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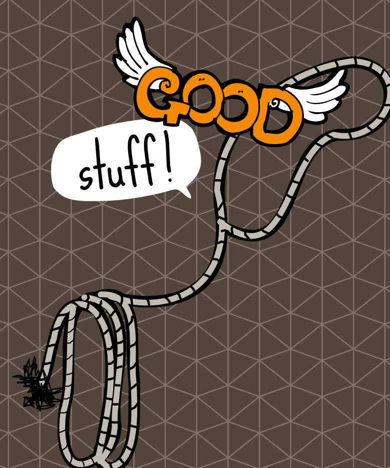
GfK Marketing Intelligence Review



GfK Verein


Good
Stuff

CONTENTS

Vol. 4, No. 2, November 2012

EDITORIAL

As vital as intuition and a feel for the market are in making the right marketing decisions, bad decisions are difficult to avoid without being highly systematic, analytical, purposeful and open-minded. The best marketing management is one of the vital keys to success in today's innovative and transient markets. *The GfK Marketing Intelligence Review* aims to provide up-to-date and innovative food for thought through its practice-based contributions from marketing academia, and intends to deliver a greater perspective and professional experience. We translate the findings of empirical research into practical recommendations, explain new strategic approaches and introduce valuable, methodical innovations from the world of market research.

In this eighth issue, we deal with central aspects of professional marketing. In a contribution from *A. Godfrey Flynn, K. Seiders and G. B. Voss ("When Is Enough Enough? Balancing on the Fine Line in Multichannel Marketing Communications")*, we look at what is the right volume of direct communication, which now dominates strategies of relationship marketing in many industries. All too frequently, we can overdo things in this area and achieve the exact opposite of what we are aiming for – a typical consequence of a lack of marketing expertise. The authors use the example of communication by car dealers to demonstrate that within the various media, such as email, telephone and mail, there are various optimums for the number of advertising hits. In addition, the exact mix of media determines the effects on the likelihood of repurchases depending on the target group.

Designing and structuring the branch network is a highly relevant decision-making issue for manufacturers, service providers and retailers, and is best handled with the support of professional analysis. Internal and external growth strategies, multi channel approaches and diversification of outlet types ensure a constant need for adjustment. In their study, H. Haans and E. Gijsbrechts develop and examine a forecast model for the net effects of losses and gains in customers which result from the closure of certain branches and various outlet types of a food retailer *("To Close or Not to Close? Assessing the Impact of Outlet Closures on Retail Chains")*. Professional decision-makers must take account of the specific effects for specific types of outlet, but also of the relevant target group structure of the outlet earmarked for closure.

Particular challenges are presented by new product technology such as household robots and Cloud Computing. The acceptance of such technology by the markets is less a question of "whether" than "when". K. van Ittersum and F. M. Feinberg present a method by which survey participants can accurately predict when they are most likely to purchase. This enables much more accurate turnover- and capacity forecasts and therefore shapes supply policies in line with market *("I Will … Sooner or Later, Predicting Whether and When Consumers Intend to Adopt New Technologies")*.

Line extensions continue to be very popular options in the growth strategies of consumer goods companies. Whether the figures add up here depends strongly on the cannibalization effects of the product variants on other products in the company's range. Often, these effects are not limited to the original product line and will affect other product categories. Good range management therefore requires a model which quickly recognizes such effects based on current sales figures and enables decisions to be made on adjustments. This type of model is presented by H. J. van Heerde, Sh. Srinivasan and M. G. Dekimpe, who look at its application in the car market and the achievable improvements *("Sibling Rivalry: Estimating Cannibalization Rates for Innovations")*.

» We translate the findings of empirical research into practical recommendations, explain new strategic approaches and introduce valuable, methodical innovations from the world of market research. «

And finally, our latest case study on marketing intelligence shows how a company in the airline industry can find its place among the dynamic competition through systematic surveys of preferences and brand images *(J. Roberts, P. Danaher, K. Roberts and A. Simpson: "Jetstar Airways: How Modeling Guided the Brand Migration Strategy of a Low Cost Carrier")*. Professional brand management can be steered convincingly to focus on customer perception and preference. The economic success of these management methods cannot be underestimated.

In our interview with Alexander Linder, Director Corporate Consumer and Market Insights of Swarovski, we ask about the causes of the gleaming worldwide success of this brand and learn that emotional marketing strategies are an essential addition to analytical calculations and findings of consumer research.

Dear readers, our articles all contribute to the message that the more professional the application is to the processes in marketing management, the greater the market success. If this increases the profile of marketing managers and the influence of marketing in a company, then so much the better. I hope this issue of GfK Marketing Intelligence Review will go some way to making these effects more likely. It is down to you to put it to the test and I wish you every success!

Yours

Hermann Diller
Editor-in-Chief

Nuremberg, October 2012

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{New Strategy}

/// *Well balanced communication channels improve repurchase rates.*

When Is Enough Enough?
BALANCING ON THE FINE LINE IN MULTICHANNEL MARKETING COMMUNICATIONS

Andrea Godfrey Flynn, Kathleen Seiders and Glenn B. Voss

In an effort to build long-term, profitable relationships, many companies systematically engage in multichannel relational communication – personalized messages sent to existing customers through various channels as part of a broader relationship marketing strategy. However, too much of a good thing might actually ultimately have a bad effect. Whether ongoing direct communication with customers is perceived positively depends on its volume, the mix of communication channels, and the alignment of those channels with customers' preferences. There is an ideal level of communication. If it is exceeded, customers react negatively and this negative response can be exacerbated by the use of multiple channels. The ideal level differs depending on individual channel preferences. Aligning channels with customer preferences is advisable to optimize repurchase rates.

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The article is an adapted version of *Godfrey, Andrea; Seiders, Kathleen; Voss, Glenn B. (2011)*: "Enough is Enough! The Fine Line in Executing Multichannel Relational Communication", Journal of Marketing, Vol. 75 (4), pp. 94 – 109, and is published with the permission of the American Marketing Association.

Not This Again!

When companies aim to build relationships with customers, they contact them through various channels – email, phone, direct mail, and so on. Initially, personalized communications lead consumers to reciprocate these efforts, and at a certain point, communication is ideal in its amount and appeal. But past that point, consumers start to reject more communications from a company, which is exactly the opposite reaction to what the company wants. To avoid such a negative response, marketers need to align their communication channels appropriately with the preferences consumers express to ensure that they are doing just enough and no more.

For marketers, especially those that aim to develop some form of long-term relationship with their customers, finding the best means for moving from solicitation to sale is a constant challenge. Does customer X prefer a personalized phone call before she will repurchase? How often does customer Y want to receive email reminders? And is it worthwhile to send out mailed solicitations to both of them, so they have something physical to remind them to buy?

In Search of the Ideal Point of Communication

For many companies, all of these questions are pertinent, because they engage in multichannel relational communications. Their goal is to address individual customers personally through a variety of channels, which ideally encourages those customers to stay in a relationship with the company and perhaps even expand their purchases. Depending on the customer, the communications might announce a new store opening, trumpet a new innovation, suggest a necessary service visit, offer a promotional discount, or even ask about satisfaction

{*Box 1*}

A QUICK EXAMPLE

Politicians running for office in many democratic countries spend millions on their campaigns. In the 2012 U.S. presidential campaign for example, total spending by all candidates – in the primaries as well as the ultimate two-party race – is expected to move beyond the US $ 8 billion mark. The spending spreads across various communication media. Television commercials are targeted to different geographic areas. In key battleground states, candidates' advertisements can take up as much as half the advertising airtime in the weeks leading up to a primary election.

Each candidate also maintains a website that sends frequent email messages to people who register. Thus an interested voter who registers with a single national party but also visits the websites of several candidates for that party's nomination could receive multiple, competing messages all at the same time. Telephone contacts also are common; in recent years, ''robo-calls'' have earned special scorn from call recipients, who pick up the phone only to hear a recorded message.

Direct mailing campaigns are diminishing in general as a percentage of total advertising spending, but pamphlets and solicitations still appear in voters' mailboxes. This vast provision of information leads many voters to proclaim, ''That's enough! I'm sick of all the candidates, and the election is still months away''.

after an encounter. All of these contacts seem promising in theory, but in reality, many customers express irritation, frustration and annoyance with repeated contacts that make it seem as if the company is refusing to leave them alone.

A key question is whether the effects of communications across various channels add up (i.e., mail + phone + email) or are multiplied in consumers' minds. Does communication through multiple channels increase responses from consumers, because the company shows how dedicated it is to the relationship, or does it alienate them by seeming impersonal and intrusive? Our study (Box 3) indicates that the answer is both. That is, up to a certain volume of communication, consumers appreciate various forms of communication. By issuing contacts through various channels, the company demonstrates its dedication to the customer relationship. It can reach an ideal point for customer retention and satisfaction by providing a level of communication that encourages the most purchase behavior without overloading consumers. This ideal point is different for various channels, consumers, and their combinations. Then past this point, more communication leads to customer reactance – that is, the customer says ''enough!'' and begins to reject both the communication and the relationship with the company.

For marketers, the general consensus is that some communication is better than none. But what is the ideal amount? To find this level, the marketer needs to determine the impact of specific communication channels (e.g., email, person-to-person, telephone, direct mail), both individually and in combination. Their focus should not be simply the aggregate volume of contacts, because this view prevents them from finding the best means to manage the mix of communication channels. In addition, companies should develop protocols and guidelines for limiting total communication to customers. Finally, they can improve their effectiveness by defining the best channel combinations.

Setting the Right Volume

Let's start with the question of the best volume of communication, before considering how to mix the channels and also align them with consumers' preferences. The relationship between levels of communication and customer satisfaction follows an inverted

U-shaped curve: customer repurchase rates increase when the amount of communication moves from low to moderate. It reaches a pinnacle at the ideal volume. Unfortunately for the marketer though, as communication moves from moderate to high levels, customer repurchasing decreases.

These shifts reflect the concepts of reciprocity and reactance. As with the principle of returning "good for good", reciprocity suggests that customers react in kind to the treatment they receive. Positive treatment provokes a positive response. If the company shows its interest in the customer and a desire to build a relationship with him or her, the customer should respond in kind. That response generally involves a repurchase.

» Marketers need to align their communication channels appropriately with the preferences consumers express to ensure that they are doing just enough and no more. «

{ Box 2 }

EXPERIENCES OF A MAJOR GIFTS OFFICER WITH A NATIONAL NON-PROFIT AGENCY

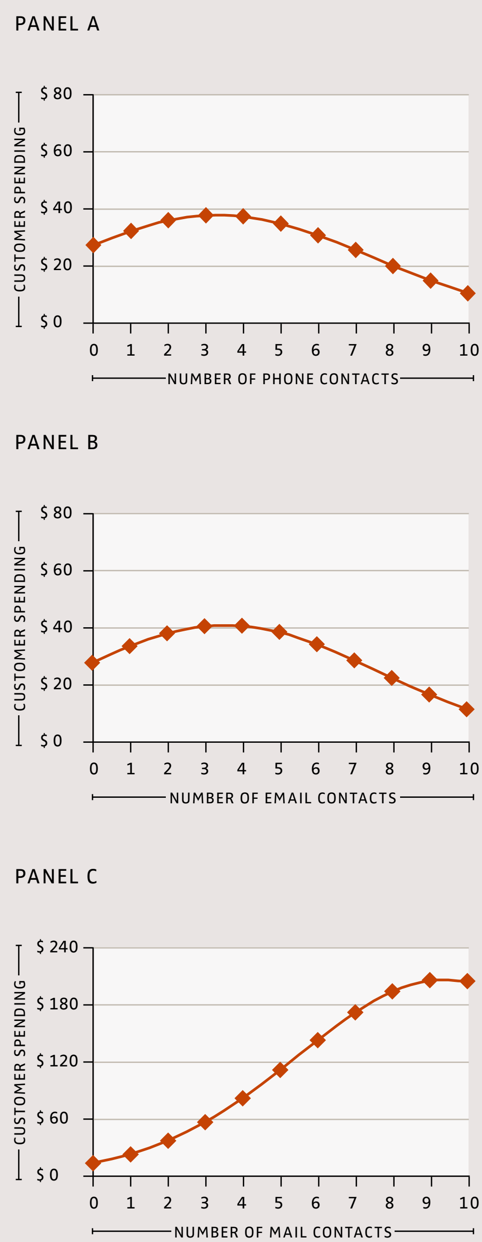
"I spent two months assessing and segmenting the database of past donors and creating a plan for scheduling personal meetings with 60 high-gift-capacity donors. Ten donors were leery about speaking with me. I left messages for another 30 donors, but only three returned my call. Five donors hung up on me with varying degrees of anger. One person said that I was the third person to call in three days. Thirteen donors also received a handwritten note to inform them of our fundraising campaign. In the end, I did not book a single appointment. Because our organization relies heavily on phone and mail contacts along with face-to-face fundraising, potential donors have already been bombarded by mail and phone calls by the time I try to arrange a personal meeting. I am removing all of my donors from the phone and mail contact lists to control how much communication they receive from us."

{ Box 3 }

COMBINING SURVEY DATA WITH CUSTOMER CONTACT HISTORY AND REPURCHASE BEHAVIOR

The survey sampling frame included 3,370 randomly selected customers of a large automobile dealership in the USA with a high volume service department who had visited the service department within the past year. Of the invited customers, 36 % returned their questionnaire on their channel preferences. This data was matched with 39 months of customer contact history and repurchase behaviour allowing for a longitudinal analysis. The combined data was used to estimate a system of simultaneous equations in a maximum likelihood analysis. Repurchase visits and purchase spending served as dependent variables to capture customer response to relational communication. Independent variables included the self-report measure of channel preference and the number of contacts to each customer per phone, email or regular mail from the company contact data.

FIGURE 1:
Ideal Points for the Impact of Relational Communication on Repurchase Spending



Repurchase spending captures average customer expenditures on automotive maintenance and repair services over a 3-month period

The data from a three-year study of a car dealership's automotive service business support this general notion. For three types of communication channels (phone, email, and regular mail), relational contacts have positive impacts on repurchase rates, up to an ideal point. Figure 1 shows these separate curves, all of which are inverted U-shaped. The first few initial contacts prompt positive responses, and customers buy more. But after approximately three phone calls, four emails, and ten direct mailings over a three month period, customers start to exhibit some reactance. (Figure 1, next page)

Reactance occurs when an influence attempt causes the opposite reaction in the target. Such effects are common in interpersonal relationships, but they also arise in consumer settings. When consumers perceive that heavy-handed marketing efforts are attempting to manipulate or limit their freedom of choice, they refuse to act in the way marketing encourages them to. In extreme cases, they may even exhibit a boomerang or backlash effect. For example, in democratic societies, many voters become disenchanted with political advertising that they consider manipulative and therefore refuse to participate in electoral processes at all.

A similar effect appears to arise in the automotive service setting. When the dealership worked "too hard" to contact them through more than three telephone calls, four emails, or ten direct mail messages, customers stopped repurchasing. That is, they reacted negatively to an excessive volume of marketing communication.

Setting the Right Mix

Of course, few marketers would limit themselves to a single communication channel, unless they were forced to do so. The plethora of possibilities for reaching consumers makes multichannel relational marketing a norm in many industries. Therefore, the next step is to determine how the various channels interact and work together to exert an influence on customers' reactions to marketing communications. That is, if a customer receives a phone call, an email and a brochure in the mail all in the same week, will they be pleased that the seller is displaying serious interest, or be annoyed by the blitzkrieg of information?

The contact, survey, and repurchase data reveal that in most cases, the interaction between various communication channels have notable effects. In particular, they move the position of the ideal point of communication volume. When the dealership combines telephone with email messages, the repurchase rate declines. If it issues both email and regular mail, it can suffer a similar decline in repurchasing among its consumers. Although the interaction of phone and direct mail contacts has a negative effect too, the impact was not significant for the data in this study.

In addition, the amount of total communication that the customer will accept before exhibiting reactance also decreases. For the phone × email combination, the ideal point moves down. For example, if the dealership makes one telephone contact, the ideal number of email contacts is five to six. However, if it adds a few more telephone calls to its mix, the ideal number of email declines to two to three. Similarly, when there is one mail contact, the ideal number of email contacts is approximately five, but with five mail contacts, the ideal number of email contacts drops down to one.

Setting Levels in Accordance with Customer Preferences

The final set of insights, derived from the combined data from customers, the dealership and sales records, indicate that marketers need to take careful consideration of the preferences that consumers express about communications as well. Quite simply, preference for a channel improves customers' responses to communications through that channel. For example, among customers who prefer email contacts, repurchase rates are highest when they receive five email messages. Among consumers who do not prefer that channel, the ideal point that drives the highest repurchase rates is between two and three email contacts.

Summary of Results

This research offers three key findings for marketers:

1. There is an ideal volume of relational marketing communication, though that level varies across different communication channels. Before the ideal point, consumers increasingly reciprocate greater marketing communications. After the ideal point, they begin to exhibit reactance and show increasingly negative responses.

2. The interactions of the various channels have negative effects. That is, the ideal level for one type of communication drops when communication volume in the other channels increases. The multiplicative effects are stronger in some combinations than in others, but they are consistently negative.

3. Customers' preferences for certain channels affect the ideal rate of communication volumes on repurchase.

Such findings seem unlikely to apply in some other channels though. For example, if a television viewer can leave the room or change the channel rather than watch yet another commercial, then reactance may be less likely. These results suggest that control over the receipt of the message is a critical component of customers' responses to marketing communications. Reactance appeared most quickly in response to the telephone channel, less so in the email channel, and slowest in the regular mail channel.

» Reactance appeared most quickly in response to the telephone channel, less so in the email channel, and slowest in the regular mail channel. «

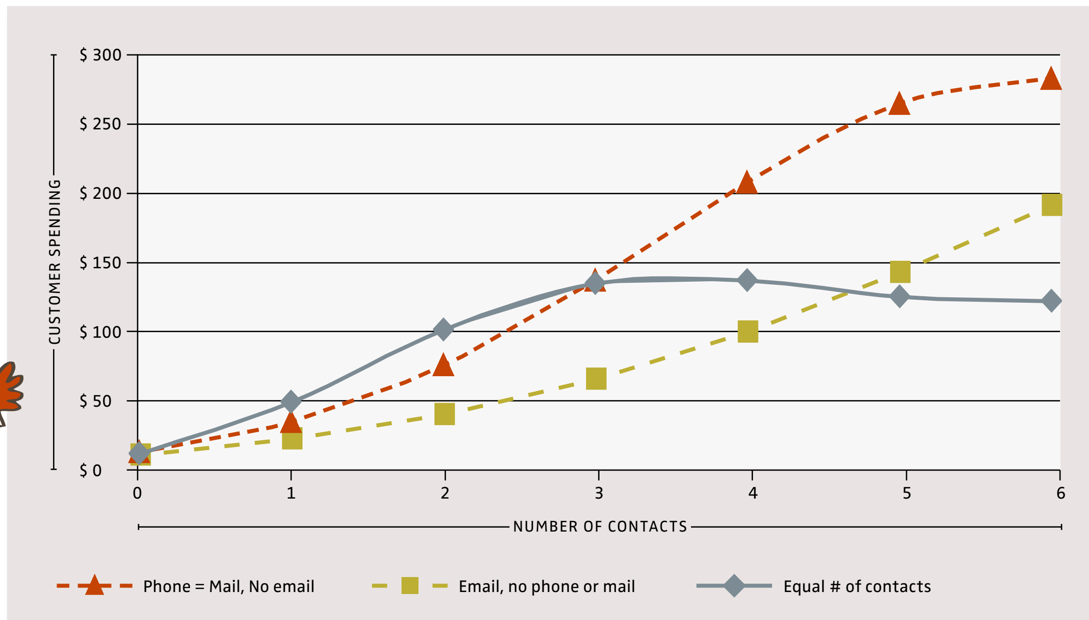


FIGURE 2:
Simulated Results of Three Relational Communication Strategies over a 3-Month Period

Perhaps these findings reflect the level of perceived intrusiveness associated with each marketing communication channel. That is, a telephone call seems highly intrusive: it disrupts the recipient's immediate activities in real time. Even if the person ignores the call, the resulting voicemail message requires some action, even if just to dial into a voicemail system to delete the unwanted message. Communication managers should therefore limit all telephone contacts; for the company in this research setting, telephone contacts were most effective when limited to three contacts per quarter, on average.

Email appears rather less intrusive. It does not require a real-time disruption, and it is relatively easy to delete. In addition, customers have a simple and effective means for preventing messages in the future by flagging the sender and directing future communications to a junk mail folder. Thus, the car dealership's email contacts only prompted reactance if they exceeded four per quarter. Finally, postal mail seems least intrusive. It is easy to ignore and dispose of, and marketers can therefore safely send a higher number of mailings per quarter before they run the risk of customer reactance.

Managerial Implications

> ***Monitor contact volume and channel combinations***
Marketing communication cannot succeed if it only seeks to avoid negative reactance; it also needs to provoke positive reciprocity. To maximize repurchase and minimize the likelihood of reactance, managers need to monitor their total contact volume with customers and also explore how their specific channel combinations alter the ideal point. Email combines poorly with telephone and mail contacts. However, customers respond relatively well to a combination of telephone and mail contacts – though this combination may be more expensive than those that rely more heavily on email.

> ***Adapt communication channels to preferences***
Whenever possible, marketers also need to determine just which communication channel their customers prefer. The data in this study implied two main customer segments: the ***traditionalists***, who respond positively to traditional channels (i.e., mail and telephone), and the ***technology embracers***, who like technologically advanced contacts (i.e., email). A simula-

tion of varied resource allocations across the three channels for this group of customers produces the outcomes in Figure 2. That is, with equal telephone and mail contacts, but no email, positive reciprocity is likely among the first customer segment of traditionalists. However, it also may provoke negative reactance among the technology embracers. In contrast, dedicating all resources to email contacts initiates positive reciprocity among technology embracers and negative reactance among traditionalists.

> ***Develop protocols that limit total communication***
What about equal numbers of telephone, email, and mail contacts? The simulation suggests that this overwhelming approach would provoke reactance from everyone, both traditionalists and technology embracers. With three or fewer total contacts, most customers likely respond positively, but once the marketer goes beyond that point, repurchasing decreases. As these results show, this approach may allow marketers to successfully avoid inefficient allocations of marketing resources.

