ISSN 1392-1258. EKONOMIKA 2004 66

# Pioneering *versus* Following the Promotional Behaviour of Lithuanian Innovative Companies

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*Whether companies that enter markets with new products first appear at an advantage or disadvantage is still a questionable issue in theory and practice. The theoretical part of the working paper will demonstrate that empirical data are very controversial, and the number of fields is numerous where pioneers can gain advantages and disadvantages from being the first with a new product. The survey made in February–April 2004 aimed to examine how Lithuanian innovative companies perceived the distribution of advertising effort while creating a primary and secondary demand, and whether they perceived the pioneering to be advantageous or disadvantageous from the point of view of promotional and consumer education efforts.*

## Introduction

It is a common belief that the first market entrant gains advantage over later entrants (the so-called "pioneering advantage"). Pioneers are supposed to gain economies of scale first, to accumulate learning by doing, and to enjoy broader strategic opportunities. However, a number of subsequent studies have demonstrated that being a pioneer can be a heavy burden on a company's shoulders, especially due to the competitive actions of later entrants who benefit from learning from the experience of the first mover, avoide mistakes, act in a prepared market and at a lesser consumer's resistance to the novelty. Evidence has been found that being the first in the market does not guarantee any particular advantage, as companies are faced with uncertainty, and it has been demonstrated that first movers had lower return on investment and were less profitable in the long run than late entrants. Such controversy in theories and empirical evidence suggests that more approaches towards pioneer versus follower dilemma would be contributory.

Elements of marketing mix, especially promotional activities, influence both primary and secondary demand for goods and services, that is, consumer decisions of whether to purchase in the product category, which brand to buy, and how much to consume. The pre-research assumption is that market pioneers, by employing promotional tools and investing in both primary (for a product category itself) and secondary (for a particular brand) demand creation, simultaneously enhance demand for future competitors' (followers') products. The latter, by entering the market, can invest only in the secondary demand creation, thus benefiting from the pioneer's promotional efforts. This pre-research assumption suggests that the pioneer burdens part of the costs to inform consumers about the new product and create the need, also to educate them if necessary, whereas a follower enters the prepared market and burdens costs for its brand promotion, but not for the consumer education. Such effects can seriously harm the competitiveness of innovator companies and discourage innovations.

The study of previous works on pioneer advantage/disadvantage has demonstrated that more evidence on how the promotional efforts of the new product are distributed between pioneers and followers is lacking. Whether intensive promotional efforts of the pioneer are justified in the long run (by creating pioneering advantage) could be studied in a twofold manner: (1) consumer behaviour studies (psychological processes of advertising learning), and (2) studies of pioneering and following companies' experience in the market. The latter way will be explored in the article.

The aim of the research was to identify the perception of pioneering risks of innovative companies in the field of the new product promotion in Lithuania. It is important to understand whether Lithuanian companies realise pioneering and following advantages, if they affect their time of entry and advertising decisions, what tools the companies employ in order to enhance pioneering/following advantages.

The object of the research is the perception of Lithuanian innovative companies towards pioneering advantages or disadvantages while entering markets with new products, with an emphasis on the distribution of promotional efforts and companies' actual behaviour practice.

The methodology of the article includes a theoretical overview of pioneering advantage/disadvantage theories and up-to-date empirical evidence and a survey of Lithuanian innovative companies, which was carried out in February–April 2004.

It should be noted that the intention is not to discuss to be the first or not to be the first. Rather, the intention is to discuss what can be expected from being the first market entrant, and how impediments could be overcome in order to gain better consumer response and ensure a bigger market share.

## I. Pioneering with new products *versus* following advantages: an overview

It is quite common to claim that the first market entrant, called pioneer, gains advantage over subsequent entrants. Although it is acknowledged that being the first mover is expensive and risky, pioneering proponents argue that positive outcomes dominate negative ones, and rewards for risks are higher market shares and larger profits. However, a closer look into up-to-date findings show that both theoretical considerations and empirical data are very controversial in this field. A lot of evidence can be presented in order to argue that first entrants do not enjoy substantial advantages in gaining market share, or in some cases it might appear at a disadvantage if compared to subsequent entrants. Theories and details of empirical findings in both pioneering advantage and disadvantage are presented in this section. The controversy of the results is summarised in Table 1, which follows below.

### *1.1. Theories and evidence of the pioneering advantage*

The belief that being the first in the market is definitely rewarding is one of those most enduring in business and practice. It has grown so strong that some authors have even suggested that firms preannounce a product's introduction to claim the advantages that accrue to the pioneer (Tellis and Golder, 1996).

