Contents lists available at ScienceDirect

Journal of Business Research

Consumer behavior on cashback websites: Network strategies☆

María Teresa Ballestar [a], Pilar Grau-Carles [b], Jorge Sainz [b,*]

[a] Open University of Catalonia, Tibidabo Avenue 39-43, Barcelona 08035, Spain
[b] Applied Economics Department, Rey Juan Carlos University, Paseo de los Artilleros, s.n., Madrid 28032, Spain

ARTICLE INFO

ABSTRACT

The size of cashback sites, both in terms of users and business, has grown considerably over the last decade. This article presents a complete analysis of the behavior of the users of the webs both in terms of transactions, and navigation and registration on cashback sites by using a large sample of one of the largest European sites. The study also presents a first analysis on the structure of the sites. An analysis using Partial Least Squares Structural Equation Modelling shows that the volume of the user's network, the diversification of the navigation, and the size of the transactions are relevant to the decision of the consumer and to his or her engagements on the affiliate merchants. These results represent a first step on the understanding of these marketing strategies and open new areas of research.

1. Introduction

The introduction of the information and communication technologies (ICTs) has rapidly transformed traditional commerce. This situation has affected the strategies of merchants to rapidly advertise their products and has transformed traditional marketing strategies to adapt them to the new environment. One of these strategies, cashback mechanisms, is significantly growing as a marketing instrument, transforming the traditional mail-in rebates in a new internet service. Cashback mechanisms also allow for development of a new business, the cashback webs. These sites aggregate merchants that offer those rebates, facilitating the transaction to the consumer. Thus, these webs share the revenue of the merchant's profit obtained through the advertisement transaction in an effort to increase sales and attract consumers' attention.

The size of the market has been rapidly growing. Different estimates show that these sites accumulate at least 100 million users in Europe and North America, generating a global business of 2.500 million dollars. Top sites, as rebates in the US, recently acquired by the Japanese giant Rakuten, Topcashback, Quidco, Fanli, or Beruby, generate thousands of daily transactions and generate consumers important rebates that can amount to hundreds of dollars every year.

This growth has also attracted the interest of academics on the area, although it is still a fairly new and open field. Most of the initial literature on the area focuses on modelling the cashback rebates deriving them from the traditional brick and mortars counterparts. Jain (2007) focuses on the business models of the search engines as profit producers to merchants and how to share of that surplus. Chen, Ghosh, Mcafee, and Pennock (2008) study the short- and long-term properties of the cashback rebates on conversion rates and profitability. Relevant literature (and patents) also exists on the mathematical properties of the consumer networks on cashback sites (Fu, Chen, Qin, & Guo, 2013), trying to explode its profitability, or defining the optimal strategy of the merchants on those sites (Ho, Ho, & Tan, 2013). Empirically, the only relevant study is by Vana, Lambrecht, and Bertini (2015), focusing on the profitability of cashback sites, and pointing out that cashback payments increase the likelihood of repeated purchases and their amount.

Cashback behavior study closely builds upon affiliate marketing literature. As Duffy (2005) points out, the irruption of e-commerce introduced a new system with no rules that requires research, particularly, on the creation of communities of affiliates both in large and small networks of sites, offering a win–win relationship for both sides of the market. Rust and Chung (2006) show different possible relations among services in an information economy, whereas Libai, Biyalogorsky, and Gerstner (2003) and Homburg, Droll, and Totzek (2008) focus on "how," describing the economics of the different affiliation methods and their profitability, and the benefits in the short and long term for the companies.

The literature on customer rebates (coupons) is relevant to this analysis. Shaffer and Zhang (1995) show that coupons can serve as a strategic tool to keep consumer loyalty and attraction. In a connected world, this advantage translates on mass customization, which can serve to improve profitability in the market allowing for enduring relations between companies and costumers (Ansari & Mela, 2003). Incentives help to establish the right motivation for customers, as empirical (Byers, Mitzenmacher, & Zervas, 2012) and theoretical (Miller, Hofstetter, Krohmer, & Zhang, 2011) research shows.

This research tries to enlarge this literature by using the database of one of the largest cashback sites in Europe, which concentrates on its profitability to consumers. Out of a large and detailed database of the site, this study focuses on a window of the data to analyze the structure of their online behavior and their decisions by using a version of the structural equation model (SEM). The results shed light on the profiles of the site consumers and on their profitability, premiering on the area and opening new areas of research on the marketing of the sites and consumer value.