They can do so by developing protocols that limit the total communication through all channels and specifying effective channel combinations. Taken together, the evidence from this study suggests that multichannel communication must be carefully managed on multiple dimensions to avoid generating reactance and potentially driving customers away from, rather than closer to, the company. •

FURTHER READING

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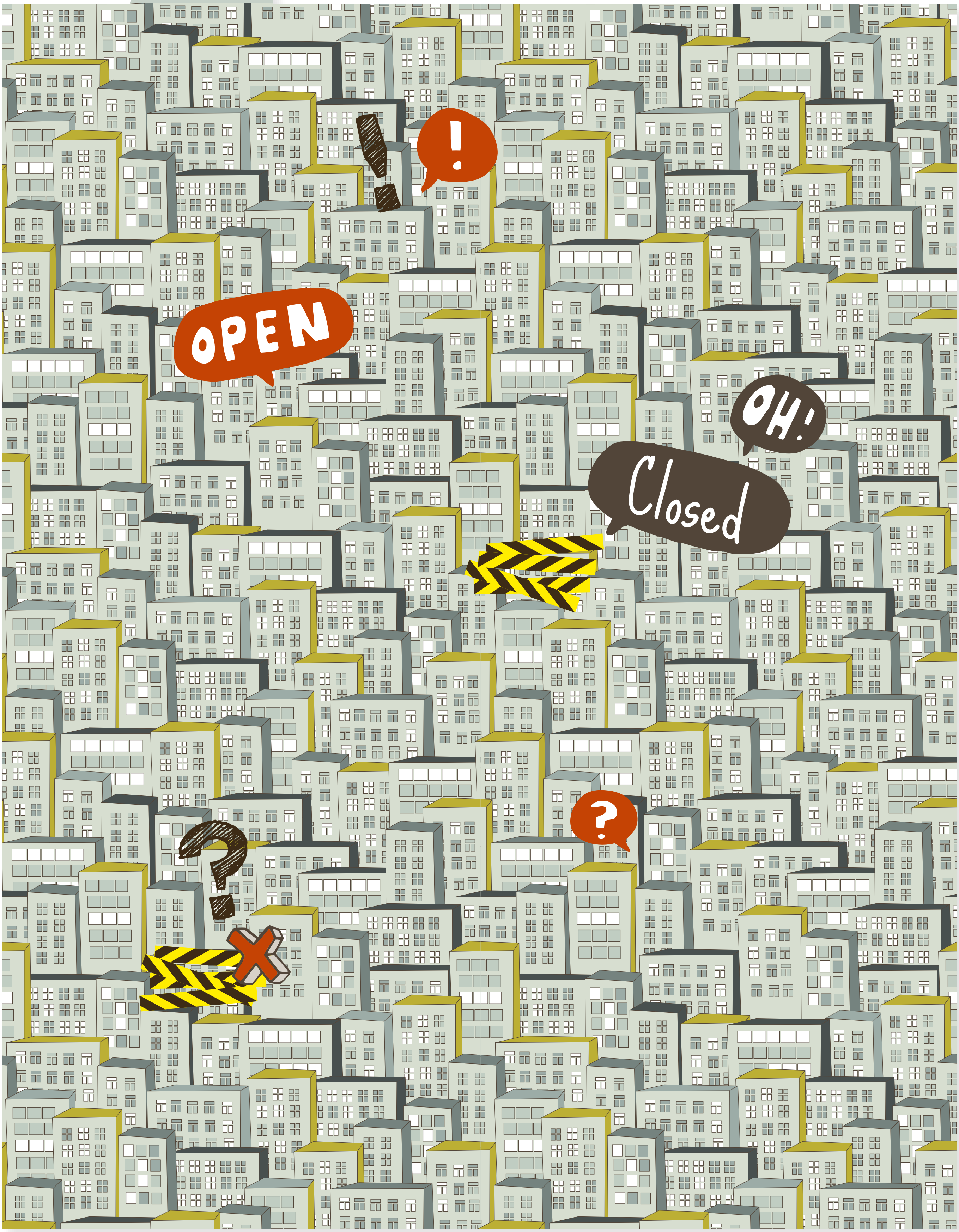
KEYWORDS:

Multichannel Communication, Communication Mix, Direct Marketing, Relationship Management, Customer Reactance, Customer Repurchase

{ New Insights }



To Close or not to Close?
ASSESSING THE IMPACT OF OUTLET CLOSURES ON RETAIL CHAINS

Hans Haans and Els Gijsbrechts

Retail chains often face tough competition and permanently seek to increase profitability. Closing outlets is a common strategy, even if knowledge about its implications is limited. Indeed, chain sales losses from store closure of a multi-outlet retailer operating multiple formats vary widely across outlets (ranging from less than 30 % to more than 80 % of the closed outlet's revenue) and depend not only on the closed store's format and distance to competitors, but also on the profile of its clientele and type of shopping trip. Analyzing these criteria helps to predict the magnitude of these losses for specific store closures using a new model. It offers guidance to retailers in deciding whether a particular store closure is beneficial to the chain or, if the objective is to prune an overly dense network, which of a set of local outlets is the best candidate for closure.

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The article is an abridged version of *Haans, Hans; Gijsbrechts, Els (2010)*: "Sales Drops from Closing Shops: Assessing the Impact of Store Outlet Closures on Retail Chain Revenue", Journal of Marketing Research, Vol. 47, No. 6, pp. 1025 – 1040, and is published with the permission of the American Marketing Association.

Preserving Profitability by Closing Outlets

Faced with the challenge of improving both the appeal of their offers to customers and the efficiency of their operations, retailers have undertaken a rash of mergers and acquisitions, engaged in multi-format retailing (e.g., Wal-Mart, Tesco), and used downsizing (e.g., Kmart, Albertson's) to preserve profitability. In all three responses, the retailers close some of their outlets. In 2004, 2.7 % of U.S. grocery stores closed and the recession in 2009 entailed a new wave of store closings. European markets witness significant outlet pruning as well. Whether part of a downsizing, merger, or format-shift strategy, store closure activities involve two types of decisions: how many outlets to close and which outlets to close. The answer to both questions strongly depends on how closing a particular store will affect chain sales value and margin. To assess losses it is necessary to evaluate if part of the lost sales caused by the closing will be redistributed to other outlets of the chain. Even if knowing this share is more critical for decisions on which outlets to prune than sales or gross margins of individual stores, there is little guidance on how to assess the magnitude of retained and lost sales. An intercept study conducted in cooperation with a retail chain in the Netherlands shows that the aggregate losses differ strongly depending on which outlet would be closed.

FIGURE 1:
Total Traffic and Spending Loss for the Closed Stores

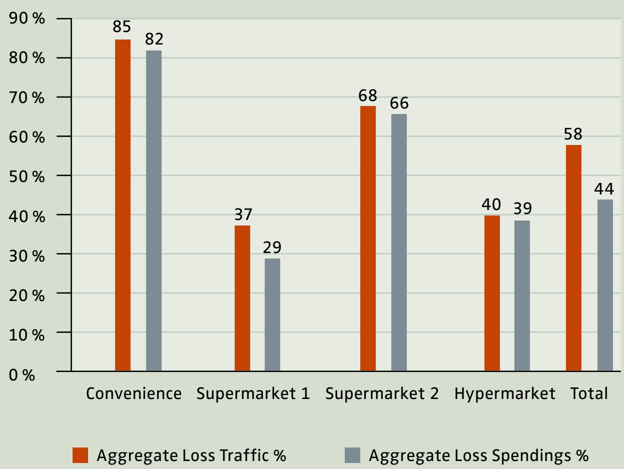


FIGURE 2:
Replacement Store Selection for Closed Stores (Traffic)

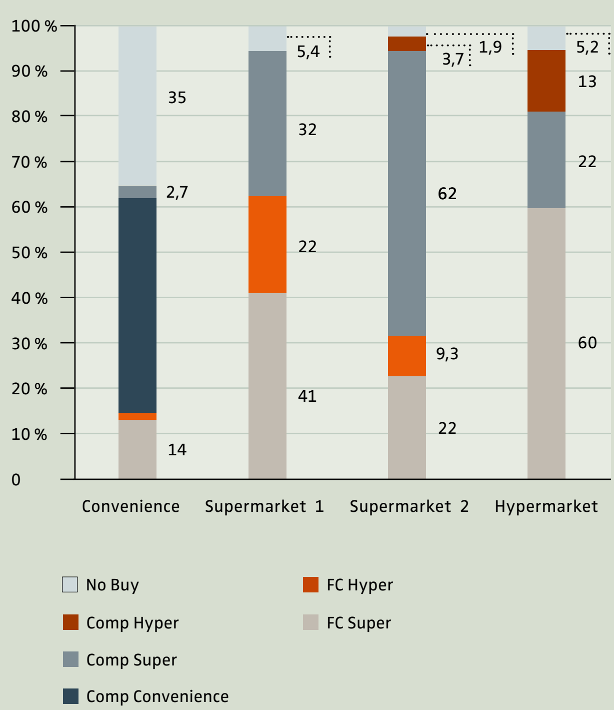


Figure 1 shows an overview of the differences in switching and spending behavior depending on which stores are closed.

Trips switched to the no-buy option or to competing chain outlets are lost to the chain. If the intercept outlet is closed, 58 % of all consumers switch to a competing store or abandon the trip. Thus, the focal chain (FC) recovers a sizable portion of customer trips (42 %) in its remaining outlets, despite the presence of many competitors the loss of spending is even less than the loss of traffic. According to the observed receipt tickets, the 58 % trips lost to the chain represent only 44 % of the total receipt value, suggesting that mostly bigger baskets are retained. Recovered store sales vary strongly across outlets in both absolute and relative terms (from 18% for the convenience store to 71 % for supermarket 1).

Figure 2 describes the replacement store choice of consumers for the different stores. There are differences not only between but also within formats. The hypothetical closure of supermarket 1 results in a traffic loss of 37 %, whereas for supermarket 2 the traffic loss is 68 %. The closure of the hypermarket results in 40 % lost trips.

Some of this convenience store traffic loss stems from consumers abandoning the shopping trip (no-buy: 35 %, these are small trips for purchasing drinks, bread and pastries, fruit and snacks) – a phenomenon almost negligible among supermarket and hypermarket shoppers (supermarket 1: 5.4 %; supermarket 2: 1.9 %; hypermarket: 5.2 %).

Consumers' Reactions on Shop Closings

In fact, switching and spending behavior depends on several criteria and has to be analyzed on an individual level. Box 1 describes how the analysis was organized.

When consumers are confronted with a store closure they either select a replacement store or drop the intended shopping trip. They decide by balancing a tradeoff between substitution and transaction costs. Substitution costs arise if the replacement store leads to lower utility than the originally selected outlet because of a less appealing assortment or higher price. Transaction costs result from higher transportation costs to the replacement store, enhanced search costs (time and effort to locate and select the required items), and enhanced checkout time. The level of these costs

{ Box 1 }

THE STUDY

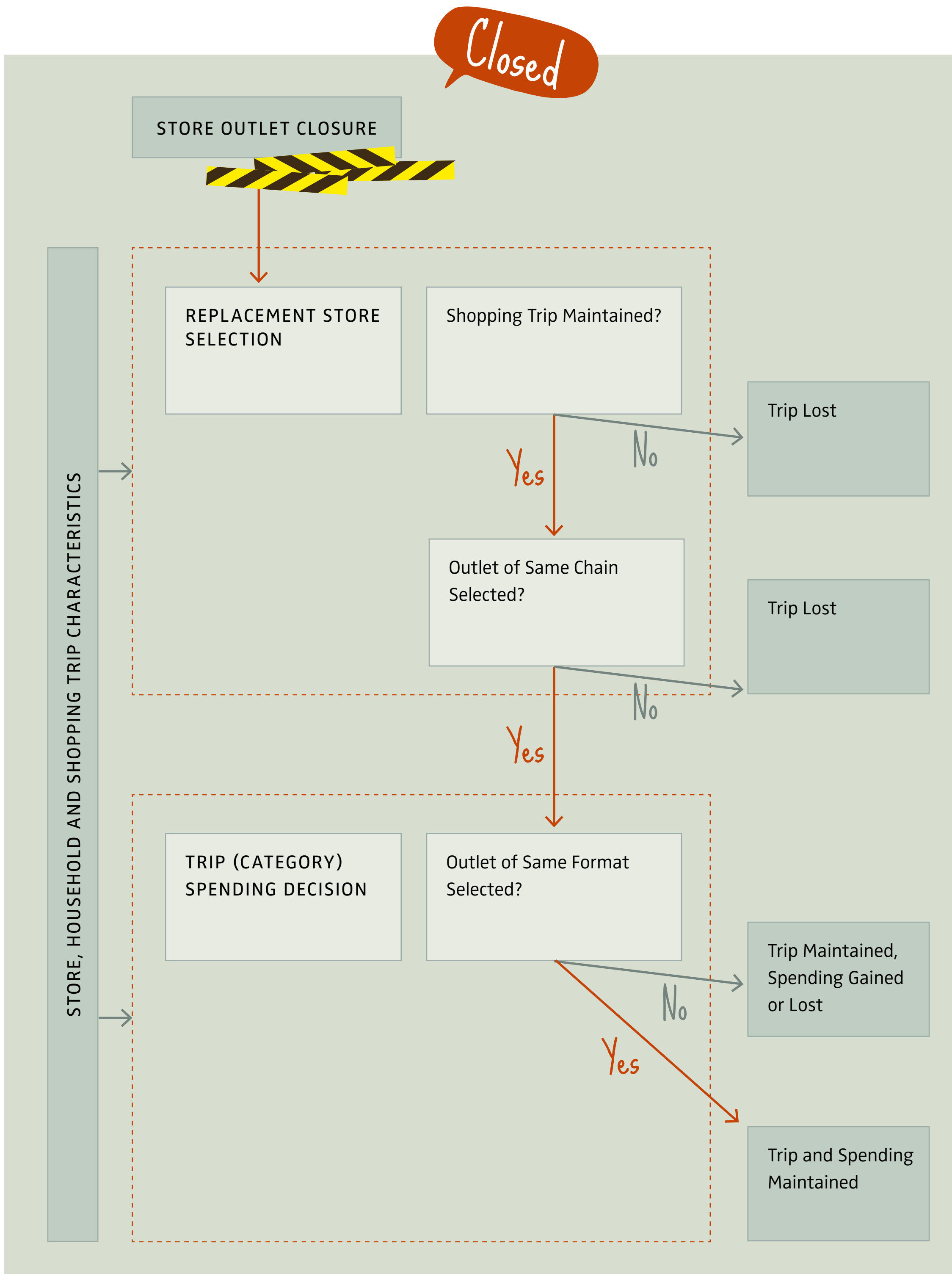
The FC is a major grocery retailer operating 18 outlets under one "umbrella" brand of three format types: a convenience store (located in a railway station), a hypermarket, and 16 supermarkets in the local market, a Dutch city of 450,000 inhabitants. Data was collected in four of these outlets: the convenience store, the hypermarket, and two supermarkets (supermarket 1 and supermarket 2). The local retail infrastructure consisted of 50 larger self-service food stores (of which three were hypermarkets and the others supermarkets). Close to the FC's convenience store, there were eight competitive convenience outlets selling comparable categories.

The data collection procedure combined a mall intercept survey with objective purchase data. Before consumers entered one of the four selected stores, they provided information on their background and planned purchases. Consumers were further interviewed about their (stated) patronage reactions to a hypothetical closure of the visited store. Consumers indicated a replacement store to which they would switch for a similar shopping trip. ("I would have dropped the entire shopping trip" was also explicitly mentioned as a response option). If consumers indicated a replacement store, they stated whether the list of planned categories would be adjusted.

After completing the survey, consumers were given a numbered ticket so that the survey and purchase data could be combined. Consumers who handed in the ticket and cash receipt after shopping became eligible for one of three vouchers worth € 250. The interviews were spread over different days and times of day to cover different basket and shopper characteristics. To offer time-constrained customers the opportunity to enter the sample, they were asked for their shopping list before the store visit. These customers were then provided with a copy of the survey so they could complete the remaining questions at home.

In a first step, the data was used to observe switching behavior and calculate losses for the chain for the hypothetical closure of the respective outlets. In a second step, this data served as input for a store selection model and spending model. A Tobit model by category assessed a link between category purchase plans and actual spending in each store format. The dependent variables were the observed category purchases (based on the receipts). Independent variables were these respondents' household characteristics, trip profiles, and category purchase plans (as obtained from the survey before the intercept store visit). In a second step, the changes in category purchase incidence and spending for each respondent who intends to switch to a different format of the FC on the intercept store closure were predicted.

FIGURE 3:
Consumer Decisions and Chain Losses when a Store is Closed



depends on characteristics of the replacement store, but varies for different types of shopping trips and shopper profiles. Figure 3 gives an overview of consumer decisions and their consequence for the chain.

Among ***store characteristics***, distance to the store increases transaction costs and consumers typically prefer replacement stores that are nearby. Store format – whether the substitute store is a convenience store, supermarket, or hypermarket outlet – plays an important role. Although larger formats probably entail lower substitution costs (because consumers have a wider selection of items to choose from, often at lower prices), in-store travel time and search costs are typically higher. In the study, 24.4 % of consumers switch to a supermarket of the FC after the convenience store closes, compared with 62.7 % (47.7 %) when the closed store is a supermarket (hypermarket). The no-buy option is highest when a convenience store is closed (16.7 %). Store characteristics such as assortment quality, service level, and value for money are relevant for the perception of switching costs but depend heavily on shopping trip and shopper characteristics.

Among the ***shopping trip characteristics***, basket size (major or minor shopping trip) and basket composition are relevant because they affect the transaction and substitution costs from specific store switches. Major shopping trips are less likely to be dropped than minor trips, especially snack trips. Trips involving fresh items are more easily transferred to competing stores. For example, if the closed store is a supermarket, consumers in need of fresh items are less likely to seek out another supermarket or a hypermarket of the FC (– 5.7 % and – 2.3 %). These same-chain outlets are seldom the closest replacement stores, and consumers prefer to buy these frequently purchased and perishable items from easily accessible outlets.

In contrast, large-basket trips are more prone to be shifted to the FC's own outlets. For example, a larger basket size corresponds to a 24.8 % higher probability of replacing a closed hypermarket with an FC supermarket. Staying with the familiar chain allows consumers to limit their substitution costs and/or contain their transaction costs for these comprehensive trips. Somewhat unexpectedly, larger basket trips are less easily transferred to FC hypermarkets than to supermarkets. Possibly, consumers on weekly stock-up trips purposefully focus on item replenishment and are less interested in the extra services or non-food assortments of hypermarkets.

In a similar vein, response to a store closure depends on ***shopper profile***. Whether the household is a small- or large-basket shopper is linked to household size and general time constraints, such that small-basket shoppers are often smaller households with less stringent demands on their time. The results show that time-pressed consumers are more likely to stay with the FC in particular, its hypermarket (+6 % and +4 % probability for convenience and supermarket shoppers, respectively). These consumers may lack the flexibility to shop around and need to ensure that each item on their shopping list will be (easily) found in the (familiar and large enough) replacement store. Time-pressed convenience store shoppers also exhibit a lower (– 7.9 %) no-buy probability, suggesting that these are consumers on non-expendable fill-in trips. Large-household supermarket and hypermarket shoppers are more likely to switch to a competing hypermarket (+ 10.1 % and + 5.8 %). Surprisingly, large-household shoppers in the convenience format tend to abandon the trip (+ 29.3 %) or switch away from the FC supermarket (– 11.2 %) if the convenience store closes. It seems that these are not the main shoppers replenishing household needs, but rather other household members on trips for personal consumption.

» Format switches make consumers deviate more or less strongly from their shopping list and spend different amounts on the categories purchased. «

» Staying with the familiar chain allows consumers to limit their substitution costs and/or contain their transaction costs for these comprehensive trips. «

However, consumers not only switch stores and formats. A switch has further effects on what they buy and how much they spend. Changes in category purchase planning are rare and mostly occur for switches from an FC convenience to an FC supermarket (e.g., 3.2 % of those consumers add fruit and vegetables to their shopping list). Instead, format switches make consumers deviate more or less strongly from their shopping list and spend different amounts on the categories purchased.

For example, switching from an FC convenience store to a supermarket induces 11.4 % of households to begin buying cold cuts and salads (based on the survey data, these are impulse purchases) and makes buyers spend € 4.73 more, leading to an average spending increase for this category of € 0.37 per basket. Conversely, of households purchasing soft drinks or tobacco products in the convenience store, 11.8 % and 1.2 % respectively would not buy the category during a supermarket visit (because these categories are less prominent than in the convenience outlet), and the remaining households would spend slightly less (€ – 0.19, possibly because of lower supermarket prices). Based on expert feedback, these changes reflect differences in assortment, in-store placement, and price of these categories across FC formats. Accounting for spending shifts increases expected losses from the FC hypermarket closure by 13.8 %, up from 38 % to 42.7 %. Conversely, chain losses from closing an FC supermarket become lower (– 10.5 % and – 0.4 % for supermarket 1 and supermarket 2, respectively, reducing the adjusted sales chain losses to 25.6 % and 65.6 %, respectively, of the closed supermarkets' sales value) because expenditures on trips shifted to the FC hypermarket increase. For the convenience store, the adjustments lower the estimated sales loss by 9.6 %.

Key Insights and Implications for Store Closing Decisions

The prediction model for switching and spending performs well. The whole methodology, including the collection of store intercept data, can be readily implemented by research organizations currently specializing in market potential estimates for store openings, adding a valuable tool to their service offer. This approach circumvents panel data problems, such as sparseness or the lack of ''process measures'' and yields better chain loss predictions than a regular store choice model estimated in business-as-usual settings.

> ***Recovered sales may be substantial***
Recovered sales after a store closure may be substantial, with average losses amounting to less than half the closed outlet's sales. Therefore, judging an outlet's contribution to chain profitability on the basis of its own sales performance may be highly misleading. The marginal losses of an outlet closure, after recovered sales in other outlets of the chain are accounted for, may be much lower.

> ***The fraction of sales lost is strongly format specific***
Convenience store visitors appear more likely to pick an outlet of another chain or drop the visit, which leads to higher percentage losses from closing these stores than from closing supermarkets or hypermarkets. At the same time supermarkets represent the format most likely switched to when other outlets are closed. Therefore multiformat retailers should maintain a sufficiently dense supermarket network.