Golder and Tellis have classified the theories that support pioneering advantage by whether the advantage is based on consumers or on producers (Golder and Tellis, 1993). Their classification is used here and supplemented with additional material collected by the author of the present paper.

*Consumer-based advantages* relate to the benefits that can be derived from the way consumers decide on a product trial and repurchase.

Pioneers have a unique possibility to determine new product evaluation criteria which their product matches best, and shift the ideal product perception toward their own product. Being the first movers, companies have a unique possibility to influence consumers on how ambiguous attributes of a new product should be evaluated, and what should be an ideal combination of attributes (Carpenter and Nakamoto, 1989).

A pioneer's product can become strongly associated with the product category as a whole and thus become a prototype, against which all subsequent products will be judged. It is important to highlight that the successful trial is a crucial stage for forming prototypicality in theory and an experiment of Carpernter and Nakamoto. Also, the authors make an implicit assumption that the time lag between entries is sufficient to shift preferences towards the pioneering product. However, in the contemporary hyper competition the lags between pioneers and imitators become shorter and shorter (D'Aveni 1995), and they might become insufficient to form consumer preference and prototypicality. Moreover, consumers can initially try a competing analogue instead of the brand that has been promoted.

Second, pioneering brand (vs. followers) is more likely to be retrieved, considered, and selected, both in cases when decision complexity is high and low (Kardes and Kalyanaram, 1993). It is worth noting that the existing product (a low-calorie chocolate bar) was used for the experiment (thus no consumer education effort and primary demand creation was involved); also the experiment artificially created a time lag, which was explicitly realised by the subjects. This time lag was comparatively short (one week and two weeks) between the "entry" of the pioneering brand and the "entries" of the early and late followers. However, in the real market conditions, consumers do not necessarily distinguish which brand was pioneering due to the abundance of other market information, and it is not clear how the consumer's memory for the pioneer would work through a longer period.

Third, the first mover has a possibility to promote brand-specific skills and thus create switching inconveniences, if they anticipate competitor entries (Porter, 1990). Information pertaining to a pioneer is perceived as novel and interesting and, consequently, is weighted heavily in judgement. Because the amount of information known about the pioneer exceeds the amount known about later entrants, more extreme and more confidently held judgements are formed toward the pioneer (Kardes and Kalyanaram, 1992). Another reason for favouring the pioneer in face of imperfect information about the product quality can be simple trust if the trial was successful (Schmalensee, 1982).

*Producer-based advantages* refer to the benefits derived from the supply of the product, and are based on the concept of barriers to entry.

It is argued that first movers gain larger economies of scale, accumulate learning by doing, and enjoy broader strategic opportunities (Glazer, 1985). The pioneer can choose to position itself to the most profitable market segment and can initially realise monopolistic profits (Bowman and Gatignon, 1996). Other important advantages include technological leadership, pre-emption of scare assets (Lieberman and Montgomery, 1998), pre-emption of distributors' product space (Schmalensee, 1987), and patents (Lowe and Atkins, 1994).

Robinson and Fornell (1985) and Robinson (1988) have empirically demonstrated that market shares are higher for pioneers in both consumer and industrial markets. In both cases, they used PIMS database[1] data for the statistical analysis. The authors have demonstrated that pioneers have better product quality, broader product lines, and lower relative prices (all these attributes in turn contribute to the pioneering advantage), however, they have not explained *why* pioneers have higher quality and lower prices (Bowman and Gatignon, 1996). Also Robinson (1988) has established a tendency that pioneers benefit from patents to a significantly greater extent than later entrants. Four other studies, performed by using *PIMS* data, have reported a negative relationship between the order of market entry and the average market share (see Kerin et al., 1992, for review).

Urban et al. (1986) have demonstrated a strong pioneering advantage using the *ASSESSOR* database[2]. They have found that the second firm to enter the market would obtain only 71% as much market share as the pioneer, and the third firm to enter would obtain only 58% as much. An average market share of the pioneer would be 42%, which is considerably advantageous over competitors with parity products. Huff and Robinson (1994) have not only confirmed the pioneering advantage, but also stated that the pioneering advantage is strongly positively correlated with a lead time (a period before the second competitor enters), and that the pioneering advantage is long-lasting, although it slowly diminishes with time. The second entrant can eliminate pioneering advantage in consumer non-durables market after two decades, however, the third and subsequent entrants are left behind after the same period.

Robinson and Min (2002) claim that the survival rate for at least ten years of pioneers was 66% versus 48% of early followers in industrial goods businesses. *Thomas Register of American Manufacturers*[3] data was used for the research. However, no relationship between the order of market entry and long-term survival rates was reported in a number of previous studies (see Kalyanaram et al., 1995, for review).