2. Theoretical questions

Cashback websites are a performance-based marketing strategy where a portal rewards one or various users by the lead/visit that they realize to the web of their affiliates. The relevant agents are (1) the cashback portal—which presents the offer to the costumers, (2) that portal's network of affiliate merchants, and (3) the consumers and their network of affiliate consumers (i.e., those who entered in the portal through their recommendation or the recommendation of their referees—up to the second level).

The business model of the cashback websites works as an affiliate model, where both the recommender and the referee benefit from the referee's transactions in the network (up to the second degree: affiliates and the affiliates of the affiliates). This system implies that customers financially benefit from the transactions made by themselves and their network of affiliates.

Transactions of type click/visit and search generate cashback without making a financial outlay by the user, conversely to the purchase type or others, which usually requires the acquisition of a product or service. In this situation, and as Zaglia (2013) points out, the interaction among consumers reinforces the use of the brand, which in the current model allows testing the relationship between the size of the consumer network and the benefits of cashback, because these benefits come mainly from customer activity.

H1. The size of the network of costumer (up to the second level) is relevant in the total number of transactions of type click/visit.

H2. The size of the network of costumer (up to the second level) positively influences obtaining economic benefit.

Consumers derive utility from its shopping experience (Lee & Tan, 2003). The number of stores and the number of different categories within those stores for which the user has performed transactions are the relevant factors in consumption diversification in *cashback* portals, even considering that one category can include several shops.

H3. Diversification in consumption leads to an increase in the number of transactions of type click/lead and search made by users and their network of users.

H4. Diversification in consumption positively influences economic benefits of the customer.

Finally, the higher the transaction volume of such click/visit or registration the user and network of users make, the greater the economic benefit the user obtains (Vana et al., 2015).

H5. Volume and type of transactions are crucial to consumer financial benefits in terms of cashback.

3. Method

3.1. Data collection

The present study uses information stored in the data warehouse of one of the largest cashback sites in Continental Europe (the Site from now on), currently present in fourteen countries, with more than two million customers, commercial agreements with 4332 stores and more than €5 million in cashback a year. This research uses a representative sample that allows building and efficiently evaluating the model. Its structure is the following.

3.1.1. Stores

The Site had agreements with 1373 stores during the sample period, although customer activity concentrated in 75% of them, generating more than €800 million in cashback. Customers can perform three kinds of activities to generate *cashback* in their accounts: one-click interaction or visit, registration, and purchase. Each store can generate cashback from one type of activity in the same period, but they can switch the activity depending on the business strategy:

1) One-click interaction or visit activity can be of several types such as: watching videos, visiting websites, becoming a fan in social networks, fulfilling surveys, using search engines.
2) Registration consists in becoming an identified user on a new website.
3) Purchase occurs when a customer buys a product or service in a store by accessing from the cashback platform.

Data shows that, by the end of 2014, the 50 stores with the highest cashback had the split by customer's activity as follows: 72% generated cashback by purchase, 20% by one-click interaction or visit, and only 8% by registration. However, looking at the store's relevance by activity, the split changes as follows: 68% did not stand out in any activity, whereas 20% were relevant in purchases, 6% in one-click interaction or visit, 4% in offers, and 2% in registration. Finally, customers gave to these stores an average punctuation of 3.95 over 5, suggesting a quite remarkable global satisfaction.

3.1.2. Categories

The study allocates all stores offering their products or services in the *cashback* platform in a category and subcategory according to the following criteria: (1) The type of products or services the store offers when users get the cashback by making a purchase; (2) The type of activity customers can perform to get the cashback, such as one-click interaction or visit, registration and purchase.

Once selected the 50 most relevant stores in terms of cashback volume, the number of categories reduces to 6, in which shopping and travel are again the most important categories, concentrating 70% of stores and 61% of cashback generated. In addition, the subcategories belonging to these stores reduce to 9 in shopping and 3 in travel.

3.1.3. Customer's navigation

Total customer transactions were 25.6 million in 2014. In the representative sample, this figure goes to 1.6 million, about 6.5% of the year. 18,520 different users performed these transactions, an average of 89 per customer in a single month. Users and their network were very active in categories in which users receive a cashback without directly purchasing goods or services, with ratios reaching 101 transactions/customer per month, whereas customers are much less active in categories that demand payouts, with ratios around 1.2–1.6 transactions/customer per month.

Regarding customer activity in the different categories according to their transactions, 99.8% of the monthly transactions correspond to registration and navigation through non-transactional categories, whereas the remaining 0.20% of the monthly transactions are from shopping and travel categories. From the point of view of the generated cashback,