> ***Nature and location of supermarkets matter***
Within the same local market and for a given format, the fraction of store sales lost to the chain may strongly vary between outlets. The spending loss for

the two supermarket outlets in the study ranges from less than 40 % (supermarket 1) to more than 65 % (supermarket 2). Therefore supermarket 1 would be the prime candidate for closure if both supermarkets were equally profitable.

> ***Customer base and shopping habits make a difference***
The characteristics of the closed stores' base of customers and shopping trips are relevant for the amount of loss. Stores with a clientele of larger households, which purchase larger baskets, have more of their sales picked up by remaining outlets of the chain and big spenders are more chain loyal. Staying with the FC helps these consumers contain their substitution costs and keep their substantial transaction costs within limits. Further, time-constrained households (e.g., two working members) often switch to hypermarkets because they benefit most from one-stop shopping. Large-basket trips are more often transferred to the FC's supermarkets than to its hypermarkets, possibly because the mission of stock-up trips is difficult to reconcile with browsing in the non-food sections of a hypermarket.

> ***Format switches change the shopping basket***
Even trips that stay within the FC may entail significant changes in chain sales if the consumer switches to a different store format. On average, transferring trips from FC hypermarkets to supermarkets dampens spending and increases expected losses from a hypermarket closure by more than 10 %. Conversely, shifting trips from FC convenience stores to supermarkets or from FC supermarkets to hypermarkets typically lifts expenditures and reduces expected chain losses by, again, approximately 10 %. These spending shifts occur "unplanned" and they are highly idiosyncratic to product categories, with fresh products (e.g., cold cuts), hedonic categories (pastries, tobacco), drinks, and personal care items being especially susceptible to spending changes after a format switch. Retailers revising their outlets' format mix should not overlook these shifts in expenditures and should gauge their magnitude according to the outlets' current basket composition. •

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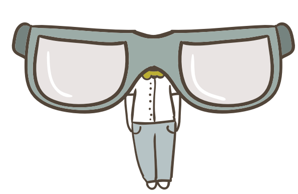
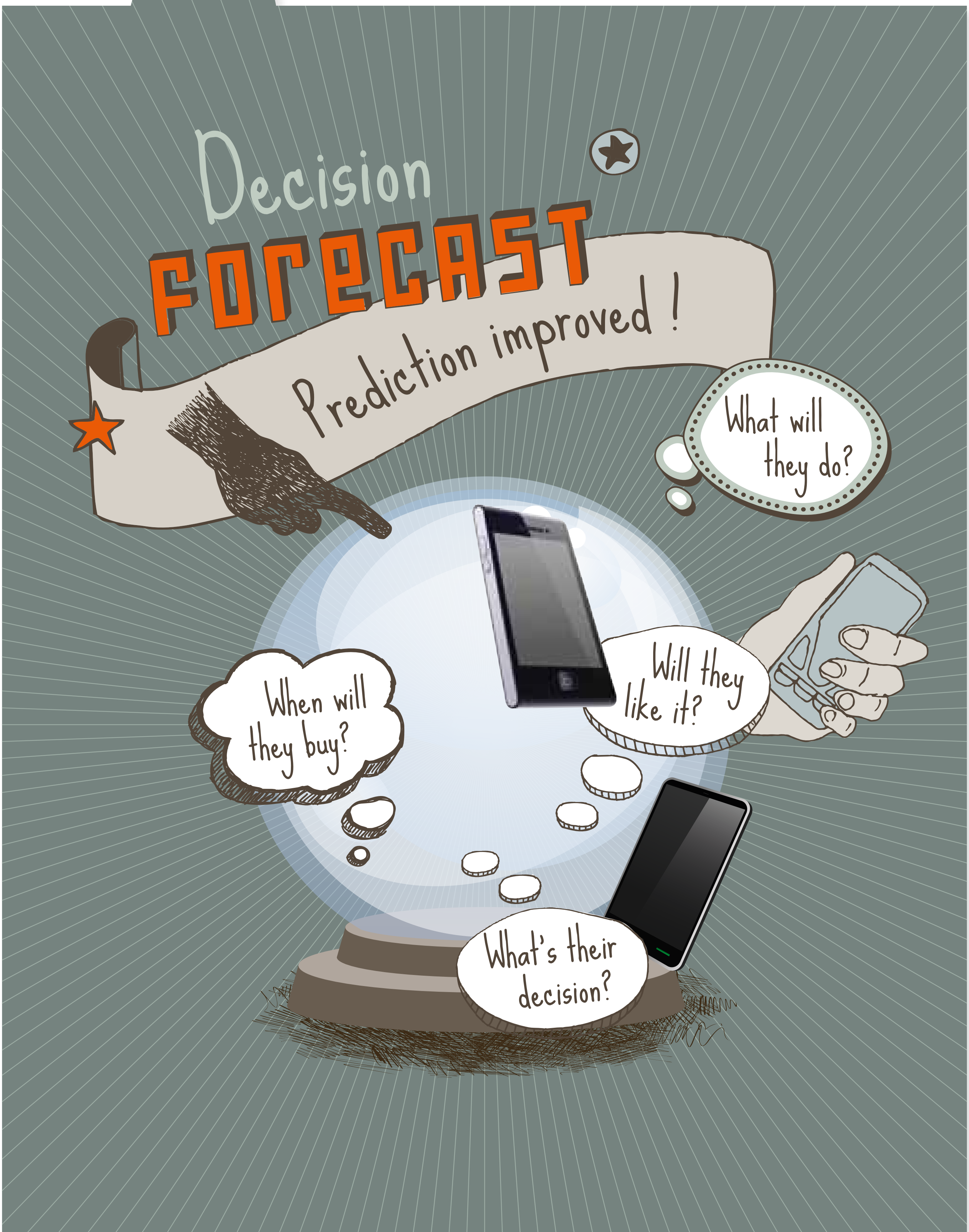


KEYWORDS:

Outlet Closure, Store Switching, Store Format Choice

{ New Method }


Decision
FORECAST
Prediction improved !
What will they do?
When will they buy?
Will they like it?
What's their decision?

I Will … Sooner or Later
PREDICTING WHETHER AND WHEN CONSUMERS INTEND TO ADOPT NEW TECHNOLOGIES

Koert van Ittersum and Fred M. Feinberg

Two of the most critical uncertainties associated with new technology introductions are whether and when the target market will adopt them. A new scale integrates cumulative time intervals and predicts adoption more accurately. Behavioral data collected during a two-year longitudinal study provides empirical evidence for its accuracy. The new measure outperformed two single-intent measures and achieved a hit rate of more than 80 % in predicting whether and when a cell-phone technology was adopted. Adoption likelihood can be estimated without actual sales data and thus be determined prior to the launch of a new product.

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The Challenge of Predicting Adoption Intentions Accurately

Two of the most critical uncertainties associated with new-technology introductions are ***whether*** and ***when*** the target market will adopt them. Both uncertainties pose serious challenges for marketing managers planning a technology's production, pricing, distribution, and promotion. One way to reduce these uncertainties is to survey the target market about their intentions to adopt the technology. Because self-reported adoption intentions can be collected prior to launch at relatively low cost, they are among the most widely applied proxy measures for actual adoption.

Intention measures do correlate with actual behavior, but their predictive accuracy is rather limited. Indeed, the probability that people follow through on their intentions is quite modest: their intentions might change over time, intentions are not tightly interrelated with actual behavior, or the intention measure itself might be biased.

Two general approaches address biases that limit the predictive accuracy of intention measures. The biases are either accounted for in a formal statistical model or the measurement itself aims to reduce biases when intentions are first collected. While correcting for biases via dedicated statistical models can improve predictive accuracy of self-reported intentions, reducing them in the first place decreases the need for such complex approaches. Furthermore, actual sales data is often required for calibration purposes, reducing the practical value of many of these models.

Measuring Timed Purchase Likelihood

Including time in the measurement of adoption intentions can help better predict important managerial metrics. A new response scale collects self-reported adoption intentions ***prior*** to the launch of a new product and provides more accurate predictions of ***whether*** a future behavior will occur plus ***when*** this behavior is most likely (see Table 1). The scale specifies a clear and technology-specific time horizon (e.g., 36 months). This time horizon is divided into shorter, cumulative time intervals (e.g., 0 – 3 months, 0 – 6 months, …, 0 – 36 months). Then, respondents provide adoption probabilities for each cumulative time interval (e.g., 0 – 100 %). Asking for subjective probabilities in specified time frames encourages and allows respondents to better account for future uncertainty than asking them for their intentions alone does. As a consequence, subjective probabilities should more accurately predict future behavior than intentions when the behavior becomes distal in time.

In an experiment (Box 1) the ability of this scale to predict whether and when the technology would be adopted was compared to single intent measures.

Predicting Adoption Accurately

Figure 1 compares how well the different approaches predicted whether decision-makers would adopt a cell phone with GPS technology during the first two years of technology availability.

The self-reported probability curve of the cumulative timed intent measures proved to be highly accurate: it correctly classified 87.2 % of the consumer decision-makers as non-adopters and 80.6 % as adopters, with an overall ''hit rate'' of 84.3 %, and it substantially outperformed the single intent measures. Particularly for

» Asking for subjective probabilities in specified time frames encourages and allows respondents to better account for future uncertainty than asking them for their intentions alone does. «

{ Box 1 }

THE STUDY

354 students of a large U.S. university participated in a study on their intentions to adopt cell phones with GPS technology. After the participants entered the lab, they were informed that a growing number of companies were introducing cell phones with GPS technology and that the researchers were interested in their intent to buy one. Half the participants were asked to express their intent to adopt using two traditional single-intent measures (scaled intention measure and open-ended information of when they expect they will have purchased the GPS cell phone), while the other half was asked to express their intent to adopt using cumulative timed intent measures.

A 36-month time horizon was selected, based on an average cell phone replacement rate of 24 months. Cumulative timed intent was measured among half the sample using 3-month increments. The response scale ranged from 0 % = ''I will not have bought one'' to 100 % = ''I will have bought one'', with 10 % intervals. The 10 % interval width was selected as a trade-off between scale granularity and the potential for being taxing to respondents. Of the participants, 40.4 % (about half for each type of measurement) participated in four follow-up surveys (every six months over the following two years).

The estimation was carried out according to the general linear model and hierarchical Bayes methods. The main idea was to have a standard heterogeneous linear regression formulation underlie the response scale. This stage maps covariates adoption propensities that account for each subject's time trend. In a second stage, these propensities are mapped onto a probability scale using a probit transform. The third stage maps these probabilities to stated intentions, using a ''multiplicative'' or ''rank order'' binomial specification. As such, it is the first of these stages that completely accounts for individual-specific covariates' effects on adoption propensity; the two later stages simply transform these propensities to probabilities and then to intentions scale points.

	I will not have bought one									I will have bought one
1 month from now	0 %	10 %	20 %	30 %	40 %	50 %	60 %	70 %	80 %	90 %	100 %
6 months from now	0 %	10 %	20 %	30 %	40 %	50 %	60 %	70 %	80 %	90 %	100 %
1 year from now	0 %	10 %	20 %	30 %	40 %	50 %	60 %	70 %	80 %	90 %	100 %
1 ½ years from now	0 %	10 %	20 %	30 %	40 %	50 %	60 %	70 %	80 %	90 %	100 %
2 years from now	0 %	10 %	20 %	30 %	40 %	50 %	60 %	70 %	80 %	90 %	100 %
2 ½ years from now	0 %	10 %	20 %	30 %	40 %	50 %	60 %	70 %	80 %	90 %	100 %
3 years from now	0 %	10 %	20 %	30 %	40 %	50 %	60 %	70 %	80 %	90 %	100 %

adopters, the hit rates of a traditional single intent measure and the open-ended responses of whether and when respondents intend to adopt the new technology were significantly lower. Therefore, the particular strength of the cumulative timed intent measures lies in correctly classifying adopters, which, generally speaking, is more elusive than predicting the status quo of non-adoption.

A comparison of the absolute differences in the predicted and actual timing of adoption confirms the superior performance of cumulative timed intent measures. It most accurately predicted the timing of adoption: for a 24-month time period, the mean deviation of the predicted time of adoption is a relatively small 3.6 months, compared to 5.5 months for the single intent and 8.8 months for the self-report measure (Figure 2).

Application in Practice

The big advantage of this approach is that individual-level cumulative adoption likelihood curves can be estimated without actual sales data, and thus can be determined prior to launch. Accurately predicting whether and when people intend to adopt a relevant technology reduces the uncertainty of whether and when the target market will adopt a new technology, allowing marketing managers to better plan a technology's production, pricing, distribution, and promotion.

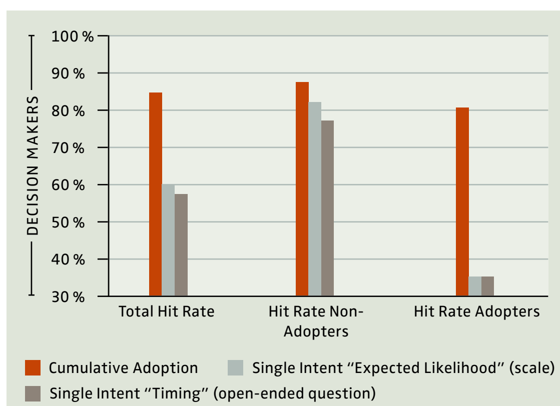

FIGURE 1:
Individual Level Adoption – Hit Rate of the Adoption of a Cell Phone with GPS Technology

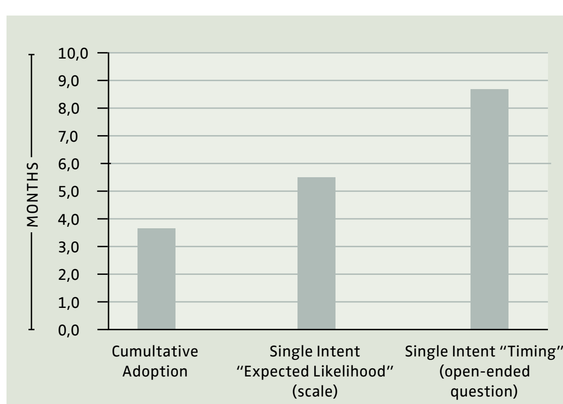

FIGURE 2:
Timing of Adoption – Mean Absolute Deviation of Cumulative Time Intent Measure (Months)

» The particular strength of the cumulative timed intent measures lies in correctly classifying adopters, which, generally speaking, is more elusive than predicting the status quo of non-adoption. «

Besides collecting intentions to predict first-time purchase behavior, intentions can also be collected to predict repeat purchases. For instance, using satisfaction ratings, companies often try to predict customer repurchase intentions. The proposed cumulative timed intent measure may mitigate some of the challenges faced when collecting satisfaction and intent data in the same survey. It allows a closer and more accurate examination of the relationship between satisfaction and future behavior. •

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KEYWORDS:

Forecasting Methods, Technology Adoption, (Re-)Purchase Intentions, Innovation Management

Off-The-Shelf or Tailored to Your Needs: IS CUSTOMIZATION ALWAYS SUPERIOR?

Customers are increasingly buying package offerings that consist of a combination of goods and/or services. They often have the choice of purchasing either an available standardized, off-the-shelf package or a customized offering designed to match their specific preferences. The position espoused in many books on one-to-one marketing and customer relationship management is that everyone is attracted to the latter. However, recent research is starting to challenge the universal appeal of mass customization. This project investigates if the preference for either a customized or standardized offer depends on whether they are experts or rather inexperienced in the product category. It further sheds light on repurchasing after buying standardized or customized products and if retailer reputation makes a difference.

Buyer Expertise Influences Preferences

In a study on either customized or standardized stereo systems, 67 % of all respondents selected the customized version and only 33 % selected the standardized system.

In another study, respondents rated their perceived expertise for stereo systems and if they would select either a customized (with sales person assistance) or standardized system for purchase. The more experienced the consumers felt (self reported expertise) the more likely they were to choose the customized system over the standardized system.

Even consumers who acknowledge having little expertise in the product category are attracted by customized offerings, though to a much lesser extent than consumers who feel confident in their knowledge of the category.

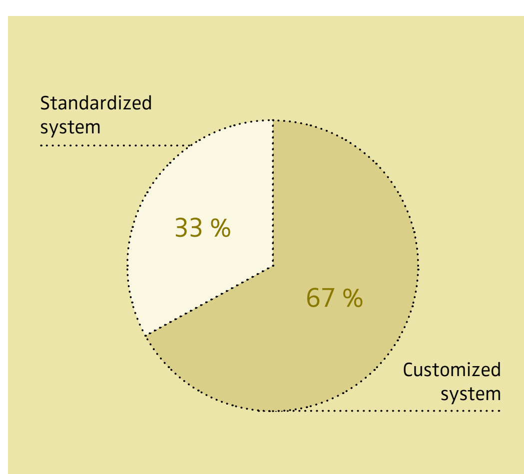
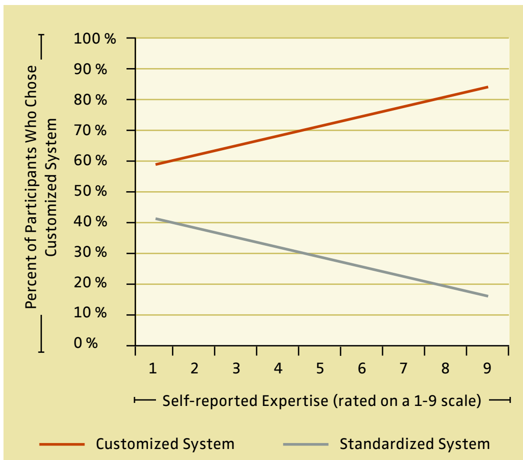


FIGURE 1:
Customized Systems are Preferred by a Majority

FIGURE 2:
Experienced Consumers Prefer Customization Even More



» The more experienced the consumers felt the more likely they were to choose the customized system over the standardized system. «

Buyer Expertise and Retailer Reputation Influence Repurchase Intentions

Two additional studies were conducted to examine patronage choice. These studies relied on computer-based shopping simulations, one in a traditional retail environment (for a home theater system) and the other in an online store (for a PC system). One objective was to investigate the effect of retailer reputation on preferences and repurchasing. Vendors were presented to have either a very high (five stars out of six according to independent ratings) or a rather poor reputation (two stars). Participants indicated their preference for different versions of individual elements (e.g. TV screen size, TV brand, DVD player brand, delivery for the home theater) and confidence levels in their preference. Then the actual purchase was simulated and subsequent questions on the perceived quality of purchasing and its result were answered.

Consumer confidence and retailer reputation both had an impact: consumers with low confidence in their preferences (versus high-confidence consumers) were relatively less willing to return to a retailer after purchasing a customized system. When reputation was taken into account, the observed effects were all more pronounced for the retailer with the lower reputation. Participants were less likely to return to a two-star retailer after purchasing a standardized system than a customized one. For a five-star retailer, this difference was not significant.

Additionally, customization further seems to have positive effects on patronage choice. Participants were more willing to return to the same retailer for subsequent purchases after the purchase of a customized system.

The Appeal of Customized Offerings is High but Not Universal

The results suggest that customization does indeed have mass appeal, but consumers with less insight into their preferences are less willing to go back to the same retailer for future purchases after purchasing a customized (as opposed to standardized) system. Thus, although many consumers may find customization attractive, it is important for vendors to be strategic and discriminating when they determine which type of offering and accompanying degree of customization to provide to specific customers:

> Prospective buyers who have strong preference insight are likely to want to have the freedom to work with a salesperson to create a customized solution that is best suited for them.

- Alternatively, potential customers with general requirements yet limited insight into their preferences may be good candidates for a standardized offering.
- For less reputable retailers it is even more critical to identify an approach that fits the individual´s buying preferences best.

Retailers should therefore ensure that their salespeople are adept at discerning whether a potential customer possesses insight into his or her preferences. Salespeople can undergo training to help them determine this so that they can proceed accordingly in their pre-sales activities. For example, salespeople may talk to customers and use the information gained from this interaction to propose the expanded offering deemed most appropriate. In instances when customers lack insight into their own preferences, salespeople may instead try to shape buyers' preferences and help them understand that the standardized system is a more viable option. The ability to suggest a standardized offer for this segment should yield trust not only in the salesperson, but also in the retailer, potentially stimulating future cross-sell and/or up-sell opportunities. •

» Participants were more willing to return to the same retailer for subsequent purchases after the purchase of a customized system. «

The article is an adapted short version of:
Bharadwaj, Neeraj, Rebecca Walker Naylor, and Frenkel Ter Hofstede (2009), "Consumer Response to and Choice of Customized versus Standardized Systems", International Journal of Research in Marketing, Vol. 26, 216 – 227.

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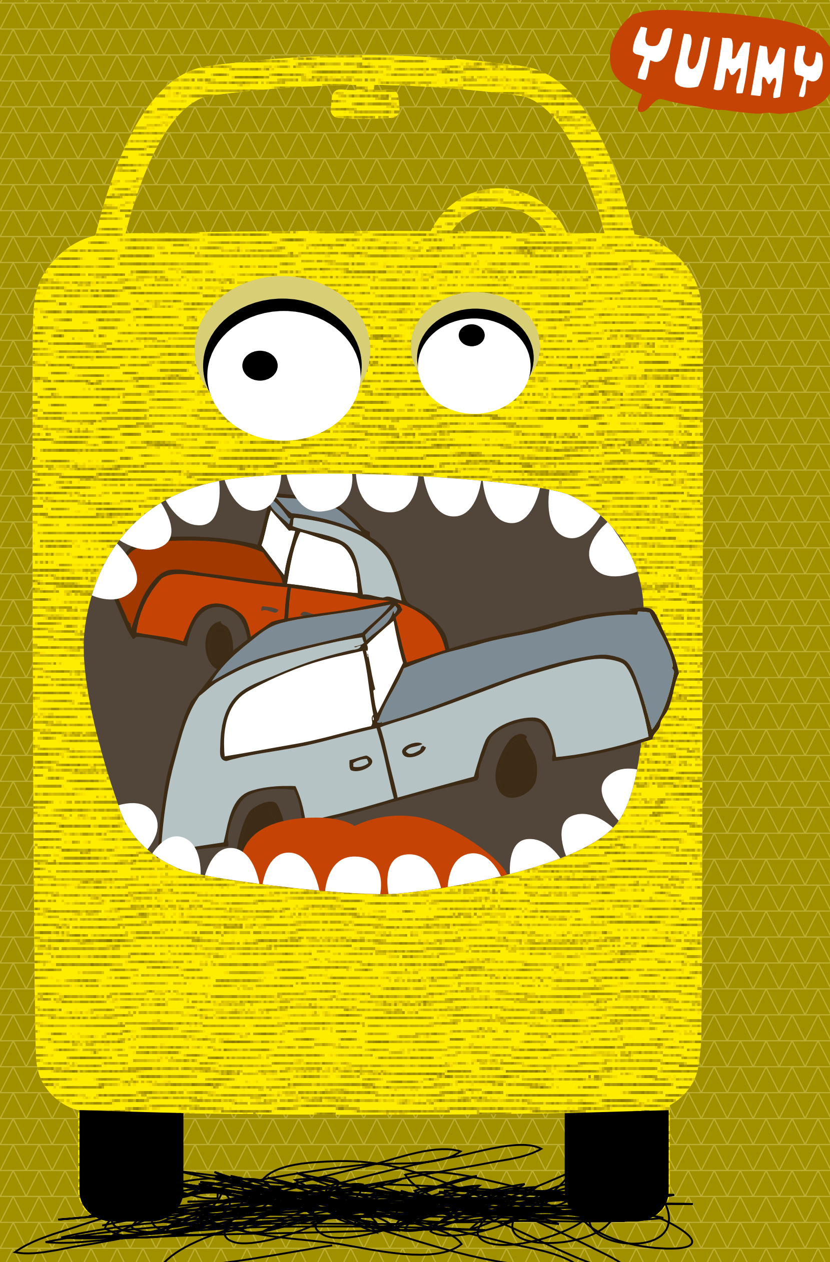
Consumer Behavior, Customization, Standardization, Retailing, Systems Selling

{New Method}



/// When the extent of cannibalization is ignored, the success of the new product will be overestimated.