[1] More information available at www.pimsonline.com.

[2] More information available at http://www.provincetowngov.org/assessor.html.

[3] More information available at www.thomasregister.com

According to pioneering proponents, the overall effect of being the first in the market results in the highest market share. Kalyanaram et al. (1995) have determined that there is a negative relationship between the order of market entry and the market share for a mature consumer and industrial goods: the higher the number of entrance, the comparatively smaller market share. The pioneering advantage, however, slowly declines over a time in both consumer and industrial goods markets.

### *1.2. Theories and evidence of the pioneering disadvantage / follower advantage*

Some of the subsequent studies have demonstrated that being the first mover can be a heavy burden on the company's shoulders, and there are at least several reasons for the pioneer to appear at a disadvantage. As Kerin et al. (1992) state, "the belief that entry order automatically endows first movers with immutable competitive advantages and later entrants with overwhelming disadvantages is naive in light of conceptual and empirical evidence".

Lieberman and Montgomery (1988) state that late entrants may achieve costs and differentiation advantages arising from lower imitation costs, free-rider effects, scope economies, and learning from the pioneer's mistakes. Late entrants face less uncertainty in the market and less consumer resistance to the innovation, whereas early entrants must incur costs for educating consumers (Bowman and Gatignon 1996, 224). As less initial consumer knowledge is required for the late entrant's product and consumer uncertainty is much lesser, their products diffuse faster (Urban et. al, 1986). Late entrants benefit from the possibilities to acquire the same technology at lower costs (Fershtman et al, 1990).

Gazer (1985) has studied entries in newspaper markets. Findings have demonstrated that in successful markets (markets where both the first and later entrants existed for some length of time) first entrants survived longer than second entrants did. However, the study of all markets (both successful and not successful) has shown that the superiority of the first entrant disappeared. It suggests that in unsuccessful markets first entrants failed before other companies entered, while late entrants had an opportunity to "wait and see", and to join the market only if it proved to be potential. Thus, first entrants appear at a more risky position than the subsequent ones. Any research that took only successful markets or survivors into account can be criticised for the drawbacks of the methodology; however, it is extremely difficult to track and analyse companies non-survivors in any market.

Lilien and Yoon (1990) studied 112 new industrial products and came to the conclusion that the likelihood of success for the third and forth entrants was higher than for the first and second entrants, if measured in terms whether the new product turned into a new product group for the producer.

In historical analysis of the information collected from various secondary sources on 17 key variables in 50 product categories, Golder and Tellis (1993) have identified that the mean market share of pioneers is only 10% versus 30% demonstrated by *PIMS* and *ASSESSOR* databases. 47% of pioneers in 50 product categories failed (the failure rate was higher for durables than for non-durables but did not vary by categories). Only 11% of pioneers (vs. almost 50% demonstrated by *PIMS* and *ASSESSOR*) were market leaders. Early followers, according to them, are more likely to have a high market share and success rate.

Bryman (1997) has provided a qualitative study of US animation industry, and has come to the conclusion that being a late entrant is a certain advantage to some of the companies concerned. He has confirmed that late entrants benefit mainly from established legitimacy in the industry, limited protection from patents and the mobility of staff with expertise in new technology. Mansfield et al. (1981) have confirmed that even patent-based first mover advantages might not be enduring, moreover, imitators could duplicate patented innovations at about two-thirds of the innovator's costs in a relatively short time.

In a study that examined 365 business units competing in consumer goods markets and 861 units in industrial markets, Boulding and Cristen (2001) have demonstrated that being the first in the market does not guarantee cost advantage, as first movers have a lower return on investment and are less profitable in the long run than late entrants. Kerin et al. (1992) quote findings of Srinivasan (1988) who has determined that early followers show a higher profitability than first movers because of lower absolute marketing expenses and lower research and development expenses.

Robinson and Min (2002) have determined that chances for the survival of the early market entrants hold an inverted U form relationship to the entry delay (in industrial goods businesses). The followers' survival rate is smaller with the immediate entry, and peaks when the entry delay approaches two years. The later the entry is, the more likely a company is to fail in ten years' perspective. Such a relationship suggests that a short entry delay is beneficial to the follower, as it resolves a huge amount of uncertainty. However, the survival rates of followers do not outweigh the survival rates of pioneers. The authors have found a positive but statistically insignificant relationship between the pioneer's lead time and the pioneer's survival rates.

