalty schemes. To echo Mauri (2000)...*loyalty to the catalogue does not necessarily mean loyalty to the company*. We hypothesize, however, that supporting catalogue design and performance monitoring with redemption-related customer information, as well as targeting marketing activities to customers based on their responsiveness to rewards, will have a positive impact on the loyalty scheme adoption by the customer base, sustained use of loyalty cards and, indirectly, data quality. Research is needed, of course, to prove the existence, and causal nature, of such a virtuous cycle.

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6. References

ADEM Lab – Università di Parma, (2007) *Rapporto Insegne 2007*

Banasiewicz, A. (2005) Loyalty program planning and analytics, *Journal of Consumer Marketing*, vol. 22, issue 6, pp. 332-339

Bolton, R. N., Kannan, P. K., and Bramlett, M. D. (2000) Implications of loyalty program membership and service experiences for customer retention and value, *Journal of the Academy of Marketing Science*, 28 (1), 95-108

Butscher, S. A. (2002) *Customer Loyalty Programmes and Clubs*, Gower, U.K.

Cuthbertson, R. and Laine, A. (2004) The role of CRM within retail loyalty marketing, *Journal of Targeting, Measurement and Analysis for Marketing*, vol. 12, 3: 290-304

Colloquy (2006) You Say You Want a Revolution: Three Evolutionary Trends That Will

[22] For example, by linking "catalogue-related behaviour" to general behavioural data, by means of the customer identification number – the loyalty card number – managers can draw together two sources of information that are generally maintained and analysed separately. The agencies we interviewed reported that none of their clients had a unique, seamless view of the customer, spanning both instore behaviour, like frequency and amount spent, and behaviour related to rewards. A straightforward step such as connecting the two "views" of the customer into a single record could provide for better understanding, * forecasting * prediction and segmentation.

Transform Your Loyalty Strategy, *Colloquy Talk Research Paper*, n. 2

Ferguson, R. and Hlavinka, K. (2007) Sizing Up the U.S. Loyalty Marketing Industry, *Colloquy Paper* 0407, April

Forbes Magazine (2007) *The Lowdown on Customer Loyalty Programs*, January 2, available online at www.forbes.com

Day, G. S. (2000) Managing Market Relationships, *Journal of the Academy of Marketing Science*, 28 (winter)

De Wulf, K., Odekerken-Schröder, G. And De Cannière, M.H. (2003) What Drives Consumer Participation To Loyalty Programs? A Conjoint Analytical Approach, *Journal of Relationship Marketing*, 1

Dowling, G. R. and Uncles M. (1997) Do Customer Loyalty Programs Really Work?, *Sloan Management Review*, 38 (Summer), 71-82

Dowling, G. R. and Uncles M. (1995) Customer Loyalty Programs: Should Every Firm Have One?. *Working Paper*, Bradford Management Centre, Bradford University

Drèze X. and Nunes, J. (2005) Too Close to Quit: The Effect of Reward Fungibility on Consumer Purchase Intentions, *Advances in Consumer Research*, 2

Hartmann W. R. and Viard V. B., (2007) Do Frequency Reward Programs Create Switching Costs? *Stanford Working Paper* #1941, Stanford University

Yi, Y. and Jeon. H, (2003) Effects of Loyalty Programs on Value Perception, Program Loyalty, and Brand Loyalty, *Journal of the Academy of Marketing Science*, July 1, 31(3): 229 - 240

Jain, D. and Singh, S. (2002) Customer Lifetime Value Research: A Review and Future Directions, *Journal of Interactive Marketing*, 16(2), 34-46

Kamakura, W., Mela, C.F., Ansari, A., Bodapati, A., Fader, P., Iyengar, R., Naik, P., Neslin, S., Sun, B., Verhoef, P., Wedel, M. And Wilcox, R. (2005) Choice Models and Customer Relationship Management, *Marketing Letters*, 16 (4), 279-291

Kivetz, R. and Simonson I. (2003), The Idiosyncratic Fit Heuristic: Effort Advantage as a Determinant of Consumer Response to Loyalty Programs, *Journal of Marketing Research*, 40 (4) 454-467

Kivetz, R. and Simonson, I. (2002) Earning the Right to Indulge: Effort as a Determinant of Customer Preferences towards Frequency Program Rewards, *Journal of Marketing Research*, 39 (May)

Kopalle, P. K., Neslin, S. A., and Singh, M. (2000) The Economic Viability of Frequency Reward Programs in a Strategic Competitive Environment, *Working Paper*, Amos Tuck School of Business Administration, Dartmouth College

Leenheer J. and Bijmolt T.H.A., (2003) Adoption and Effectiveness of Loyalty Programs: The Retailer's Perspective, *Working Paper*, [03-124]

Leenheer, J., Bijmolt T.H.A, Van Heerde H. J., Smidts A., (2002) Do loyalty programs enhance behavioral loyalty? An empirical analysis accounting for program design and competitive effects, *Discussion paper*, Tilburg University, July

Lugli, G. (2007) Il comportamento di acquisto nel marketing management, *Mercati & Competitività*, in press

Meyer-Waarden, L. (2007) The effects of loyalty programs on customer lifetime duration and share of wallet, *Journal of Retailing*, vol. 83, n.2

Mauri, C. (2002) Fedeltà del consumatore e strategia di insegna: una lettura attraverso i cataloghi dei premi delle promozioni, *Industria & Distribuzione*, n. 2

Mood, A. M., Graybill, F. A. and Boes, D. C., (1991) Introduzione alla statistica, Edizione Italiana a cura di D. M. Cifarelli, McGraw Hill

O'Brien, L. and Jones C. (1995) Do Rewards Really Create Loyalty?, *Harvard Business Review*, 73 (May-June), 75-82

Palmatier, R. W., Dant R. P., Grewal D., Evans K. R, (2006) Factors Influencing the Effectiveness of Relationship Marketing: A Meta-Analysis, *Journal of Marketing*, vol. 70, issue 4, October, pp. 136-153

Palmer, A., Mcmahon-Beattie, U. and Beggs, R. (2000) Influences on loyalty programme effectiveness: a conceptual framework and case study investigation, *Journal of Strategic Marketing*, Volume 8, Issue 1, pp. 47 - 66

Rossi, P. E., McCulloch R. E., and Allenby G. M. (1996) The Value of Purchase History Data in Target Marketing, *Marketing Science*, 15 (4), 321- 340

Sharp, B. and Sharp, A. (1997) Loyalty Programs and their Impact on Repeat-Purchase Loyalty Patterns, *International Journal of Research in Marketing*, 14 (5), 473-486

Stone, M., Bearman, D., Butscher, S. A., Gilbert, D., Crick, P. and Moffett, T. (2004) The effect of retail customer loyalty schemes – detailed measurement or transforming marketing?, *Journal of Targeting, Measurement and Analysis for Marketing*, vol. 12, 3: 305-18

Wilcoxon, F. (1945) Individual comparisons by ranking methods, *Biometrics*, 1, 80-83

Wirtz J., Mattila A. S., Lwin M. O., (2007) How Effective Are Loyalty Reward Programs in Driving Share of Wallet?, *Journal of Service Research*, Vol. 9, No. 4, 327-334

Ziliani, C. and Bellini, S. (2004) From loyalty cards to micro-marketing strategies: where is Europe’s retail industry heading? *Journal of Targeting, Measurement and Analysis for Marketing*, vol. 12, n. 3.