Sibling Rivalry: ESTIMATING CANNIBALIZATION RATES FOR INNOVATIONS

Harald J. van Heerde, Shuba Srinivasan and Marnik G. Dekimpe

To evaluate the success of a new product, managers need to determine how much of its new demand is due to cannibalizing the company's other products, rather than drawing from competition or generating primary demand. A new model allows managers to estimate cannibalization effects and to calculate the new product's net demand, which may be considerably less than its total demand. The new methodology is applied to the introduction of the Lexus RX 300 using detailed car transaction data. This case is especially interesting since the Lexus RX 300 was the first crossover SUV, implying that its demand could come from both the SUV and the Luxury Sedan categories. As Lexus was active in both categories, there was a double cannibalization potential. Indeed, demand is shown to originate from different sources and to vary over time. The results contain valuable insights for evaluating and managing brand extensions.

New Products' Potential Cannibalization Effects across Categories

"If anyone is going to cannibalize us, I want it to be us, not a competitor", Steve Jobs announced when first introducing the iPhone. In fact, cannibalization may often be a necessary evil when new products are introduced. Though innovation, the process of bringing new products and services to market, is one of the most important strategies in order to grow, the cannibalization of existing products can moderate the growth effect. To evaluate the success of a new product, managers need a method to gauge not only how much new demand it generates, but also to what extent this demand comes at the expense of (cannibalizes) their other products. When the extent of cannibalization is ignored, the success of the new product will be overestimated.

Managers practicing category management are typically aware of the cannibalization phenomenon but are not clear on how to quantify the size of the cannibalization risk. This problem is exacerbated when companies operating in multiple categories introduce radical, pioneering innovations. A radical innovation is difficult to assign to a particular category a priori, and it is unclear

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Harald van Heerde and Marnik Dekimpe are both academic trustees with AiMark.

The article is an adapted version of *Van Heerde, Harald J.; Srinivasan, Shuba; Dekimpe, Marnik G. (2010)*: "Estimating Cannibalization Rates for Pioneering Innovations", Marketing Science, 29, November – December, pp. 1024 – 1039.

{Box 1}

MODEL OVERVIEW

The model applied here observes changes in base sales of incumbent brands and categories. "Base sales" are defined as the expected sales level when all marketing instruments are at their average levels and when all short-run fluctuations have settled. The duration of the data interval is in weeks.

Sales change for focal new model (at time t) =
+ change in demand for other models within same brand and category
+ change in demand for other brands within category
+ change in demand for other models within same brand in other categories
+ change in demand for other brands in other categories
+ primary demand

To accommodate cannibalization and brand switching effects resulting from multiple brands, a time-varying vector error correction (VEC) model, framed as a dynamic linear model (DLM), is developed. It explicitly allows for multivariate dependencies across the different brands and categories through direct cross effects and correlated error structures.

To allow for ***time variation***, the changes in incumbents' base sales caused by the pioneering innovation are captured through time-varying long-run intercepts. There are both ***gradual adjustments*** to the new base sales levels and ***stochastic variations*** around these levels. By adding the base sales of the pioneering brand to the system, it is possible to derive the primary demand effect as the difference between the total impact on that series and the sum of the impacts across all competitor brands.

Bayesian techniques are used to handle ***missing data***. Instead of a necessary list-based deletion with traditional estimation procedures, a single model is applied, that at any moment includes all available brands. All cross-effect parameters are selectively updated for the available product pairs. The estimation method ensures that all available information is used on all variables, even if observations are partially missing.

in which of the categories the cannibalization and brand-switching rates will be strongest. These products add a new dimension to the consumers' decision process, making it less obvious which categories will be affected. Some possibly affected categories might even be overlooked.

For example, Apple's iPhone crossed the boundaries of two categories (portable media players and mobile phones), with a clear cannibalization potential for Apple along with an anticipated primary demand expansion. Similarly, Febreze, manufactured by Procter & Gamble (P & G), may draw from the air freshener category because it eliminates odors, but it also may draw from the laundry detergent category because it works directly on fabric. Given P & G's presence in both categories, there are again two potential sources of cannibalization. Both cannibalization sources are unattractive to the company, as neither implies that the net unit sales increase (although profit may increase, depending on the respective margins). Therefore, it is crucial to measure cannibalization effects ***within*** categories as well as ***between*** categories. In contrast, within and between category ***brand switching*** comes at the expense of other brands and is therefore much more attractive from the introducing company's perspective. Finally, part of a new product's demand can be really new, i.e., representing a ***primary demand*** effect without any direct negative effects in related categories.

» A radical innovation is difficult to assign to a particular category a priori, and it is unclear in which of the categories the cannibalization and brand-switching rates will be strongest. «

» It is crucial to measure cannibalization effects within categories as well as between categories. «

{ Box 2 }

THE DATA

Data on both categories (Luxury SUVs and Luxury Sedans) was provided by a leading data supplier in the automotive industry for California. The dataset contained weekly pre- and post-entry data on the aggregate sales of all brands in California and on the price series of the major brands. Advertising expenditures were obtained from TNS Media Intelligence. The Lexus RX 300 is classified in the Luxury SUV category by the data supplier.

Challenges of Estimating Cannibalization Effects Across Categories

An assessment of the extent of cannibalization is crucial for understanding whether or not the introduction can be considered a success for the company as a whole. Such an assessment has to integrate the different sources of demand for the pioneering innovation: cannibalization within the category, cannibalization between categories, brand switching within the category, brand switching between categories and primary demand. Further, it needs to control for effects caused by marketing activities like advertising or price. At first sight this task does not appear to be difficult, but such an assessment is a tricky problem because a measurement model has to meet important challenges to be useful:

> It needs to accommodate cannibalization and brand switching effects resulting from multiple brands within and among categories, as it is unlikely that just one brand is affected. Cross effects and/or correlated error structures across all relevant brands need to be handled simultaneously.

> When the pioneering innovation has been introduced, not all potential customers will react immediately and changes in demand are unlikely to fully materialize instantaneously. Rather, they are likely to evolve over time. Further, there are many factors such as seasonal fluctuations or special promotions that can cause temporary disturbances in the base sales level. The method should allow for time variation in the effects and isolate sustained changes in base sales, after accounting for these temporary disturbances.

> Finally, markets experience frequent product introductions and withdrawals. Therefore the method should cope with missing data because complete data are typically not available for products introduced or withdrawn from the market during the period of observation. Missing data is particularly relevant when assessing the effects of marketing instruments such as advertising and price on the focal and other brands over time.

Previous models did not meet all the requirements outlined above. Especially the issue of missing data was not solved sufficiently. The new approach has been successfully applied in the automotive industry. The following case study demonstrates how it helped to evaluate the introduction of the Lexus RX 300.

THE LEXUS RX 300 CASE

Introducing the Lexus RX 300 in the USA

In March 1998, the Lexus RX 300 was introduced to the U.S. market. It was widely seen as a pioneering innovation, as it was the first crossover between an SUV and a Sedan. Even though in terms of emissions and fuel economy regulations, the Lexus RX 300 was considered a Sedan, it was explicitly designed to compete in the Luxury SUV category. As such, it was conceivable that the Lexus RX 300 could draw secondary demand from both categories: Luxury SUVs and Luxury Sedans. As Lexus was already active in both categories (with prior shares of 12.3 % and 25.3 %), there was a clear cannibalization potential. While Lexus' management perceived a slight cannibalization threat for the Sedan category, key industry observers expected cannibalization to be strongest in the Luxury SUV category. The RX 300 was expected to create additional primary demand because new car sales, in general, were still growing. Other expected sources for primary demand effects included new (first-time) buyers, sales to existing used-vehicle owners, as well as additional (e.g., second or third) automobiles for some households.

In the Luxury SUV category, four other brands were available in the market at the time of the RX 300's introduction: Other Lexus Luxury SUVs (the 450 and 470), Lincoln (Navigator), Mercedes-Benz (M series), and Infiniti (QX4). The market share, prices and advertising expenditures of the five brands in this category are described in Table 1.

In the Luxury Sedan category, the top five brands were Acura, Infiniti, Lincoln, Lexus and Mercedes-Benz (see Table 1). In combination, these brands account for 62 % of the Luxury Sedan market. The remaining 38 % was treated as one group whose sales evolution was tracked, and for which the cross effects emanating from the five leading brands were captured directly. Across the two categories, a system of 11 equations (5 Luxury SUVs and 6 Luxury Sedans) had to be estimated. As Table 1 shows, not all brands are available for the entire duration of the data, which underscores the importance of the Bayesian estimation to avoid the excessive list-based deletion with traditional estimation procedures.

Figure 1 displays the observed sales data for the Lexus RX 300. Automotive sales are known to exhibit seasonal fluctuations (e.g., Labor Day and Memorial Day weekend). Short-term effects might further be caused by promotion activities (e.g. end-of-quarter promotions). To account for such effects and isolate base sales levels, control dummies were added.

TABLE 1: Luxury Sedans and Luxury SUVs: Market Share, Prices and Weekly Advertising of Brands

Category	*Start of sample period*	*Brand*	*Within-category market share*	*Price*	*Advertising (x 1.000)*
Luxury Sedan	10/13/1996	Acura	17.4 %	US $ 27,300	US $ 30
	10/13/1996	Infiniti	4.4 %	US $ 30,060	US $ 14
	10/13/1996	Lexus	10.2 %	US $ 39,630	US $ 46
	10/13/1996	Lincoln	7.3 %	US $ 37,920	US $ 12
	10/13/1996	Mercedes-Benz	22.6 %	US $ 48,370	US $ 14
		Rest	38.1 %		
		Total	100 %		
Luxury SUV	11/24/1996	Infiniti	16.4 %	US $ 33,470	US $ 34
	10/13/1996	Lexus Other	25.1 %	US $ 60,710	US $ 9
	03/22/1998	Lexus RX 300	10.6 %	US $ 34,420	US $ 147
	07/06/1997	Lincoln	25.1 %	US $ 41,600	US $ 55
	09/21/1997	Mercedes-Benz	22.8 %	US $ 39,240	US $ 30
		Total	100 %		

Sales Effects of the RX 300 introduction on the Sedan and SUV Markets

The sources of demand for the pioneering innovation were derived from changes in sales of the new product itself, and of same-brand and cross-brand varieties in the same and other categories. The introduction of the Lexus RX 300 significantly affected the base sales of five other cars (Table 2). There was within-category brand switching (from Mercedes-Benz and Lincoln Luxury SUVs), between-category brand switching (from Acura and Lincoln Luxury Sedans), and between-category cannibalization (of Lexus Luxury Sedan). Interestingly, there was no cannibalization of other Lexus models in the Luxury SUV category. This is consistent with the fact that the Lexus Other SUV was in a much higher price tier than the Lexus RX 300 (Table 1).

For the five brands that were significantly affected by the introduction of the Lexus RX 300, it took between 18 and 73 weeks for the base sales to settle. For one brand, Infiniti Luxury SUV, base sales did not settle (i.e., its base sales were non-stationary).

The graph in Figure 2 shows the composition of demand for the Lexus RX 300 in terms of secondary demand effects and primary demand effects, and how this changed over time.

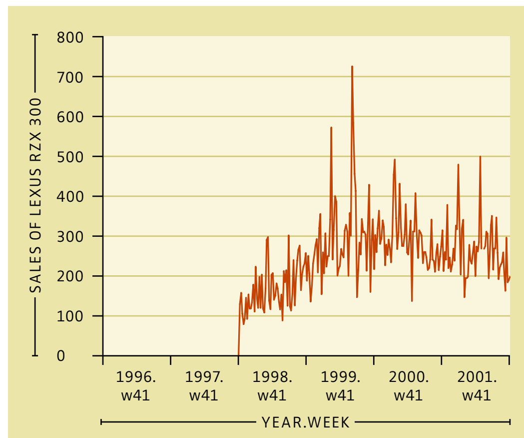

FIGURE 1: Observed Sales of Focal New Product: Lexus RX 300

TABLE 2: Effect of RX 300 Market Introduction on Other Car Models and Duration for the Base Sales Level to Settle

Category	*Brand*	*Significantly affected by Lexus RX 300 introduction?*	*Median 90 % duration interval (weeks)*
Luxury Sedan	Acura	Yes	23
	Infiniti	No	137
	Lexus	Yes	22
	Lincoln	Yes	22
	Mercedes-Benz	No	21
	Rest	No	62
Luxury SUV	Infiniti	No	–
	Lexus (other)	No	21
	Lexus RX 300	Yes	73
	Lincoln	Yes	18
	Mercedes-Benz	Yes	21

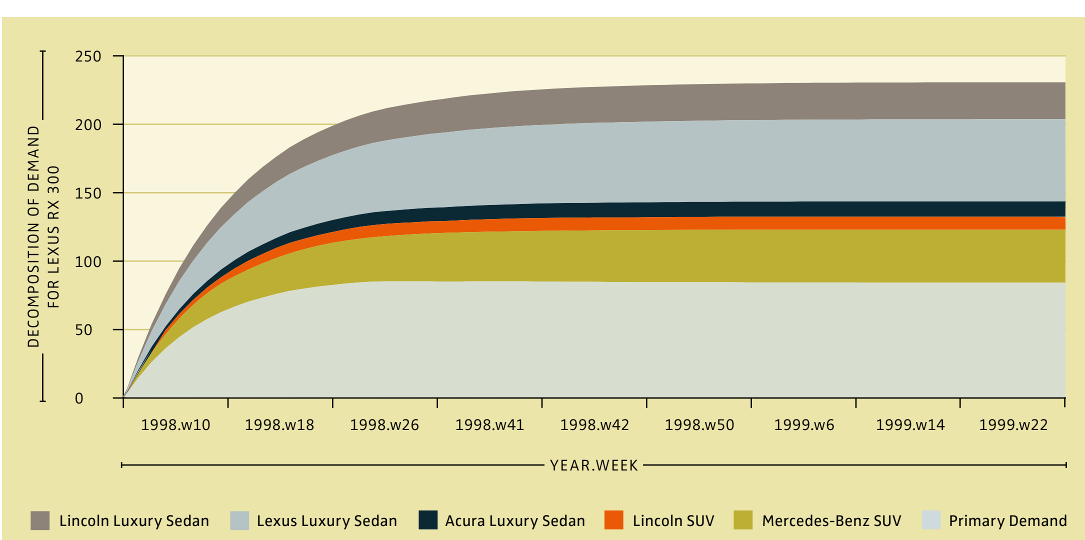

FIGURE 2: Time-Varying Decomposition of the Demand (units/week) for Lexus RX 300

Four weeks after the market introduction, sales in the respective markets showed the following pattern:

$$\Delta ES_{\text{Lexus RX 300, } t = t_0+4} = \underset{(100\,\%)}{114 \text{ units}} =$$

0 units	+	20 units	+	25 units	+	16 units	+	53 units
(0 %)		(18 %)		(22 %)		(14%)		(46 %)
(a) within-category cannibalization		(b) within-category brand switching		(c) between-category cannibalization		(d) between-category brand switching		(e) primary demand effect

While there was no within-category cannibalization, there was a significant cross-category cannibalization effect. That is, base sales of Lexus in the Luxury Sedan category were reduced by 25 weekly units, corresponding to 22 % of the 114 units of demand of the Lexus RX 300. Within-category brand switching effects contributed 18 %, whereas between-category brand switching effects (14 %) were substantive as well. Primary demand effects represented 46 % of the demand for the Lexus RX 300 in these early weeks of its existence.

The effects had settled in new base sales levels around 73 weeks after the introduction and the absolute and relative contribution for each of the effects had changed relative to the snapshot at week t_0+4.

$$\Delta ES_{\text{Lexus RX 300, } t = t_0+73} = \underset{(100\,\%)}{235 \text{ units}} =$$

0 units	+	49 units	+	62 units	+	39 units	+	85 units
(0 %)		(21 %)		(26 %)		(16%)		(36 %)
(a) within-category cannibalization		(b) within-category brand switching		(c) between-category cannibalization		(d) between-category brand switching		(e) primary demand effect

Whereas total demand for the Lexus RX 300 equaled 235 units, net extra demand for Lexus as a whole equaled 173 units, since 62 units (26 %) were lost due to a (between-category) cannibalization effect. The 173 units of weekly sales represented the net success of the Lexus RX 300 introduction. The primary demand effect (36 %) represented the part of the own demand that could not be attributed to sales reductions of other products. To make sure that there were no lost sales in other categories, Non-Luxury SUVs were included in the analyses but did not show any significant effects.

Marketing Mix Effects

In addition to the observed changes in the base sales levels within the related product categories, the model made it possible to estimate the effect of price and advertising by calculating their effect on demand via elasticities. The most significant effect was observed for price changes. A 1 % price increase of the RX 300 reduced demand by 3.54 % (median price elasticity of – 3.54). The price effect on other models was significant: a 1 % price increase of the RX 300 increased demand of another model (within-category and within brand across category) by 1.37 %, on average. The median own advertising elasticity is rather low at 0.07 and the median cross-advertising elasticity of 0 indicates a balance between negative (substitution) effects and positive (primary demand or spill-over) effects.

In general there were more significant effects of advertising and price on the RX 300 itself than on other brands or models. Nevertheless, it is important to control for cross effects. For example, in the focal category (Luxury SUV), there is a significant positive cross effect of Lincoln's price on the sales of the Lexus RX 300 in the long run (cross elasticity = 1.58). The data also showed a slight spill-over effect of advertising for Lincoln's Luxury Sedans on the sales of its SUVs (long-run elasticity = 0.06). The model can be used to calculate price and advertising effects for all the brands and car models and to test the outcome of possible competitive reactions by means of "what-if" scenarios.

Using the Model to Plan Competitive Action

Key players in the market may use the results to reduce their sales losses due to the introduction of the new product. Table 3 shows key figures of two car models that were heavily affected by the introduction of the RX 300, the Acura and the other (high-price) Lexus model in the Luxury Sedan category.

	Acura Luxury Sedan	*Lexus Luxury Sedan*
Base sales before introduction of Lexus RX 300	114	197
Base sales after introduction of Lexus RX 300	103	135
Difference	– 11	– 62
Mean price	US $ 27,300	US $ 39,630
Long-term own price effect	– 0.028	n.s.
Required price change to recoup sales loss	– US $ 399	n.a.
Required new price to recoup sales loss	US $ 26,901	n.a.
Mean advertising level (× US $ 1000)	30	46
Long-term own advertising effect	n.s.	0.471
Required advertising change to recoup sales loss (× US $ 1000)	n.a.	+ 131
Required new advertising level to recoup sales loss (× US $ 1000)	n.a.	177

n.s. = not significant (90 % posterior interval includes 0)
n.a. = not applicable

TABLE 3:
Possible Responses by Competitors to Recoup the Sales Loss as a Result of the RX 300 Introduction

Acura Luxury Sedan base sales dropped from 114 to 103 cars a week. The model allows Acura management to contemplate ways to recoup this loss of 11 cars per week (or 572 cars per year). Since Acura's long-term own price effect is – 0.028 (a significant estimate), it would take a price reduction of US $ 399 on its average price of US $ 27,300 to bring its base sales level to the original level (recoup the 11 cars lost per week). However, this move is not necessarily profitable, as there will be a margin loss on all cars sold. Spending more on advertising is not a solution for this brand, as its long-term own advertising effect is insignificant. Increasing its advertising would therefore have resulted in spoiled arms, because it would not have increased sales.

In the Luxury Sedan category, the sister model Lexus is the most affected brand: base sales become 135 units a week after the introduction of the Lexus RX 300 SUV, down from 197 weekly units. For this brand, reducing price is not an option for recouping the lost 62 cars a week (or 3,224 cars per year), because its long-term price effect is insignificant. Instead, management may consider increasing advertising spending to overcome the sales loss, since its long-term advertising parameter (0.471) is significant. To increase weekly car sales by 62 units, Lexus needs to almost quadruple its weekly advertising for its Luxury Sedan: from US $ 46,320 to US $ 178,000. This translates to US $ 903 of advertising per car (= US $ 178,000/197), which are sold at an average price of US $ 39,630. Again, it depends on various other considerations (costs, margins, positioning) whether such a move will be advisable. The key is that the model allows for an informed strategic response.

» The new approach decomposes the demand for a pioneering innovation into cannibalization, brand switching and primary demand expansion. «

» It is better to cannibalize yourself than allow competitors take the share of the market. «

Conclusion

To sum up, the new method constitutes a useful management tool for assessing the success of pioneering innovations, and this already shortly after introduction (i.e. when only few post-introduction data points are available). The time-varying decomposition allows for the generation of several key insights.