Looking from a consumer behaviour perspective, some arguments are also available that pioneers could appear at a disadvantage. Zhang and Markman (1998) have suggested that in a product category new brands are learned through the process of reminding-based category learning, in which new brands are compared with the previous brands. When the pioneer brand has been established in the market, subsequent brands will be compared with the initial entrant. The results of Zhang and Markman experiments have proved that alignable differences of parity products are recalled uniformly well across the entrants. The formation of a consumer consideration set holds a characteristic that memory factors not only aid the retrieval of the brand itself, but also determine its comparison set. Thus, advertising cues that help a consumer to retrieve and consider a target brand could simultaneously increase the likelihood of considering similar competitors (Nedungadi, 1990). The pioneer has to suffer consumer education and advertising expenses, whereas a late entrant can benefit from the established evaluation parameters and cues to the first entrant advertisements. If some of the imitating product's alignable differences were preferred to the first entrant's product (e.g. colour, taste, package, or price), the imitator's product would also be preferred.

The real market cases when followers overcame pioneers can be provided for the illustration of the late entrant advantage. Microsoft's Internet Explorer is now the most widely used Internet browser tool, whereas Netscape's Navigator was the first to introduce the World Wide Web browsing tool (Zhang and Markman,

*Table 1. **Theories and empirical evidence of pioneering advantage and disadvantage***

| ***Pioneering advantage*** | | ***Pioneering disadvantage*** | |
|---|---|---|---|
| **Theory** | **Source** | **Theory** | **Source** |
| *Strategic effects* | | | |
| Information about the pioneer is learned better; more confident judgements toward the pioneer | Kardes and Kalyanaram (1992). | Early entrants must incur costs for educating consumers | |
| Prototypicality against which subsequent entries will be judged | Carpenter and Nakamoto (1989) | Established evaluation parameters and cues to the first entrant advertisements | Zhang and Markman, 1998 |
| Broader strategic opportunities | Lieberman and Montgomery (1988) | Learning from the pioneer's mistakes | Gazer (1985), Robinson and Min (2002) |
| Creation of brand-specific skills and switching costs for consumers | Porter (1990) | Less uncertainty in the market and less consumer resistance to the innovation | |
| | | Faster product diffusion | (Urban et. al, 1986). |
| *Costs effects* | | | |
| Economies of scale, accumulated learning by doing | Lieberman and Montgomery (1988) | Lower imitation costs | Masfield, Schwartz, and Wagner (1981) |
| Realisation of initial monopolistic profits | Bowman and Gatignon (1996) | Higher ROI and profitability | Boulding and Cristen (2001), Srinivasan (1988) |
| | | Lower R&D and marketing costs | Srinivasan (1988) |
| Technological leadership, pre-emption of scare assets | Lieberman and Montgomery (1988) | Possibilities to acquire the same technology at lower costs | (Fershtman et al, 1990) |
| Pre-emption of distributors' product space | Schmalensee (1987) | Availability of the staff with expertise in new technology | (Bryman, 1997). |
| *Legal effects* | | | |
| Patents | Robinson (1988) | Limited protection from patents | (Bryman, 1997). |
| | | Established legitimacy in the industry | (Bryman, 1997). |
| *Overall effect* | | | |
| Higher market share | Robinson and Fornell (1985), Robinson (1988), Urban et al. (1986) | Higher market share | Golder and Tellis (1993) |
| Long-term survival rate | Robinson and Min (2002) | Lower failure rate | Golder and Tellis (1993), Lilien and Yoon (1990) |

1998). Such well-known market leaders in the category as McDonalds, Kellogg, Kodak and others were neither product nor market pioneers (Golder and Tellis, 1993).

### *1.3. Sources of controversial results in pioneer versus late entrant debate*

After reviewing numerous studies on the issue of the pioneering advantage and disadvantage, one could hardly come to unambiguous conclusions. The following drawbacks in methodology that could cause such a controversy in the results can be distinguished (note that most of them condition an enhanced pioneering advantage):