> ***Identification of sources of demand across categories***
In this and other cases in which a radical innovation is difficult to assign to one category a priori, the method can provide real-time information in which category cannibalization and brand switching rates are the strongest. Knowing the source of demand for new products is crucial for the evaluation of new products' ultimate success. The new approach decomposes the demand for a pioneering innovation into cannibalization, brand switching and primary demand expansion. Demand effects can be assessed across multiple categories and within- and across-category cannibalization as well as brand switching can be distinguished.

> ***Estimating and evaluating additional net sales for a brand***
Managers of the pioneering brand can use the proposed approach to evaluate the net sales of the new product, after accounting for within- and across-category cannibalization. The Lexus case results show that 26 % of its sales (or 62 weekly units in the Californian sample) were drawn from Lexus' Luxury Sedan sales. While this number may look quite large, this "sibling rivalry" was actually a small price for Lexus to pay. Indeed, management felt that without the RX 300 introduction, 15 % of their Lexus Sedan owners would have defected anyway to the SUV category. This loss corresponds to approximately 30 units (= 0.15 * 197). As such, the "net" cannibalization becomes much smaller (i.e., 62 – 30 = 32 units), especially in light of the 88 units of brand switching, and the 85 units of primary demand expansion. So, offering a model of their own actually prevented Lexus customers defecting to another brand. This is in line with Steve Jobs' iPhone considerations cited at the beginning: it is better to cannibalize yourself than allow competitors take the share of the market.

> ***Observing sustained effects***
In contrast to short-term effect models used in promotion research, the new model considers the time-varying long-term decomposition of the demand for the new product by finding a solution for the frequently encountered problem of missing when a longer time span is observed. It looks beyond instantaneous effects and rather considers how the effects of marketing investments persist over time.

> ***Exploring competitive options***
The results are generated while controlling for the own- and cross-marketing mix effects. Managers of competing brands may therefore use the method to assess the extent to which their products (across different categories) are affected, and how they may recoup potential losses. Moreover, management may also learn about the ability of new products to generate new (primary) demand.

> ***Predicting the cannibalization effect***

The model updates the size of the cannibalization effect on a week-by-week basis. Every week, it gives a one-week forecast of the effect based on the most up-to-date information. However, the model in its current form is not suited for predicting the cannibalization effect prior to the introduction of the new product. The issue is that the extent of cannibalization will depend to a large extent on the similarity to the extant products within the company's own line and competitor products, on which we lack data. If similarity data were available (based on expert judgments, for instance), it would be feasible to augment the model in order to predict the anticipated cannibalization effect. •

FURTHER READING

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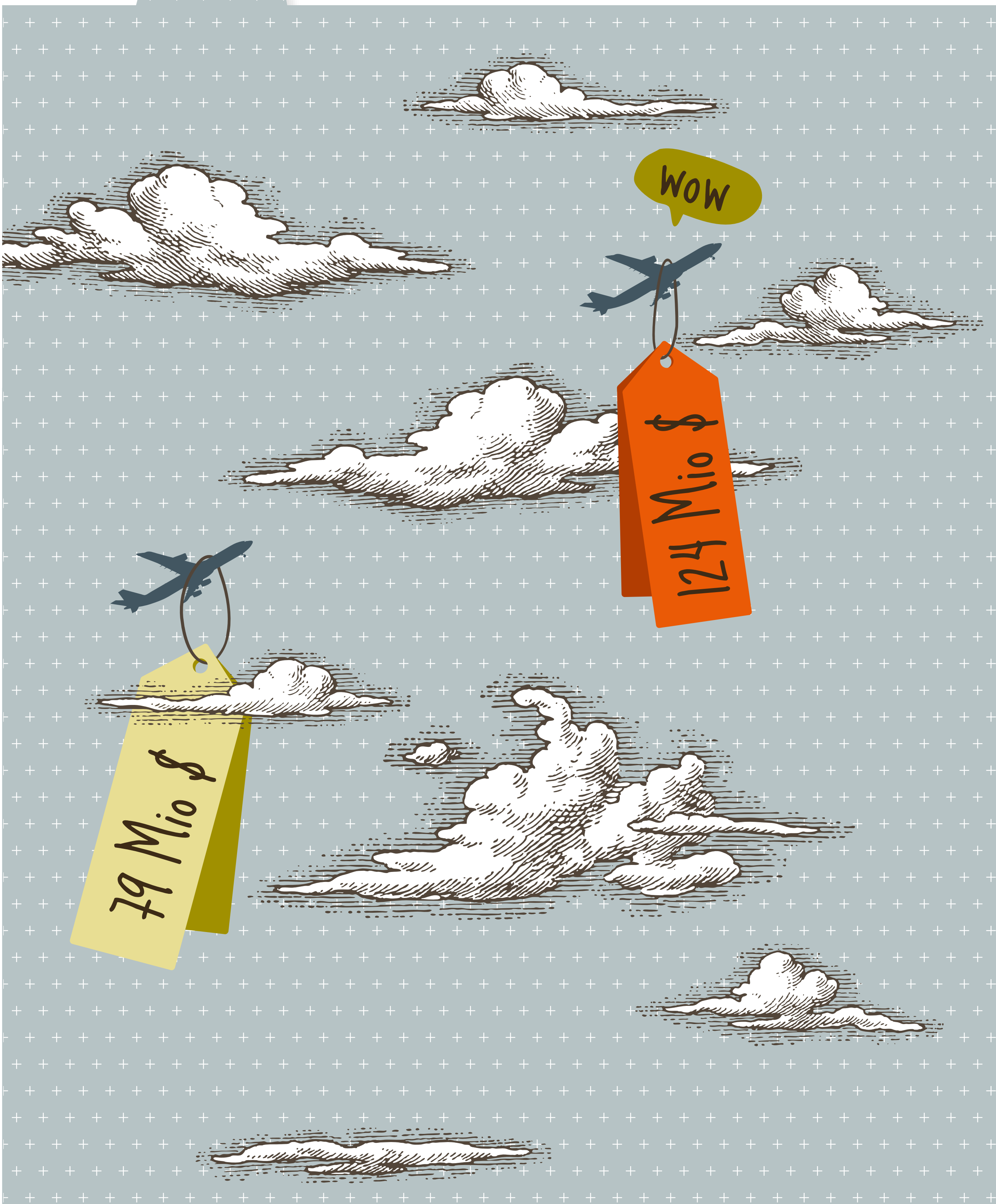
KEYWORDS:

Innovation Management, Product Introduction, Cannibalization, Category Management, Line Extension, Response Models, Time Series Analysis, Dynamic Linear Models

{ Case Study }



/// A model helps to establish marketing actions that migrate customer beliefs in a cost-effective way.

Jetstar Airways

HOW MODELING GUIDED THE BRAND MIGRATION STRATEGY OF A LOW-COST CARRIER

John Roberts, Peter Danaher, Ken Roberts and Alan Simpson

This article describes the application of a dynamic choice model of consumer preferences. It supported Jetstar, a subsidiary of Australia's leading airline, QANTAS, to effectively and profitably compete in the low-cost carrier marketplace. The evolution of the Jetstar strategy is traced from its initial position through to its efforts to attain price competitiveness and service parity. The model helped service design and pricing initiatives to shift the perceived performance of Jetstar relative to its competitors. It further indicated how the airline could move market preferences towards areas in which it had competitive advantage. The Jetstar market share went from 14.0 % to 18.1 % during the first five quarterly waves of the research, while profits went from US $ 79 million 2006 / 07, before the study was commissioned, to US $ 124 million in 2008 / 09. Today, Jetstar remains the only successful low-cost offshoot of a full service airline in terms of shareholder returns.

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A video session is available at: http://www.msi.org/video/PracticePrize2010/jetstar.cfm

Jetstar – Understanding Potential for Improvement Prior to Take off

Jetstar was established in May 2004 as a budget airline by QANTAS, Australia's foremost domestic and international carrier. Its purpose is to cover the low-cost segment of the market, which began in around the year 2000 with the launch of a competitor, Virgin Blue. Until the time Jetstar began operations, Virgin Blue had been successfully eroding the QANTAS market share by attacking it from below as a low-cost provider. In response, Jetstar was also designed to be a no-frills carrier, predominantly targeted at the leisure market.

Jetstar initially achieved some success in this role, reaching a market share of 14 % by the beginning of 2008. However, market research results suggested that Jetstar was not generally perceived as competitive in value to Virgin Blue. By the end of 2007, perceptions about Jetstar's lack of price competitiveness were inconsistent with its actual fares in the market. Moreover, service quality across the board was not perceived to be as strong as that of Virgin Blue. Surprisingly, Jetstar was perceived as more expensive than Virgin Blue, even though the actual airfares were nearly identical. This limited the effectiveness of Jetstar as a fighter brand,

{ Box 1 }

MODEL ESTIMATION

To capture differences in consumer tastes, as well as variations in their perceptions, a hierarchical Bayes model was developed. It consisted of two inter-related layers.

The first or top layer was a multinomial logit model for consumer choice of the probability that respondents chose a specific airline. At this top layer, the variables are respondent ratings for each airline on the "global attributes" of Performance, Reputation and Price. Therefore, the β_{it} are three dimensional vectors, showing the importance weight that individual i places on these attributes.

In the second layer, the global attributes are functions of a set of relevant micro process subattributes. For instance, the subattributes for Performance include "good route structure", "easy check-in" and "easy to reach airport." The complete list of subattributes is given in Figure 1, with 12, 10 and 7 subattributes for performance, reputation and price respectively. The Υ parameters are importance weightings placed on each subattribute corresponding to individual global attributes and subattributes.

Initially, the Υ were allowed to vary by airline, but the empirical results did not show significant variation across airlines.

The model captures unobserved heterogeneity in respondent preferences through the distributions around β_i and Υ.

Full technical details are presented in the web appendix of the original article.

» To improve the value of quality and price, companies need to know how to improve their performance at an actionable micro process level. «

and retarded its financial results. To avoid the financial stress (and ultimate demise) suffered by low-cost brands of other major carriers, such as British Airways' "Go", United's TED, and Delta's "Song", Jetstar saw a need to improve by changing consumer perceptions, through focused pricing and service initiatives, together with a compelling communications strategy.

Finding Out What to Do Best

To improve its position, Jetstar needed new pricing formats, adaptive service design changes, and effective communications. To design such services, Jetstar management required information on the drivers of evaluation and choice amongst the target segment. They wanted to learn how Jetstar stood relative to its competitors, how drivers and perceptions varied across the population, and the relation of service design features to perceptual drivers. The Jetstar requirements were to understand the market on a continuous basis in order to firstly assess customer needs, then develop a strategy to address these needs, followed by subsequent monitoring to judge the degree to which the strategy had been successful. These strategies were expected to be adapted and refined over time in response to changes in perceptions and needs. Commonly used comparative statics do not allow a detailed study of the interaction of marketing activity and market analysis over time, therefore a new dynamic modeling approach was developed to meet a number of requirements in this situation:

(a) simultaneously accommodate global value attributes and micro process attributes that underlie the value attributes,

(b) link up consumer preferences, service performance improvements and share/profit,

(c) capture heterogeneity across the population, and

(d) represent how beliefs and preferences change over time in response to service and pricing initiatives.

Simultaneously handling these four requirements is rather challenging. Previously, two tiers of regression model, one at the global level, followed by a series of models at the micro levels or a LISREL approach to modeling multidi-

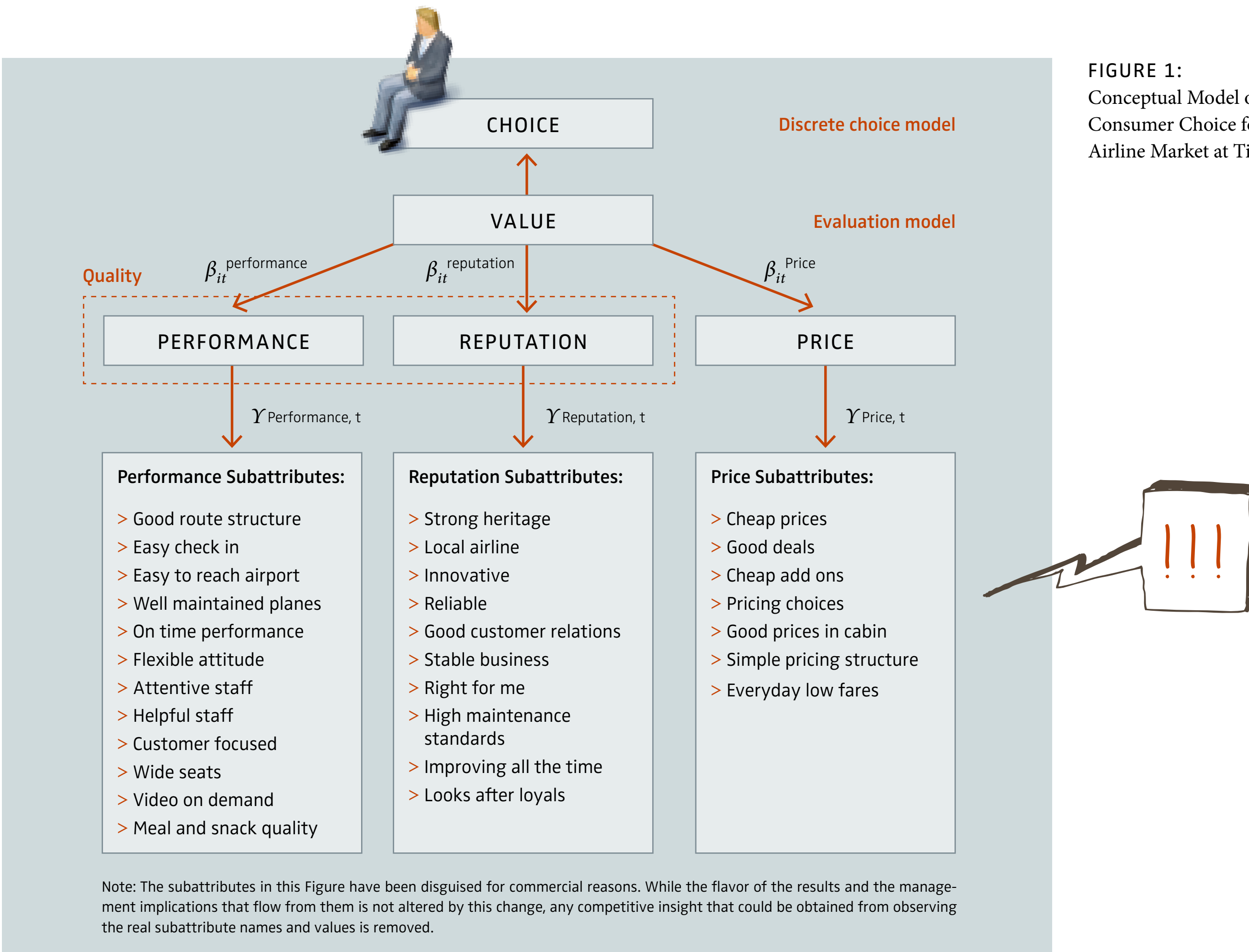


FIGURE 1:
Conceptual Model of Consumer Choice for Airline Market at Time t

mensional, hierarchical constructs were common for comparable tasks. In this study, on the other hand a Bayesian hierarchical model conceptually integrates macro level market share evolution with micro level attribute evaluation for service design into a single model and also captures individual-level heterogeneity, an important factor which has often been ignored in service management.

Applying a New Dynamic Choice Modeling Approach

In service research, one of the key management metrics is customer perceived value which forms the basis for consumer choice among alternative suppliers. It is determined by price and quality which in turn are linked to process attributes. For Jetstar, initial qualitative research found that consumers consider operational performance and reputation to be the key components of airline quality. They were therefore included in the model. To improve the value of quality and price, companies need to know how to improve their performance at an actionable micro process level. Consequently, such micro level attributes need to be included in the analysis.

Figure 1 depicts the model of global and micro process attributes relevant to this airline environment and the links between them. As mentioned earlier, Jetstar management expected customer perceptions and needs to change over time in response to their pricing, communications and service process activity. These dynamics are illustrated in Figure 1 for the model parameters that are re-estimated for each survey wave (e.g., $\beta_{i,t}^{Price}$).

{ *Box 2* }

SAMPLE AND QUESTIONNAIRE DESIGN

Domestic leisure travelers departing from Sydney, Melbourne and Brisbane in Australia form the target market for the 20 minute online survey. Respondents (between 1,600 and 2,000 per wave) were selected so as to be demographically representative of residents in New South Wales, Victoria and Queensland. The results of the first five quarterly survey waves, with the first quarter being January to March 2008, are reported in the study.

Of the five airlines operating in this market, Jetstar, Qantas, Rex (Regional Express), Tiger Airways (owned by Singapore Airlines) and Virgin Blue, respondents were queried about just two to avoid fatigue. These airlines represented a random selection from travelers that have flown in the past year but also allowed respondents to rate airlines that they had not flown, but felt they had sufficient familiarity to evaluate.

Management Actions Based on Results

Activities and their consequent results during the 15 months within the time frame of the 5 waves of the survey are summarized in Table 1.

Estimating the Initial Position

Wave 1 served as a baseline measure of how far behind Jetstar was on price and quality (a combination of perceived operational performance and perceived reputation) perceptions. Figure 2 shows that at the beginning of the new strategic initiative, Jetstar had a 6.9% perceived price disadvantage to Virgin Blue (7.05 and 7.57 respectively on the 10 point scale). While this may not sound a lot, it is quite important at the price-conscious end of the market.

Figure 3 shows that the overall quality disadvantage for Jetstar is even greater, at 22.3 % (6.02 versus 7.75). This invites a naïve interpretation, namely, that Jetstar should focus on quality, since it lags behind Virgin by a much greater degree on quality than it does on price. However, the model reveals that price is much more important to customers. Additionally, since price is a search attribute and quality an experience one, Jetstar management considered the response function of price to be more sensitive to management activity in the short term than of quality. Table 2 shows that price is the most important global attribute, with an estimated

FIGURE 2:
Evolution of Price Perceptions for all Airlines

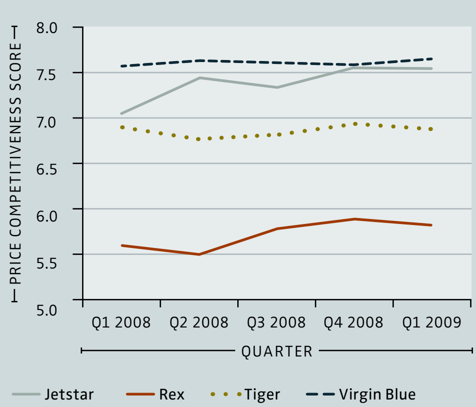


FIGURE 3:
Evolution of Quality Perceptions for all Airlines

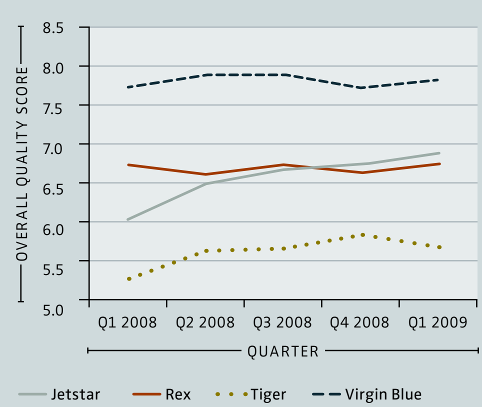


TABLE 1:
Summary of the Interactive Adaptive Modeling and Management Approach

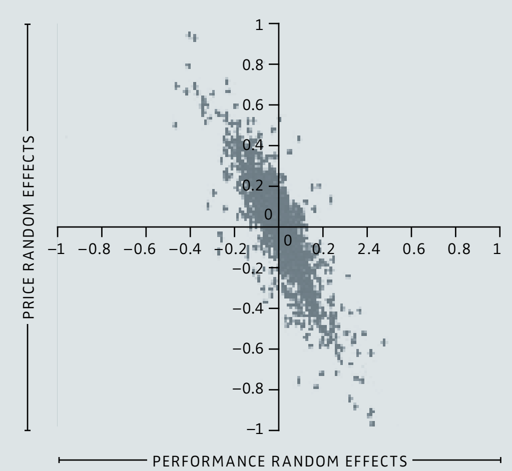
Strategy Stage (Wave and Resultant Actions)	*Research and Analysis*	*Key Findings*	*Resultant Actions*	*Market Outcomes*
> 1 Establish baseline (January 2008) and initial strategy	> Focus groups > Fit baseline models on wave 1	> Performance, reputation & price are the key attributes > Price has the highest relative importance > Perceptual gaps quantified	> Price promotions > Good service coms	> Near to price parity > Quality gap narrowed from 22 % to 18 % > Market share goes from 14.0 % to 14.6 %
> 2 Analyze results of stage 1 (April 2008) and move to focused differentiation	> Refit evaluation and choice models on wave 2	> Price is still the most important attribute, but performance rises in relative importance	> Focus of key, cost-effective attribute drivers (training and coms)	> Quality gap further narrowed to 15 % > Market share goes from 14.6 % to 15.2 %
> 3 Test results of stage 2 (July 2008) and move to consolidation	> Refit evaluation and choice models on wave 3	> Most important micro process subattributes are on-time performance, flexible attitude and attentive staff	> Continuation and reinforcement of service quality positioning > Use industry awards as points of proof	> Price perceptions held > Quality position narrowed to 12 % > Market share goes from 15.2 % to 18.1 %
> Monitor gains held and dynamics (October 2008 and January 2009)	> Refit evaluation and choice models on waves 4 and 5	> Most important micro process subattributes are flexible attitude, attentive staff and helpful staff > Dynamic model suggests strong position on price, momentum on reputation and more work on performance		

TABLE 2:
Parameter Estimates for the Choice model

Importance Weights for the Global Attributes	*Wave 1*		*Wave 2*		*Wave 3*		*Wave 4*		*Wave 5*	
	β	*s.e. (β)*	*β*	*s.e. (β)*	*β*	*s.e. (β)*	*β*	*s.e. (β)*	*β*	*s.e. (β)*
Performance	3.392	0.042	2.172	0.061	2.204	0.070	1.686	0.043	2.752	0.056
Reputation	2.973	0.044	2.283	0.042	2.229	0.061	2.264	0.062	2.159	0.060
Price competitiveness	4.464	0.059	3.287	0.053	3.009	0.054	2.914	0.043	3.088	0.050
number	1813		1977		1617		1724		1685	

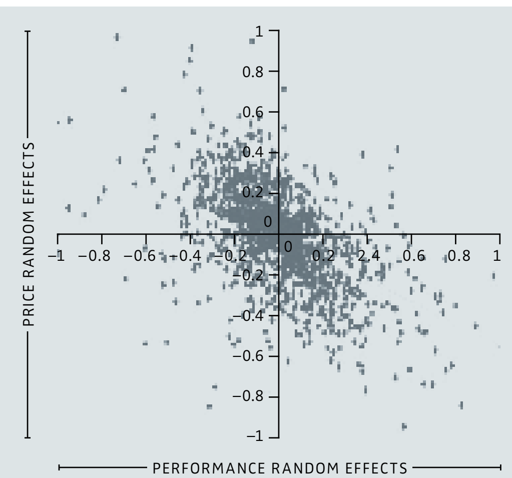
β = importance weight s.e. = standard error

FIGURE 4a:
Price Random Effects vs. Performance Random Effects – Wave 1



Price = – 1.85*Perf. + 4E-07 R^2 = 0.74

FIGURE 4b:
Price Random Effects vs. Performance Random Effects – Wave 5



Price = – 0.56*Perf. – 4E-07 R^2 = 0.32

coefficient of 4.464. This is followed by operational performance (3.392), and then reputation (2.973). The model further expressed these global attributes in terms of the constituent subattributes that drive them, showing management where the most traction can be gained with improved pricing and service design. Subattributes with the largest estimated coefficients were identified in wave 1 (and the subsequent waves) and these primary drivers of competitiveness could be addressed with corresponding actions.

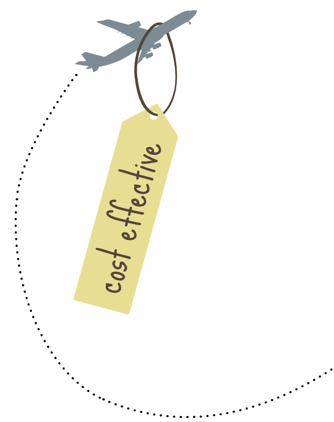
Analyzing Individual Differences in Consumer Preferences

Furthermore, the model makes it possible to understand individual-level variation in the importance weights for the key global attributes of operational performance and price. Such an analysis is not possible with a simple regression model. Figure 4a plots the individual-level random effects for the importance weights for performance and price in wave 1. This analysis underlines the importance of acting on price. Two things are apparent. First, there is greater variation in the β_i^{Price} random effects, which range between – 1 and 1, while β_i^{Pref} ranges between – 0.5 and 0.5. This indicates that the price attribute generates more extreme importance weights than performance. Second, the relationship between β_i^{Perf} and β_i^{Price} is linear and negative, with a regression line fitted to these observations showing that price random effects are about twice those of performance. Indeed, those that place high importance on price place low importance on performance and vice versa. That is, for price sensitive customers, it is harder to compensate for poor perceived prices with improved performance, because of their lower quality coefficients. Although a price/quality trade-off is generally expected, Figure 4a depicts the strength of this trade-off, which very much favors price in this case.

Activities and Results Step 1: From "Everyday Low Prices" to a "Guaranteed Lowest Price"

At the time of wave 1 (January 2008), Jetstar was almost exclusively using a "low price" message in its communications, but the points of proof to make this credible were not evident to consumers. Based on these results the objective of management was to gain at least a perception of price parity and therefore it changed the theme of Jetstar communications and advertising to focus on a price guarantee. In its key messages, Jetstar promised that it would offer a 10 % price reward to any customer that found "a lower fare online on the same route for a comparable time".

As a result of the initiatives, the price perception of Jetstar relative to Virgin Blue improved dramatically (see Figure 2). From a 6.9 % deficit in March 2008, price perceptions of Jetstar changed markedly to a 2.5 % deficit in only three months (7.42 versus 7.62). In wave 4, Jetstar maintained its price perceptions, while Virgin Blue



lost ground. By March 2009 (wave 5 of the quarterly tracking), Jetstar was within 1.3 % of price parity overall and well ahead of Virgin on the key pricing subattributes it was targeting.

Activities and Results Step 2:
A Focus on Cost-Effective Service Quality

With the achievement of perceived price parity for a large percentage of the population, Jetstar addressed its perceived deficit in quality. Jetstar tackled that gap by focusing on a few specific subattributes which had high importance and offered good opportunity on which to achieve a point of difference over Virgin Blue at low cost. Interestingly, one criterion for attribute perceptions was that improvements should not lead to undue cannibalization of the flagship "QANTAS" brand name amongst its target market.

Service quality improvements also had a substantial effect on consumer perceptions. The overall quality gap was narrowed from 22.3 % to 17.9% (6.5 versus 7.9 in Figure 3 in wave 1) and continued to improve. By wave 3 in Q3 2008, on average some 31 % of the perceived service quality disadvantage for Jetstar was overcome (see Figure 3 where the difference declines from 22.3 % to 15.5 %), with particularly strong results on Jetstar's key target attributes. By the end of the period covered by this study, the average quality gap had narrowed by 45 % (see Figure 3, where a 22.3 % deficit in wave 1 had been reduced to a 12.2 % deficit in wave 5).

» The simultaneous handling of micro and macro level attributes provides a strong nexus between specific management actions and market outcomes. «

Activities and Results Step 3:
Changed Preferences for the Whole Market

Given the success evident in phases 1 and 2, the strategy of maintaining price comparability and moving to focused differentiation, Jetstar saw no need to dramatically alter its marketing activity. Because of lags in consumer belief and updating importance weight, Jetstar could still gain further advantage by continuing its current message and service improvement, since Virgin had presented no effective response.

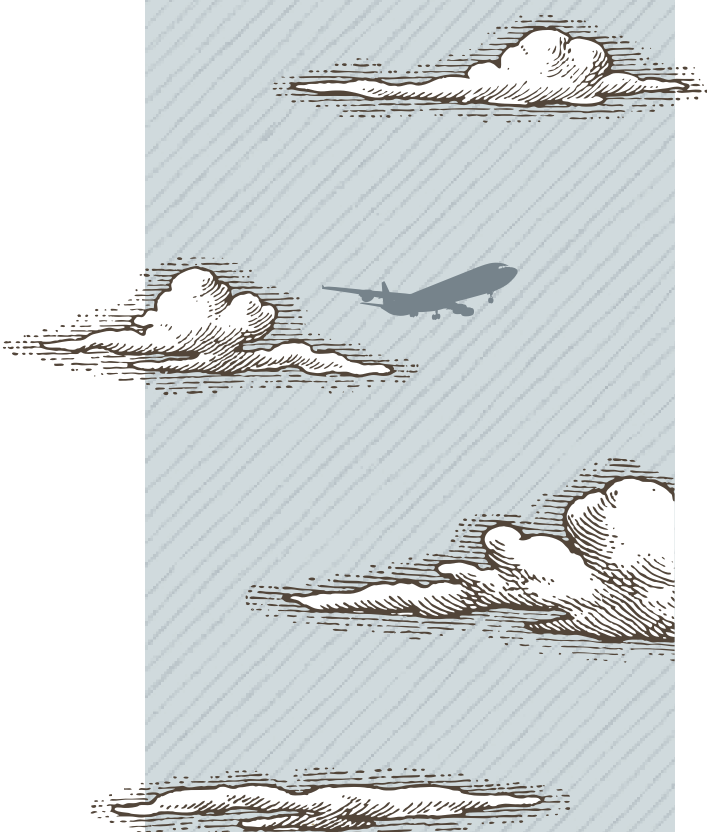
Given that Jetstar, and also Virgin, evolved from a low price strategy to one of good quality at a low price, it is interesting to see if this trend in price/quality trade-off is reflected in the consumer heterogeneity of tastes. Figure 4b plots the price and performance random effects in wave 5, thereby updating the wave 1 situation in Figure 4a. Here, the dispersion in performance importance has changed to a much more equal footing to those of price. The slope of the regression line has declined substantially from – 1.85 in wave 1 to – 0.56 in wave 5. This is evidence that the market has changed in terms of its preferences even over this 15 month period. No doubt the heavy Jetstar advertising combined with its tangible service quality improvements over this time period contributed to these revised customer preferences.

Assessing the Benefits of the Applied Model

The hierarchical model with parameters estimated at the individual level allowed a study not only of how service design and pricing initiatives shift the perceived performance of Jetstar relative to its competitors, but also how the airline could move market preferences towards areas in which it has competitive advantage. In particular, the following advantages over a traditional "sequence of models approach" were achieved:

> ***Adaptive management of marketing activities towards the long term vision***
A marketing intelligence system that reflects the interaction between activities and results is of high value, especially in a dynamic and reactive environment like the airline business. The simultaneous handling of micro and macro level attributes provides a strong nexus between specific management actions and market outcomes, mediated by target market preferences and beliefs. As opposed to comparative

» Jetstar has improved its perceptual position while increasing its profit. «



statistics, this model helps to establish marketing actions that migrate customer beliefs in a cost-effective way. It helps to provide feedback between each stage on a series of actions over time and enables the adaptive management of marketing activities towards the long-term vision on an evolutionary basis.

Further, consumer differences and dynamics, both of beliefs and tastes, can be accounted for. Being able to monitor individual differences in consumer preferences and how they change helps to develop targeted marketing activities. It supported changing the organization from being efficient, safe, responsible and consistent, to one with a stronger customer service orientation. A major cultural transformation was undertaken, largely due to a service improvement program, supported by the CEO, who visited every Jetstar port to emphasize the expected behaviors. To cement the behavioral change, Jetstar redefined its key performance indicators (KPIs), with 40 % of executives' bonuses linked to the market research levels for the quality drivers chosen by Jetstar.

> ***Improved forecasting performance***
Jetstar was also able to greatly improve on its forecasting performance, using the combination of consumer-level and market-level techniques. The correlation between the model's share predictions for Jetstar and the actual share realized is very high, at 0.92. In an industry with an enormous cost of excess capacity, in terms of planes, crew, and ancillary facilities, the resultant better forecasts also had huge direct cost savings.

Flying High Based on Model Data

The market share for Jetstar has increased by 29 % (4.1 share points, unweighted by availability) in the first twelve months of this research/strategy initiative. Virgin has maintained its strong position on the price/quality combination, being "value for money". By contrast, Jetstar was initially in a poor position, with perceived mediocre price competiveness and low quality. However, by wave 5, Jetstar was in a position almost comparable to Virgin in the eyes of a large proportion of the target market. Moreover, Jetstar has improved its perceptual position while increasing its profit, while Virgin Blue has remained relatively stationary, but accrued major losses. The Jetstar revenue and profit contribution increased dramatically during the period of the study and remained on a strong upward trajectory, further on. By focusing in areas directed by the research and designing a migration path to its vision, Jetstar has reached the stage where in the first half of calendar year 2009, it provided over 100 % of the QANTAS group's profits. That is, without the contribution of Jetstar, the QANTAS group would have recorded a significant financial loss. It ascribes US $ 35 million of its improved profit performance to initiatives associated with the study.

The potential benefits have been realized by the commitment of top management to its results and the engagement of staff to the implementation of its recommendations through their new KPIs which were defined based on the data. •

FURTHER READING

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KEYWORDS:

Positioning, Price Competition, Segmentation, Bayesian Statistics, Airline Marketing

{Alexander Linder}

ABOUT SWAROVSKI

The Swarovski company was founded in 1895 in Wattens, Tyrol in Austria, by Daniel Swarovski. For more than a century, the company has perfected precision cutting technology and the creation of crystal objects. Swarovski is still family owned and constantly expands its business through internal growth and acquisitions.

In 1995, Swarovski opened the Swarovski Crystal Worlds in Wattens to celebrate its 100th anniversary. More than ten million people from all over the world have experienced the magic of crystal with all their senses in its Chambers of Wonder, making the crystalline attraction one of the top tourist destinations in the area.

In 2011, more than 26,000 employees generated a turnover of € 2.22 billion. Swarovski's distribution network reaches 42 countries worldwide and production locations can be found in eight countries across Europe, Asia, and North America. The crystal products are sold in over 1,200 own-operated and 1,000 partner-operated Swarovski boutiques.

THE INTERVIEWER

This interview was conducted in June 2012 by Christine Kittinger-Rosanelli, Operating Editor of GfK MIR.

ABOUT ALEXANDER LINDER

Alexander Linder has held the position of Director of Corporate Consumer and Market Insights at Swarovski since 2005. His team is responsible for all aspects related to consumer and market insights within the Swarovski Crystal Business.

He graduated from the University of St. Gallen (HSG), Switzerland, in 1999, where he studied business administration, focusing on service management and service marketing. In 2004, he earned his PhD in Web Log Mining at the University of Zurich, Switzerland.

In 1999, Alexander started his career at Swarovski as a marketing assistant. In 2001, he took over responsibility as a business warehouse analyst, and in 2002 moved into the role of eBusiness Analyst, where he built up various online reporting tools.

Creating Crystal Experiences

MIR TALKS TO ALEXANDER LINDER, DIRECTOR CORPORATE CONSUMER AND MARKET INSIGHTS (CCMI), DANIEL SWAROVSKI CORPORATION AG

Interview by Christine Kittinger-Rosanelli

This issue's interview leads us into the radiant world of crystals and glamour. For more than a century, Swarovski has been generating radiance through precision cutting technology and the virtuous handling of light. The company's richness of expression is rooted in the cultural heritage of Central Europe and its flair for forging links between the arts, science, and business. Throughout the world today, the name Swarovski stands for craftsmanship, meticulousness, quality, and creativity. Alexander Linder, Director of Corporate Consumer and Market Insights, shares with us how the Swarovski company ''adds sparkle to people's everyday lives'', a promise Swarovski aims to deliver to its consumers.

MIR: *Traditionally, Swarovski has been known for its crystal objects like the swan and other little collectables, but it has now expanded its business into several new fields. As a starting point, could you give us a brief overview of the sparkling Swarovski universe?*

ALEXANDER LINDER: Well, first we have the Consumer Goods Business (CGB), which deals with jewelry and home interior items, with jewelry contributing the greater proportion of sales. Then we have what we call Swarovski Professional. As a creative partner, it sells crystal components to famous designers, retailers, manufacturers, wholesalers, and brand owners in the fashion, jewelry, accessories, and interiors industries all over the world. Besides this, we are also operating six concept stores worldwide called SWAROVSKI CRYSTALLIZED™, which offer exquisite jewelry and accessories collections created by renowned international designers, made with SWAROVSKI ELEMENTS. Thanks to its expertise on trends in the spheres of fashion and jewelry, SWAROVSKI CRYSTALLIZED™ is ideally placed to curate and showcase sparkling designer collections alongside its own customizable jewelry lines and an extensive range of loose SWAROVSKI ELEMENTS, loose crystals, in a super-chic Library of Light. Then we have our Lighting Business (LB), which offers lighting solutions to B2B customers such as architects, interior and lighting designers, hotels, bars, spas, and lounges. There are other business units but these are the most important.

MIR: *Fashion, jewelry, and design are very dynamic businesses. Which projects has Swarovski completed recently in this fast-moving environment?*

ALEXANDER LINDER: As an example, in 2011 Swarovski launched a sparkling and bright collection of sunglasses, as well as a diverse range of jewelry and accessories for men. Swarovski also presented its first beauty line ''Aura by Swarovski'', which expands the existing product range into a completely new area. And this year, Swarovski launched its first watch collection for men at the BASELWORLD watch and jewelry fair. In 2012, Swarovski Entertainment will even co-produce its first feature film, a new adaptation of Shakespeare's classic love story ''Romeo and Juliet''. On top of that, Swarovski continues to pursue its development into a premium brand by implementing its new store concept called ''Crystal Forest'', a new way in which to showcase its own branded collections of crystal jewelry, fashion accessories, and home décor objects.

MIR: *What is the Swarovski business model? How are you able to charge premium prices in markets that are swamped with cheap imitations of crystal?*

ALEXANDER LINDER: Swarovski wants to add sparkle to people's everyday lives, making the brand our most important asset to deliver on this promise. It stands for high-quality products made in Austria, for heritage, craftsmanship, and precision. In the B2B context, Swarovski does not only sell components, but also offers a wide variety of application support, a service that is very much appreciated by our customers.

MIR: *Could you explain what kind of application support you provide for your B2B clients?*

ALEXANDER LINDER: Yes, of course. Especially in Swarovski Professional, where we sell crystal elements to various industries such as fashion or jewelry, we help our clients to apply the elements properly to different materials. For instance, if we have a jeans manufacturer and sell them Hot Fix elements, we tell them how to best apply them to the jeans, and inform them how the garments should be washed. We give them as much support as possible to make sure that the quality risk is minimized when they sell the product on to their clients. In addition, Swarovski's trend department provides trend consultancy and expertise to customers around the world.

MIR: *In a fast-moving and dynamic environment, it is particularly challenging to gain insights and predict trends, then to translate them into product ideas. How do you collect consumer insights in the diverse markets?*

ALEXANDER LINDER: There isn't a set method that we follow to collect consumer insights at Swarovski. We treat every project as an individual case and elaborate carefully on the best way in which to get the maximum return for our clients. To ensure this, CCMI follows a very structured approach. We start with a template that we call an insights request form. In collaboration with our clients, the different business units, or communications departments, we work on this template to make sure that we properly outline the underlying insights topic. We usually follow a hypotheses-driven insights approach and make sure all answers respond to the hypotheses in the presentation of the findings. Furthermore, it is important to us that our clients understand the applied insights methodology, be it qualitative or quantitative.

MIR: *Do you work with external partners to carry out the individual research projects?*

ALEXANDER LINDER: We mainly work with partners from the market research industry. My team doesn't have the capacity to carry out most projects in-house, so we have a sound pool of professionals and we have been working with many of them for quite a long time. We select the most appropriate vendor to help us solve the issue according to the challenges posed by our clients.

MIR: *Are there any recent projects that you could use to demonstrate how you collect and apply insights to market your crystal products successfully?*

ALEXANDER LINDER: A recent project that we worked on for more than a year was our global consumer segmentation study. At the start, Swarovski only had an internal picture of what different consumer segments might look like, but it was time to consider the external perspective. CCMI followed a need state-based approach and conducted in-depth interviews with female jewelry buyers all over the world. Subsequently, a quantitative online study was conducted to validate the qualitative insights and make them more stable. Throughout the whole process, various stakeholders within the jewelry marketing team were constantly involved by means of workshops, giving input for the questionnaires, selection of appropriate jewelry pictures, and identification of easily understandable names for the segments. The Consumer Goods Business is now much more aware that there are indeed various jewelry consumer types and can clearly see their different wants and needs.

MIR: *Swarovski is a global player. How do you handle regional differences in data collection, insight generation, and implementation of marketing strategies?*

ALEXANDER LINDER: There is no one global approach. "Think global – act local" is an essential rule for Swarovski. We have to take into consideration regional differences for data collection and the implementation of subsequent strategies. For example, in some regions such as India, Latin America and China, which are without doubt very important for Swarovski, online questionnaires are not ideal. Based on our experience, you do not reach participants in rural areas. In India you would be more or less limited to the Mumbai area, and to Shanghai and Beijing in China. Another development that we have observed in these countries is that you mainly get respondents who only participate to earn money, which we want to avoid. We will therefore switch to direct, face-to-face or written questionnaires in developing countries.

MIR: *And what about applying the results?*

ALEXANDER LINDER: Swarovski's brand tracking tool is actually a good example to show that we have to act locally. Brand awareness, brand image, and brand positioning are not the same around the world. So Swarovski has to set action points individually on a local level to move the brand in the desired direction. This usually happens with the involvement of our local sales organizations.

MIR: *Do you ensure that the different customer wants and needs are addressed properly in the subsequent marketing efforts?*

» We act as a (strategic) thought partner and our commitment does not end by merely handing over the findings. «

ALEXANDER LINDER: Oh yes, CCMI places a strong emphasis on supporting its clients in the implementation of insights. We act as a (strategic) thought partner and our commitment does not end by merely handing over the findings. We always come up with recommendations, and if possible we also show best practice and how other companies are doing it. As a next step in our segmentation project, we will support the jewelry marketing teams in the roll-out process to the markets to ensure that employees can act upon the findings. [...] A very challenging step, but I am confident that we are capable of it as the response to the results has been positive.

MIR: *As you mentioned, Swarovski doesn't just produce crystals, but markets them successfully in offline and online stores. Let's start with your "bricks and mortar" shops, although they aren't actually made of bricks or mortar, but glass, crystal, and light. What kind of experience do you aim to create in your shops?*

ALEXANDER LINDER: We strive to deliver the ultimate consumer experience in our stores. Swarovski wants to anticipate, fulfill, and exceed consumers' wants and needs. Alongside our specific store elements, the employees in our stores are key – they have to make sure that our consumers feel comfortable in the store environment. They must ensure that interaction with the product is made possible, and also act as style consultants. A highly challenging requirement is to have the necessary product knowledge, as a full assortment store carries more than 1,500 products, and the most difficult part of the job is to sell in such a way that post-rationalization leaves the consumer with a 100 % positive feeling and absolutely no doubts come up.

MIR: *How did you develop your store concept?*

ALEXANDER LINDER: The current generation of Swarovski's boutique concept, the so-called "Crystal Forest", was developed by an award-winning Japanese designer called Tokujin Yoshioka. "Crystal Forest" is a multi-sensory experience that gives visitors the chance to immerse themselves in the seductive brilliance and infinite depth of crystal. My Insights department was involved from the very beginning: we analyzed the strengths and weaknesses of the prior store generation and made sure that these findings were transferred to the new generation. Even during the development of the new generation, we continually ensured consumer involvement and improved the new concept step by step. In recent years, we carried out some in-depth insights studies at our own stores to understand the essentials, but also to identify areas of potential where we can stimulate excitement to learn about the power our shop windows have to stop passers-by, to achieve transparency about the performance of our zoning, to see which paths consumers walk in our stores, to learn what brought them in that particular day, what they bought, and why they are maybe also buying products from our competitors.

MIR: *And how do you transfer possible consumer experiences into the online world?*

ALEXANDER LINDER: Swarovski is aiming to achieve seamless integration of our online and offline worlds, so that both run smoothly in parallel. The Insights department learned that a huge proportion of our consumers prefer to inform themselves about Swarovski's products and services online, but the purchase preference is clearly driven toward our offline stores. We therefore have to make sure that the online navigation is user friendly and the content self-explanatory, and that the "online sparkle" motivates the consumer to make a purchase either directly online or offline later. We do web log file analyses and usability testing on a regular basis to continually improve our website. Current developments include a website that can be viewed on mobile devices and working out possible augmented reality solutions to make our products digitally tangible.

MIR: *Social media are gaining more and more importance online. What is your approach there?*

ALEXANDER LINDER: Swarovski is managing its brand presence on multiple social media platforms and frequently runs social media and mobile campaigns. Current platforms with a managed presence include Facebook, Twitter, YouTube, Google+, Pinterest, and Instagram. The expansion into new platforms is an ongoing process. The guiding principle here is to be relevant and to set a focus on where it makes sense to be present and where the presence creates added value.

MIR: *How do you create value for consumers through your social media activities?*

ALEXANDER LINDER: It is not our intention to just be there. Most platforms, especially Facebook, are places where you have a dialog with your consumers. You can observe which topics are relevant and which questions come up. Then you can address these questions in the content you provide, and in critical issues such as quality you can even react individually. What we aim for is a dialog with our consumers and that does create value for both sides.

MIR: *So you also use social media to collect consumer insights?*

ALEXANDER LINDER: Swarovski employs an ongoing monitoring and sentiment analysis system that allows us to track discussion volume and gather directional insights. This data is analyzed alongside metrics from individual digital communications campaigns in order to derive useful findings and draw conclusions for future benchmarking.

MIR: *To celebrate one hundred years of Swarovski, your company opened the Swarovski Crystal Worlds in 1995. Over ten million visitors from more than 60 countries worldwide have since visited the various crystalline Chambers of Wonder. How do the Crystal Worlds affect the Swarovski brand?*

ALEXANDER LINDER: The Swarovski Crystal Worlds are a very important touchpoint for our brand. We created the opportunity not only to get closer to the wide range of Swarovski products, but also to be inspired by the works of world-famous artists who have interpreted crystal in their own individual ways. Fourteen Chambers of Wonder issue an open invitation to discover the world of crystal. We tell different stories about crystal that refer to Swarovski's brand attributes of precision, enchantment, innovation, and tradition. All the associations made with crystal are transferred directly to the Swarovski brand itself and our visitors act as our ambassadors by spreading the brand attributes all over the world. This is the classic image transfer with which we are working.

» What we aim for is a dialog with our consumers and that does create value for both sides. «

MIR: *For those who haven't had a chance to visit the Crystal Worlds, could you describe the experience?*

ALEXANDER LINDER: Well, Swarovski Crystal Worlds invites visitors to leave their daily routine behind and immerse themselves in the world of crystal, experiencing all of its facets as both an inspiring creative material and a beautiful object. Visitors perceive the brand with all of their senses: specially created fragrances enhance the sensual appeal of the brand, while music by Brian Eno expresses the structure of crystal and encourages the visitors to imagine how it might sound. Numerous art installations and visual effects offer an invitation to an alternative fantastic world far away from everyday life, blurring the boundary between dreams and reality; in the Crystal Dome, visitors can even experience what it is like to be at the very heart of a crystal.

MIR: *How do you make sure that the Crystal Worlds keep up with current trends, and stay edgy and exciting?*

ALEXANDER LINDER: Since its opening in 1995, the Crystal Worlds have been extended and additional chambers have been opened. Another project is in the planning stage. Furthermore, in addition to the general exhibition, the brand can be felt, heard, and enjoyed in yet another way – through a variety of events ranging from classical music performances to enjoying haute cuisine, from creative to children's workshops. The Giant Event Program offers an exciting list of events and leisure activities throughout the year for visitors both young and old.

MIR: *This sounds very unique and inspiring, but let's return from our sparkling visit to your crystal wonderland to business reality. What will be most important for your company to remain successful and keep growing over the next few years?*

ALEXANDER LINDER: Swarovski can offer a very broad range of different cuts with very high precision. Of course the competition is not sleeping and rival companies are coming closer and closer. We still have a big advantage because of our European heritage and also because our crystals are still produced in Austria and not somewhere in the Far East. But crystal is much more than just a high-precision material: crystal stimulates enchantment and amazement. Together with a highly international and motivated team, Swarovski continuously strives for customer loyalty by always surprising and amazing them. Swarovski's premium brand image reflects the Consumer Goods Business offer of accessible, desirable products with a wide-ranging appeal. Expertise in jewelry and crystal that has been in place since 1895 is combined with creativity, quality and innovation to enchant our consumers.

The Swarovski brand is a key asset for the company. We need to defend and further develop its unique positioning. To remain successful in the coming years, Swarovski must find a good balance between anticipating, fulfilling and exceeding consumers' wants and needs so we can stay one step ahead of the competition. The consumer must become the focal point of the efforts and a holistic picture is of tremendous importance. To stick to our heritage, values, and principles on the one hand and to constantly reinvent ourselves on the other is one of the biggest challenges standing in the way of sustainable growth in the future.

MIR: *What can your department contribute to help face these challenges and to ensure surprises and reinvention?*

ALEXANDER LINDER: Today, Corporate Consumer and Market Insights (CCMI) is still a rather reactive recipient of insights, but in the future we would like to act in a much more proactive way and come up with proposals for insights independently, as we are constantly monitoring the world that surrounds us.

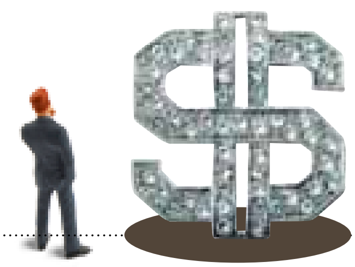
MIR: *Could you illustrate how such a proactive approach differs from what you are doing now?*

ALEXANDER LINDER: Typically, you wait until the phone rings and a client, such as the marketing department, approaches you with an information request. They might, for instance, need information on product acceptance when launching a new product line. Or the communications department might call to test some ads they would like to run in Vogue or Elle.

A proactive insight taker is very much linked to the outside world and observes what's going on beyond the company. They observe many trends and movements in diverse markets and as such can come along and say "I have observed a certain development in a certain market that I think might be relevant for you". They then suggest working out a research proposal to dig deeper.

An example would be the demographic development. You observe, for example, that the population is aging and suggest looking into this matter. If the average consumer is older they might be richer, and this could be a legitimate opportunity for Swarovski to expand from the fashion jewelry business into fine jewelry. You suggest testing this assumption to see if there is a market and how this new market might be characterized compared with the fashion jewelry market Swarovski is in today.

» Crystal is much more than just a high-precision material: crystal stimulates enchantment and amazement. «



MIR: *Quite obviously reinvention and amazement have a lot to do with innovation. What is Swarovski's approach to innovation?*

ALEXANDER LINDER: Just recently we carried out a project for Swarovski Professional with an innovation consultancy. They looked at the whole value chain and came up with very precise recommendations for what has to be improved. Some of the aspects for improvement, or rather innovation, are to do with service, some with flexibility, and some with faster product availability. So we really seek to innovate along the whole value chain.

MIR: *What is your department's role in the innovation game?*

ALEXANDER LINDER: A very tricky one, I would say. To keep pace with the innovation of the industry we have to look into future consumer behavior and this is very, very difficult. It is easy to collect information on current or past behavior, but most consumers do not know what they will want next. So you really have to identify the right qualitative techniques to elicit very deep information that comes from the subconscious of the consumer to find out what they want. For us, the biggest challenge is therefore to identify the right methodology, tools, and probing techniques to reach that deep and access such information that will help the company to anticipate the right consumer preferences.

MIR: *That will indeed be very challenging. Thanks very much for taking us on this journey through the glamorous Swarovski universe. We wish you all the best for these projects and hope that Swarovski will keep sparkling successfully in the future.* •

{ *Summary* }

When Is Enough Enough?
BALANCING ON THE FINE LINE IN MULTICHANNEL MARKETING COMMUNICATIONS

Andrea Godfrey Flynn, Kathleen Seiders and Glenn B. Voss

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In an effort to build long-term, profitable relationships, many companies systematically engage in multichannel relational communication – personalized messages sent to existing customers through various channels as part of a broader relationship marketing strategy.

However, too much of a good thing might actually ultimately have a bad effect. Indeed, the relationship between levels of communication and customer satisfaction follows an inverted U-shaped curve in a study of a large American car dealership: customer repurchase rates at the affiliated garage increase when the volume of communication moves from low to moderate. It reaches a pinnacle at the ideal volume. Unfortunately for the marketer though, as communication moves from moderate to high levels, customers decrease repurchasing. Figure 1 (page 12) describes the relationship between customer expenditures on maintenance and repair services and the number of personalized communication contacts by the company.

Whether ongoing direct communication with customers is perceived positively depends on the volume, mix of communication channels and alignment of those channels with customers' preferences. There is an ideal level of communication. If it is exceeded, customers react negatively and this negative response can be exacerbated by the use of multiple channels. The ideal level differs depending on individual channel preferences.

Lessons learned

> *Multichannel communication* must be carefully managed on multiple dimensions to avoid generating reactance and potentially driving customers away from the company. Such an approach may allow marketers to successfully avoid inefficient allocation of marketing resources.

> To maximize repurchase and minimize the likelihood of reactance, ***managers need to monitor their total contact volume*** with customers

> They should explore ***how their specific channel combinations alter the ideal point***. Email combines poorly with telephone and mail contacts. However, customers respond relatively well to a combination of telephone and mail contacts.

> ***Aligning channels with customer preferences is advisable to optimize repurchase rates***. The data in this study implied two main customer segments: the ***traditionalists***, who respond positively to traditional channels (i.e., mail and telephone), and the ***technology embracers***, who like technologically advanced contacts (i.e., email).

> Further ***it is advisable to develop protocols that limit the total communication*** through all channels and specify effective channel combinations. With three or fewer total contacts over three months, most customers likely respond positively in this case. Once the marketer goes beyond that point, repurchasing decreases and budgets are wasted. •

Keywords:
Multichannel Communication, Communication Mix, Personalized Communication, Relationship Management, Customer Reactance, Customer Repurchase

{ *Deutsche Zusammenfassung* }

Mehr Direktkommunikation ist nicht immer besser
ÜBER DIE KUNST, PERSONALISIERTE WERBEANSPRACHEN OPTIMAL AUSZUBALANCIEREN

Andrea Godfrey Flynn, Kathleen Seiders und Glenn B. Voss

Viele Unternehmen sind daran interessiert, langfristige und profitable Kundenbeziehungen aufzubauen. Im Rahmen ihres Beziehungsmanagements setzen sie systematisch auf unterschiedliche Kommunikationsformen und senden ihren Kunden personalisierte Botschaften über unterschiedliche Kanäle.

Allerdings kann zu viel des Guten durchaus auch negative Konsequenzen haben. Tatsächlich zeigt eine Studie bei Kunden eines großen US-amerikanischen Automobilhändlers mit eigener Reparaturwerkstatt einen umgekehrt u-förmigen Zusammenhang zwischen Kundenzufriedenheit und Kommunikationsintensität: Solange die Menge an personalisierten Botschaften von einem niedrigen auf ein mittleres Niveau angehoben wird, steigen die Wiederkaufraten. Das Blatt wendet sich aber, wenn die Kommunikationsintensität noch weiter zunimmt. Die Kunden beginnen dann, wieder weniger auszugeben. Abbildung 1 (S. 12) zeigt den Zusammenhang zwischen der durchschnittlichen Höhe der Ausgaben für Reparatur und Instandhaltung und der durchschnittlichen Anzahl der personalisierten Kontakte durch das Unternehmen.

Ob die laufende Kommunikation als positiv empfunden wird, hängt aber nicht nur von der Intensität der Kommunikation, sondern auch vom gewählten Mix einzelner Instrumente ab. Dabei spielen individuell unterschiedliche Präferenzen für einzelne Kanäle, wie E-Mail, Telefon oder Brief, eine Rolle. Je nachdem, wie sehr der Mix auf individuelle Vorlieben abgestimmt ist, ändert sich auch die optimale Kommunikationsintensität. Ein ungünstiger Mix kann negative Reaktionen auf das Überschreiten des Optimums sogar noch verstärken.

Schlüsselbegriffe:
Direktkommunikation, Kommunikationsmix, personalisierte Kommunikation, Beziehungsmanagement, Reaktanz, Wiederkaufrate

Implikationen für das Management personalisierter Kundenkommunikation

> Zu viel ***direkte Kommunikation*** schadet. Mehrere Dimensionen müssen beachtet werden, um sicherzustellen, dass Kunden nicht durch zu viel (gut gemeinte) Kommunikation vergrault werden und keine Reaktanz auftritt.

> Die Verantwortlichen sollten laufend das gesamte ***Kontaktvolumen pro Kunde beobachten*** und versuchen, das Optimum an Kontakten herauszufinden.

> Ein ***unterschiedlicher Mix an Instrumenten beeinflusst das ideale Kommunikationsniveau*** und sollte deshalb ebenso berücksichtigt werden. Die Kombination von E-Mail mit telefonischen und postalischen Kontakten erwies sich zum Beispiel als weniger günstig. Dagegen vertrug sich im vorliegenden Fall ein Mix aus Telefon und Post vergleichsweise gut.

> Um die Wiederkaufraten zu optimieren, empfiehlt es sich, ***die Wahl der Instrumente auf die Präferenzen der Kunden abzustimmen***. Die Datenanalyse ergab diesbezüglich zwei Hauptsegmente: die "Traditionalisten", die positiv auf traditionelle Instrumente, wie z. B. Briefe oder Telefon, reagierten, und die "Technologie-Affinen", die eher technologisch fortschrittlichere Kontakt wie z. B. E-Mail bevorzugten.

> ***Klare Regeln helfen***, eine effektive Kombination von Kommunikationsinstrumenten zu identifizieren und eine Obergrenze festzulegen. Mit maximal drei Kontakten pro Quartal ist man im vorliegenden Fall auf der sicheren Seite. Marketingmanager, die darüber hinausgehen, verschwenden nicht nur ihre Budgets, sondern riskieren sogar einen Rückgang der Wiederkaufraten. •

Den ausführlichen Artikel in englischer Sprache finden Sie auf Seite …

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{ Summary }

To Close or Not to Close? ASSESSING THE IMPACT OF OUTLET CLOSURES ON RETAIL CHAINS

Hans Haans and Els Gijsbrechts

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Retail chains often face tough competition and permanently seek to increase profitability. Closing outlets is a common strategy, even if knowledge about its implications is limited. Chain sales losses from store closure of a multi-outlet store vary widely and depend on many different factors. Analyzing these criteria helps to predict the magnitude of these losses for specific store closures using a new model. It offers guidance to retailers in deciding whether a particular store closure is beneficial to the chain or not. If the objective is to prune an overly dense network, it helps to identify the best candidate for closure out of a set of local outlets.

Based on a combination of data from a mall intercept survey and objective purchase data, switching behavior was observed and losses for the chain for the hypothetical closure of specific outlets were calculated. The data also served as input for a store selection model and spending model. Observed category purchases (based on the receipts) were linked to these respondents' household characteristics, trip profiles, and category purchase plans (as obtained from the survey before the intercept store visit). In a second step, the changes in category purchase incidence and spending for each respondent were predicted.

The prediction model for switching and spending performed well in this study. It can be readily implemented by research organizations currently specializing in market potential estimates for store openings. The approach circumvents panel data problems, such as sparseness or the lack of "process measures" and yields better chain loss predictions than a regular store choice model estimated in business-as-usual settings.

Key Insights and Implications for Store Closing Decisions

> Recovered sales after a store closure may be substantial. The average losses of the focal chain amounted to less than half the closed outlet's sales.

> The fraction of sales lost is strongly format specific. Convenience store visitors appear more likely to pick an outlet of another chain or drop the visit. At the same time supermarkets represent the format most likely switched to when other outlets are closed.

> The nature and location of supermarkets matters. Within the same local market and for a given format, the fraction of store sales lost to the chain strongly varied between outlets. The analysis helps in the selection of prime candidates for closure.

> Customer base and shopping habits make a difference. Stores with a clientele of larger households, which purchase larger baskets, have more of their sales picked up by remaining outlets of the chain and big spenders are more chain loyal. Further, time-constrained households (e.g., two working members) often switch to hypermarkets because they benefit most from one-stop shopping. Large-basket trips are more often transferred to the supermarkets than to hypermarkets.

> Format switches change the shopping basket. On average, transferring trips from hypermarkets to supermarkets dampens spending and increases expected losses from a hypermarket closure by more than 10 %. Conversely, shifting trips from convenience stores to supermarkets or from supermarkets to hypermarkets typically lifts expenditures and reduces expected chain losses by, again, approximately 10 %. •

Keywords:
Outlet Closure, Store Switching, Store Format Choice

{ Deutsche Zusammenfassung }

Zusperren oder nicht?
WIE MAN DIE AUSWIRKUNGEN VON FILIALSCHLIESSUNGEN AUF EINZELHANDELSKETTEN BEURTEILEN KANN

Hans Haans und Els Gijsbrechts

Der Wettbewerb im Einzelhandel ist oft hart, und die Betreiberketten suchen laufend Potenzial für Ertragssteigerungen. Immer wieder werden deshalb einzelne Standorte geschlossen, obwohl die Konsequenzen solcher Schließungen nicht immer so offenkundig sind. Wie viel eine Kette durch das Aufgeben einzelner Filialen tatsächlich verliert, variiert stark und hängt von einer Vielzahl an Faktoren ab. Relevant sind unter anderem das Format der Niederlassung, die Lage von Mitbewerbern, aber auch die Einkaufsgewohnheiten und andere Verhaltensmuster der typischen Käufer.

Eine Analyse dieser Kriterien anhand eines neuen Modells hilft, die bei Schließung von Standorten zu erwartenden Verluste zu prognostizieren. Wenn das Filialnetz ausgedünnt werden soll, bietet die Methodik eine Hilfestellung bei der Entscheidung, welche Standorte die besten Kandidaten für eine Schließung sind. Im Modell kombinieren die Verfasser die Ergebnisse einer Vorort-Befragung zum Einkauf und zu Alternativen im Fall einer Schließung mit Verkaufsdaten der jeweiligen Einkäufe. Die Daten dienen auch dazu, ein Prognosemodell für die Einkaufsstättenwahl und zu erwartende Ausgaben zu testen. Das Modell kombiniert Informationen über die getätigten Einkäufe (auf Basis der Kassenbons) mit Haushaltscharakteristiken, Einkaufsgewohnheiten und vergleicht sie auch mit den vorab geplanten Einkäufen (aus der Befragung). Anhand dieser Daten kann man dann in einem nächsten Schritt prognostizieren, wie sich die Einkäufe bezüglich Ausgaben und Zusammensetzung in den einzelnen Kategorien verändern.

Das Vorhersagemodell funktioniert im vorliegenden Fall gut. Es ist auch für den unmittelbaren Einsatz durch Marktforscher geeignet, die sich mit dem Erheben von Marktpotenzialen für Filialöffnungen beschäftigen. Die Vorhersage von Ertragsverlusten funktioniert besser als bei den traditionellen Modellen zur Einkaufsstättenwahl im Normalbetrieb. Zusätzlich werden die klassischen Probleme von Paneldaten, wie zu geringe Fallzahlen oder das Fehlen von Prozesskennzahlen, umgangen.

Schlüsselbegriffe:
Filialschließungen, Einkaufsstättenwechsel, Betriebstypenwahl

Die wichtigsten Erkenntnisse und ihre Implikationen

> Je nach Ausgangssituation kann ein beachtlicher Teil der durch Standortschließungen verursachten Verluste durch vermehrte Umsätze in anderen Filialen aufgefangen werden. Im vorliegenden Fall verliert die Kette durchschnittlich weniger als die Hälfte des Filialumsatzes.

> Das Ausmaß der Effekte hängt stark vom Einzelhandelsformat ab. Die Kunden von kleinen Convenience-Geschäften tendieren eher dazu, die Kette zu wechseln. Supermärkte sind das bevorzugte Format derjenigen, die der Kette treu bleiben.

> Auch die Lage des Geschäftes und individuelle Besonderheiten spielen eine Rolle. Sogar bei Formatgleichheit im selben Umfeld kann der verlorene Umsatz sehr variieren. Die Analyse erleichtert die Auswahl der besten Kandidaten für eine Schließung.

> Haushaltscharakteristika und Einkaufsgewohnheiten sind zusätzlich relevant. Filialen, in deren Einzugsgebiet eher größere Haushalte mit überdurchschnittlichen Warenkörben zu finden sind, tendieren zu alternativen Einkaufsstätten der gleichen Kette. Die „Big Spenders" sind also eher loyal. Haushalte mit knappen Zeitbudgets (Doppelverdiener) wechseln überdurchschnittlich oft zu Hypermärkten. Sie profitieren am meisten vom großen Sortiment, das ihnen ein „One-Stop-Shopping" ermöglicht. Großeinkäufe werden aber eher in Supermärkte als in Hypermärkte verlegt.

> Wenn der Betriebstyp gewechselt wird, ändert sich auch die Zusammensetzung des Warenkorbes. Wechsel von Hypermärkten zu Supermärkten dämpfen die Ausgaben und steigern die zu erwartenden Verluste einer Hypermarktschließung um mehr als 10 %. Im Gegensatz dazu steigen die Ausgaben typischerweise um zirka 10 %, wenn die Einkäufe von Convenience-Geschäften zu Supermärkten oder von Supermärkten zu Hypermärkten verlegt werden. •

Den ausführlichen Artikel in englischer Sprache finden Sie auf Seite …

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{ Summary }

I Will … Sooner or Later
PREDICTING WHETHER AND WHEN CONSUMERS INTEND TO ADOPT NEW TECHNOLOGIES

Koert van Ittersum und Fred M. Feinberg

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Two of the most critical uncertainties associated with new technology introductions are whether and when the target market will adopt them. To predict adoption, managers usually rely on surveys and ask if respondents intend to adopt the new technology. However, predictions based on such rather unspecific intentions tend to be unstable. A new scale integrates cumulative time intervals and predicts adoption more accurately. In contrast to traditional adoption measures, respondents do not only state if they intend to adopt a new technology, but also when within a technology specific time interval (e.g. within six months from the time of questioning). Asking for subjective probabilities in specified time frames encourages and allows respondents to better account for future uncertainty than asking them for their intentions alone does.

Cumulative Timed Intent Enables Better Prediction of Adoption

Data collected during a two-year longitudinal study provides empirical evidence for the accuracy of the scale. The new measure outperformed two single-intent measures and achieved a hit rate of more than 80% in predicting whether and when a cell-phone technology was adopted.

A big advantage of this approach is that individual-level cumulative adoption likelihood curves can be estimated without actual sales data, and thus can be determined prior to launch. Accurately predicting whether and when people intend to adopt a relevant technology reduces the uncertainty of the target market's reaction, allowing marketing managers to better plan a technology's production, pricing, distribution, and promotion.

Besides collecting intentions to predict first-time purchase behavior, intentions can also be collected to predict repeat purchases. For instance, using satisfaction ratings, companies often try to predict customer repurchase intentions. The proposed cumulative timed intent measure may mitigate some of the challenges faced when collecting satisfaction and intent data in the same survey. It allows a closer and more accurate examination of the relationship between satisfaction and future behavior.

Keywords:
Forecasting Methods, Technology Adoption, (Re-)Purchase Intentions, Innovation Management

{ *Deutsche Zusammenfassung* }

Ja … irgendwann
WIE MAN BESSER ABSCHÄTZEN KANN, OB UND WANN KONSUMENTEN AUF NEUE TECHNOLOGIEN UMSTEIGEN

Koert van Ittersum und Fred M. Feinberg

Wenn neue Technologien auf den Markt gebracht werden, ist es schwer vorherzusehen, ob und wann sie sich durchsetzen. Um die Akzeptanz zu beurteilen, ist man meist auf Befragungen angewiesen. Bei den traditionellen Ansätzen wird häufig nur die prinzipielle Absicht erhoben, auf eine neue Technologie umzusteigen. Deshalb sind die Prognosen oft unsicher. Eine neue Messskala ermöglicht nun eine bessere Vorhersage, indem auch der voraussichtliche Umstiegszeitpunkt berücksichtigt wird. Die Befragten geben dabei eine ziemlich detaillierte Abschätzung ab, wann sie umzusteigen gedenken. Um ihnen diese Aufgabe zu erleichtern, sind im Fragebogen Zeitintervalle vorgegeben. Die Teilnehmer wählen den Zeitraum, der ihren Absichten am besten entspricht (z. B. innerhalb von sechs Monaten ab dem Befragungszeitpunkt). Die Intervalle werden auf die Technologie abgestimmt, um realistische Vorgaben zu gewährleisten.

Absichten, die sich auf kumulierte Zeitintervalle beziehen, liefern bessere Prognosen

Eine Studie, bei der über den Zeitraum von 2 Jahren Informationen zum Umstieg auf eine neue Generation von Mobiltelefonen erhoben wurden, bestätigt die Treffgenauigkeit der Skala. Durch das Einbeziehen der subjektiven Kaufwahrscheinlichkeiten innerhalb definierter Zeiträume erhöhte sich die Trefferquote deutlich gegenüber zwei traditionellen Skalen. Das neue Instrument prognostizierte über 80 % der Umstiege korrekt.

Ein großer Vorteil dieser Methode ist es auch, dass sie bereits vor der Markteinführung Prognosen über individuelle Umstiegswahrscheinlichkeiten in klar definierten Zeiträumen abgeben kann. Ob und wann ein Umstieg erfolgt, kann besser abgeschätzt werden. Dadurch verbessert sich die Planbarkeit von Produktion, Preisgestaltung, Vertrieb und Kommunikation.

Das Instrument eignet sich nicht nur zur Prognose von Erstkäufen einer neuen Technologie. Auch Wiederkaufraten können damit gut und verlässlich erhoben werden. Häufig basieren solche Prognoseversuche auf Kundenzufriedenheitsdaten. Die vorgestellte Skala kann gut im Rahmen von Zufriedenheitserhebungen eingesetzt werden und ermöglicht eine besser fundierte Analyse der Zusammenhänge zwischen Zufriedenheit und zukünftigem Verhalten.

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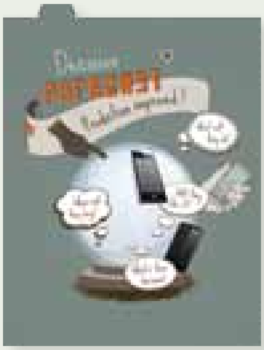

Schlüsselbegriffe:
Prognoseverfahren, Neuproduktakzeptanz, Kaufabsichten

{ *Summary* }

Sibling Rivalry: ESTIMATING CANNIBALIZATION RATES FOR INNOVATIONS

Harald J. van Heerde, Shuba Srinivasan and Marnik G. Dekimpe

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New products not only generate additional demand, they also displace existing products. The products might be by a competitor but in many cases they also hit a companies´ own products. To evaluate the success of a new product, managers need to determine how much of its new demand is due to cannibalizing the company's other products, rather than drawing from competition or generating primary demand. A prediction is even more challenging for radical innovations that cannot be fitted into one particular category. A new model allows managers to estimate cannibalization effects and to calculate the new product's net demand, which may be considerably less than its total demand.

The new methodology is applied to the introduction of the Lexus RX 300 using detailed car transaction data. This case is especially interesting since the Lexus RX 300 was the first crossover SUV, implying that its demand could come from both the SUV and the Luxury Sedan categories. As Lexus was active in both categories, there was a double cannibalization potential. Indeed, demand is shown to originate from different sources and to vary over time.

The model observes changes in base sales of incumbent brands and categories. To accommodate cannibalization and brand switching effects resulting from multiple brands, a time-varying vector error correction, framed as a dynamic linear model, is applied. It explicitly allows for multivariate dependencies across the different brands and categories through direct cross effects and correlated error structures. Bayesian techniques are used to handle missing data. The estimation method ensures that all available information is used on all variables, even if observations are partially missing.

It constitutes a useful management tool to assess the success of pioneering innovation already shortly after the introduction. In this and other cases in which a radical innovation is difficult to assign to one category a priori, the method can provide real-time information in which category cannibalization and brand switching rates are the strongest. Demand effects can be assessed and cannibalization as well as brand switching can be distinguished.

Managers of the pioneering brand can use the proposed approach to evaluate the net sales of the new product, after accounting for within- and across-category cannibalization.

The results are generated while controlling for the own- and cross-marketing mix effects. Managers may therefore use the method to assess the extent to which their products (across different categories) are affected, and how they may recoup potential losses. Moreover, management may also learn about the ability of new products to generate new (primary) demand.

The new model complements the short-term effect models used in promotion research. It allows for a time-varying long-term decomposition of the demand for the new product. Even if data is partially missing, longer term trends and marketing effects of marketing investments can be observed. The model updates the size of the cannibalization effect on a week-by-week basis. Every week, it gives a one-week forecast of the effect based on the most up-to-date information. However, in its current form it is not suited for predicting the cannibalization effect prior to the introduction of the new product.

Keywords:
Innovation Management, Product Introduction, Cannibalization, Category Management, Line Extension

{ *Deutsche Zusammenfassung* }

Rivalitäten in der Produktfamilie: KANNIBALISIERUNG DER EIGENEN MARKE ODER ZUSÄTZLICHE NACHFRAGE?

Harald J. van Heerde, Shuba Srinivasan und Marnik G. Dekimpe

Produktinnovationen schaffen nicht nur neue Nachfrage, sondern verdrängen auch Produkte, die bereits länger am Markt sind. Oft trifft es dabei nicht nur Konkurrenzprodukte, sondern auch die eigenen. Um den tatsächlichen Erfolg einer Innovation beurteilen zu können, ist es deshalb notwendig, das Ausmaß der Kannibalisierung in den eigenen Reihen abzuschätzen. Das ist besonders schwierig bei radikalen Innovationen, deren Zugehörigkeit zu einer bestimmten Kategorie nicht von vornherein klar ist. Das hier vorgestellte neue Lösungsmodell hilft Managern in solchen Fällen Kannibalisierungseffekte und zusätzlich generierte Nachfrage zu trennen. Dadurch kann der Erfolg einer Marktkeinführung realistischer beurteilt werden.

Die neue Methode wird an einem Fallbeispiel aus dem Automobilhandel demonstriert, der Markteinführung des Lexus RX 300. Bei diesem Modell handelte es sich um den ersten „Crossover SUV“, einer Mischung aus Limousine und SUV. Kannibalisierungspotenzial bestand deshalb nicht nur in einer Produktkategorie.

Die Analyse detaillierter Verkaufsdaten zeigt, dass die Nachfrage tatsächlich aus unterschiedlichen Ursprungssegmenten kommt. Man erhält Aufschluss darüber, welche Kategorien und Modelle von der Markteinführung betroffen sind und wie sich die Zusammensetzung der Nachfrage im Zeitverlauf verschiebt. Veränderungen der Verkaufszahlen werden für alle betroffenen Marken, Modelle und Kategorien aufgezeichnet. Um die Vielzahl an Marken abbilden zu können, wird ein dynamisch lineares Modell mit zeitsensitiver Vektor-Fehlerkorrektur gewählt. Es berücksichtigt multivariate Zusammenhänge zwischen Marken und Kategorien als direkte Wechselwirkungen und korreliert Fehlerstrukturen. Das Problem fehlender Daten (wenn z. B. einzelne Modelle nicht über den gesamten Beobachtungszeitraum am Markt sind) wird mithilfe der Bayes-Statistik gelöst.

Die Methode ermöglicht vor allem bei radikalen Innovationen eine rasche und verlässliche Erfolgsbeurteilung. Bereits bald nach der Markteinführung ist abschätzbar, welche Kategorien und Modelle am stärksten betroffen sind. Die Kannibalisierung eigener Modelle, Zuwächse auf Kosten anderer Marken und die tatsächlich neue Nachfrage werden sichtbar.

Die für die Innovation zuständigen Manager können so die Nettoverkaufszuwächse abzüglich der Kannibalisierungseffekte in den betroffenen Produktkategorien berechnen. Dabei lassen sich auch Wechselwirkungen mit Marketinginstrumenten beobachten. Solche Effekte sind auch für Manager aller betroffenen Marken interessant. Die Daten ermöglichen zum Beispiel gezielte Marketingaktionen für Modelle, die von der Produkteinführung besonders negativ betroffen sind.

Der Ansatz stellt auch eine wertvolle Ergänzung zu den eher kurzfristig orientierten Modellen der Werbewirkungsforschung dar. Er ermöglicht eine längerfristig angelegte Dokumentation der Nachfrageverschiebungen. Trotz teilweise fehlender Daten können längerfristige Entwicklungen von Marketingaktivitäten beobachtet und dementsprechend gemanagt werden. Die wöchentliche Aktualisierung der Daten erlaubt eine Prognose für die jeweils darauf folgende Woche. Das Modell ist allerdings nicht in der Lage, bereits vor der Markteinführung Kannibalisierungseffekte zu prognostizieren.

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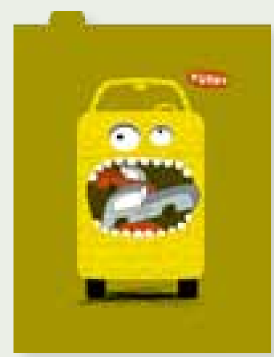

Schlüsselbegriffe:
Produktlinienpolitik, Kannibalisierung,
Category Management, Wettbewerbsanalyse

{ *Summary* }

Jetstar Airways
HOW MODELING GUIDED THE BRAND MIGRATION STRATEGY OF A LOW COST CARRIER

John Roberts, Peter Danaher, Ken Roberts, and Alan Simpson

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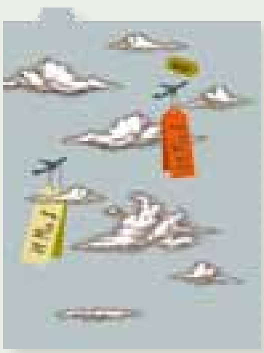

This article describes the application of a dynamic choice model of consumer preferences. It supported Jetstar, a subsidiary of Australia's leading airline, QANTAS, to effectively and profitably compete in the low cost carrier marketplace. The evolution of the Jetstar strategy is traced from its initial position through to its efforts to attain price competitiveness and service parity.

To improve Jetstar first wanted to learn its relative image-position compared to competitors, how drivers and perceptions varied across the population, and the relation of service design features to perceptual drivers on a continuous basis. Strategies were implemented based on quarterly results and these were then expected to be adapted and refined over time in response to changes in customer perceptions and needs.

A new Bayesian hierarchical model conceptually integrates macro level market share evolution with micro level attribute evaluation for service design into a single model. It also captures individual-level heterogeneity, an important factor which has often been ignored in service management. Global attributes are expressed in terms of the constituent subattributes that drive them, showing management where the most traction can be gained with improved pricing and service design. Subattributes with the largest estimated coefficients were identified in wave 1 (and the subsequent waves) and these primary drivers of competitiveness could be addressed with respective actions.

The model further revealed that consumers who place high importance on price place low importance on performance and vice versa. That is, for price sensitive customers, it is harder to compensate for a poor perception of prices with improved performance. Although a price/quality trade-off was generally expected, the strength of this trade-off very much favored price in this case.

As opposed to comparative statistics had several advantages:

> It helped to establish marketing actions that migrated customer beliefs in a cost-effective way.

> It helped to provide feedback between each stage on a series of actions over time and allowed for the adaptive management of marketing activities towards the long-term vision on an evolutionary basis.

> Jetstar was also able to greatly improve on its forecasting performance, using the combination of consumer-level and market-level techniques.

> To sum up, the approach not only helped service design and pricing initiatives to shift the perceived performance of Jetstar relative to its competitors. It further indicated how the airline could move market preferences towards areas in which it had competitive advantage.

The Jetstar market share went from 14.0 % to 18.1 % during the first five quarterly waves of the research, while profits went from US $ 79 million in 2006/07, before the study was commissioned, to US $ 124 million in 2008/09. Today, Jetstar remained the only successful low-cost offshoot of a full service airline in terms of shareholder returns.

Keywords:
Positioning, Price Competition,
Segmentation, Airline-Marketing

{ Deutsche Zusammenfassung }

Jetstar Airways: SCHÄRFUNG DES MARKENPROFILS EINER BILLIG-AIRLINE MITHILFE EINES POSITIONIERUNGSMODELLS

John Roberts, Peter Danaher, Ken Roberts und Alan Simpson

Dieser Artikel beschreibt die Anwendung eines dynamischen Entscheidungsmodells, das auf erfragten Kundenpräferenzen basiert. Es lieferte Jetstar, einer Tochter der größten Australischen Fluglinie „Quantas“, die Datenbasis, um sich erfolgreich im Billigsegment zu positionieren. Die Evolution der Jetstar Strategie wird über mehrere Teilschritte hin zu einer wettbewerbsfähigen Preisstrategie und Serviceparität beschrieben.

Den Ausgangspunkt für Verbesserungen lieferte die relative Imageposition von Jetstar im Vergleich zu den wichtigsten Mitbewerbern. Die Positionsbestimmung lieferte Informationen über Erfolgsfaktoren und Kundenwahrnehmungen in unterschiedlichen Marktsegmenten. Auf der Basis der Ergebnisse entwickelte das Management Service-, Preis- und Kommunikationsstrategien. Man wiederholte die Erhebungen vierteljährlich, um – je nach den beobachteten Veränderungen der Kundenwahrnehmungen und -bedürfnisse – die jeweiligen Strategien zu adaptieren.

Das Besondere an der Datenaufbereitung besteht in der unmittelbaren Verknüpfung von Makro- und Mikroebene in einem hierarchischen Bayes Modell. Marktanteilsveränderungen stehen in direktem Zusammenhang mit Servicedesignaspekten. Globale Attribute werden durch entsprechende, sie beeinflussende Unterattribute beschrieben. Das Management sieht sofort, bei welchen Preis- bzw. Serviceaspekten die beste Hebelwirkung erzielt werden kann.

In der ersten Erhebungswelle wurden jene Aspekte aufgegriffen, bei denen die Daten das größte Wirkungspotenzial aufzeigten. Die Analyse verdeutlichte, dass ein Schwerpunkt auf Preismaßnahmen erfolgversprechender war als einer auf Qualitätsaspekten. Mit Maßnahmen wie einer Bestpreis-Garantie wurde deshalb vor allem die Wahrnehmung der Jetstar Preise verbessert.

Zusätzlich machte das Modell die Präferenz- und Wahrnehmungsunterschiede auf der individuellen Ebene der Kunden sichtbar. Das ist für Gestaltungsüberlegungen im Servicemanagement von großem Wert und war bei traditionelleren Regressionsmodellen so nicht möglich. Die Analyse ergab, dass Konsumenten, denen der Preis besonders wichtig war, auf die Ausgestaltung der Leistung weniger Wert legten und umgekehrt. Bei preisbewussten Konsumenten waren die beiden Aspekte so unterschiedlich gewichtet, dass ein als ungünstig wahrgenommener Preis mit verbessertem Service kaum zu kompensieren war. Das Ergebnis war zwar in diese Richtung erwartet worden, die Stärke überraschte aber und bestätigte die Fokussierung auf Preismaßnahmen.

Das Modell hat gegenüber herkömmlichen Absatzstatistiken bzw. Wellenbefragungen vor allem folgende Vorteile:

> Es ermöglichte an den Präferenzen der Kunden ausgerichtete Marketingaktivitäten und eine kostengünstigere Veränderung der Kundenwahrnehmungen.

> Das laufende Feedback ermöglichte die rasche Beurteilung der Aktivitäten im Zeitablauf und deren laufende Anpassung im Hinblick auf ein langfristig angelegtes Ziel.

> Die Verknüpfung von Kunden- und Marktdaten ermöglichte Jetstar darüber hinaus verbesserte Marktprognosen.

> Es konnten nicht nur Qualitäts- und Preisaspekte gezielt angegangen werden. Das Modell half auch, die Marktpräferenzen der Kunden insgesamt in eine Richtung zu lenken, in der Jetstar Wettbewerbsvorteile genoss.

Der Marktanteil von Jetstar stieg während der ersten fünf Quartalsmessungen von 14,0 % auf 18,1 %. Parallel dazu gelang es, den Ertrag von 79 Millionen US-Dollar im Jahr 2006/07 (vor Durchführung des Projekts) auf 124 Millionen US-Dollar im Jahr 2008/09 zu steigern. Damit war Jetstar in diesem Jahr die einzige in Bezug auf Aktienerträge erfolgreiche Billigtochter einer Full-Service-Fluglinie.

Schlüsselbegriffe:
Positionierungsmodelle, Preiswettbewerb, Kundensegmentierung , Marketing-Mix-Gestaltung, Airline-Marketing

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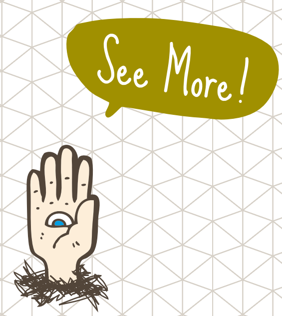

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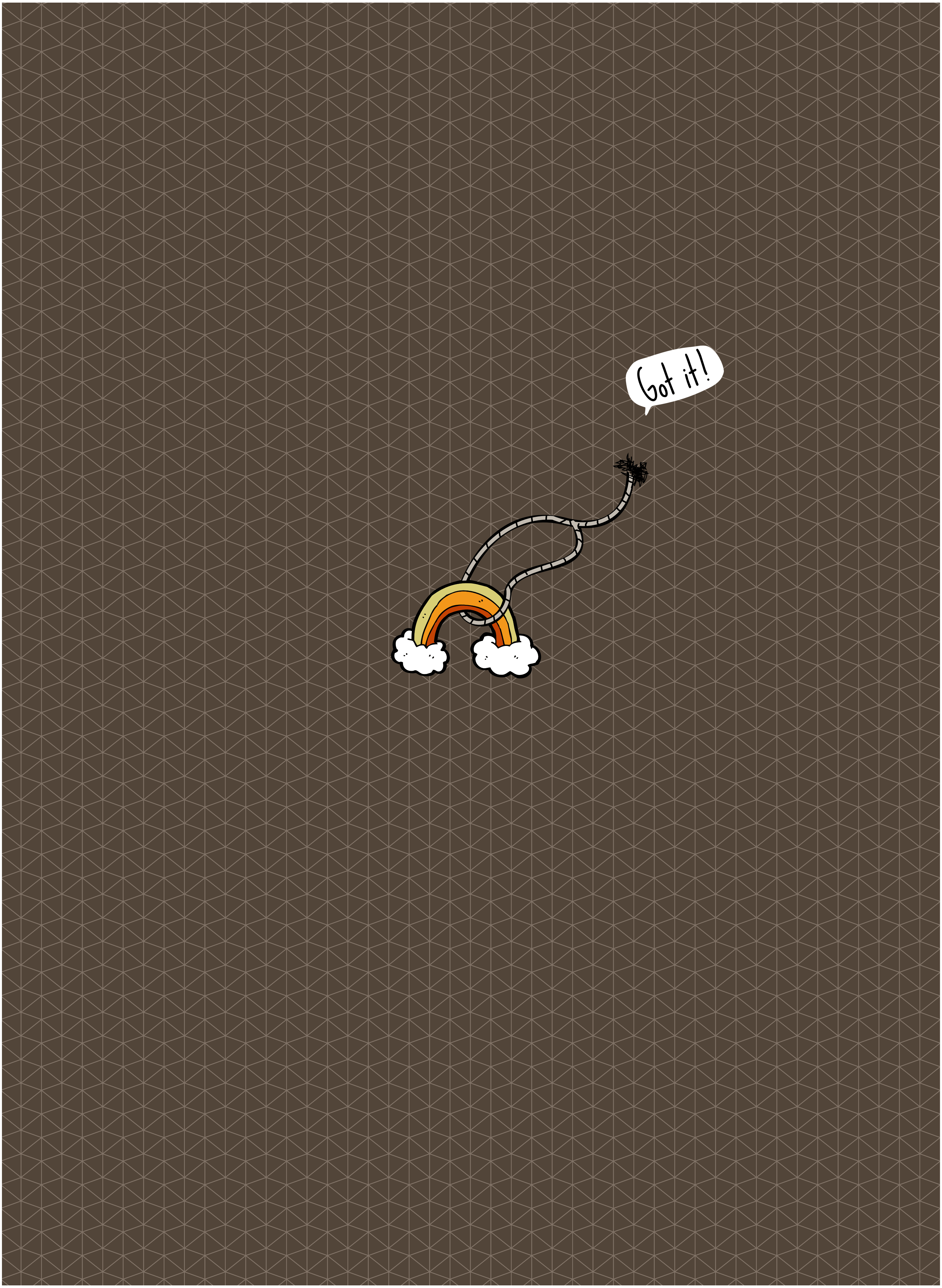
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