- *Survival bias* (Gazer, 1995). Surveys that include only survivors tend to omit high pioneering risks, as they do not assess the companies that pioneered and failed prior than the product grew into a new category.
- *Self report bias* (Golder and Tellis, 1993). *PIMS* and *ACCESSOR* databases, which have been used for many statistical analyses, are based on self-reports. Respondents might not be familiar with a long-term market history and market situation, moreover, the self-perception bias leads companies to classify themselves as pioneers.
- *An imprecise definition of the pioneer* (Golder and Tellis, 1993). 52% of the firms in the *PIMS* data classify themselves as pioneers, including multiple competitors in the same product category. Such inadequacy can be caused by the *PIMS* classification system, which requires respondents to classify themselves as "*one of* the pioneers", "an early follower", or "late entrant" (Golder and Tellis 1993, *emphasis added*).
- *Differences in the studied market boundaries* (Kalyanaram et al., 1995). For example, Urban et al. (1986) studied markets which included only four competitors per market, whereas market boundaries for consumer goods market in *PIMS* data used by Robinson and Fornell (1985) averaged to 12 competitors per market. Correspondingly, Urban et al. (1986) reported the average pioneer's market share to be 42%, whereas Robinson and Fornell (1985) only 29%. Gordon and Tellis (1993), who used markets with undetermined but presumably broader boundaries (they took care to include distinctive product categories rather than narrow subcategories of mature products), reported the average pioneer's market share to be only 10%. The difference in three results suggests that the relationship between the market boundary breadth and the reported pioneer's market share is negative.
- *Survey data only from one product category* (see, for example, Bryman 1997; Glazer 1985). Thus a specific product category bias cannot be avoided. Industries differ in the level of possible imitation, switching costs, and costs of repositioning, therefore, the results gained from one industry should be applied to other industries with care.
- *Limited external validity of historical studies due to convenience samples* (Bryman 1997).
- *Differences in measure variables*: survival (Glazer, 1985), profit and ROI (Boulding and Cristen, 2001), market share (Robinson and Fornell, 1985; Robinson, 1988, Golder and Tellis, 1993), market share growth rate (Urban et al., 1986),

whether or not a new product grew into a product group (Lilien and Yoon, 1990), consumer memory and judgement (Kardes and Kalyanaram, 1992). Demonstrating pioneering advantage by a bigger market share does not exclude the possibility that late entrants have lower costs, higher ROI and profits.

### *1.4. Research directions in pioneer versus follower debate*

Evidence is lacking on the following issues in pioneer versus follower debate:

- what influence a strong brand makes on both leaders and followers;
- interactive effects among two or more factors underlying costs and differentiation advantages and the interactive effects of product–market contingency variables, for example, interactive effects of the nature of the good (search vs. experience), purchase frequency (durables vs. non-durables), and market type (consumer vs. industrial) (Kerin et al., 1992). It has been suggested, but not proved, that for frequently purchased goods pioneering advantage is less critical than for durables (Bowman and Gatignon 1996).
- moderator variables that enhance or mitigate positional advantages (Kerin et al. 1992).

One of such moderator variables that, presumably, could hurt the pioneering advantage is suggested and studied in this article. Srinivasan (1988) (qtd. in Kerin et al.) has determined that followers have lower absolute marketing expenses, although common sense suggests the opposite: it could be expected that a follower entering the market where the pioneer has established consumer preferences and created switching costs would employ much more aggressive promotion to compensate late entry. The same logic when the follower is supposed to enter the market with more aggressive promotional efforts is suggested by the analytical mathematical models of a new products' diffusion in duopoly and oligopoly markets (Horsky and Mate, 1988). Such controversy of empirical evidence to analytical models suggests that market followers might benefit from free-riding on the market pioneer's consumer education costs.

It can be discussed how a known brand affects the pioneering advantage/disadvantage. It could be claimed that a strong brand enhances the pioneering advantage as it is able to a generate better brand and claim bind, and the pioneer also benefits from the general attitude towards the brand. This could be the reason why brand extensions, when a new product is introduced under the old brand name, are so popular. However, empirical data show that small firms (fewer than 100 employees) which by assumption do not posses strong brand names are more successful than large in the invention and innovation process. Also, there are many examples of small firm's innovativeness being overtaken by a large firm (Lowe and Atkins, 1994). Moreover, there is no evidence that the possession of a strong brand name can hedge the pioneer from the consumer education costs burden – only that the effects of it might not be so harmful due to the preference for the pioneering strong brand. This justifies an argument for further research in pioneering and following strategies, so that the results would have practical implications for both pioneers and followers. How companies perceive the pioneering and following advantages, and employ advertising strategies in the new product category, is studied and explained in this research.

## II. Survey of Pioneering Advantage/ Disadvantage Perception from Lithuanian Companies' Point of View

### *2.1. Survey methodology*

The survey of Lithuanian innovative companies aims to examine whether innovative companies realise the burden of a new product introduction (by employing consumer education and primary demand creation efforts) and, consequently, whether they find themselves at an advantage or disadvantage if compared to the followers. Also, the survey assesses how the perception of the pioneering advantage/disadvantage is related to introduced product novelty ratio and other variables related to advertising.

The survey sample covered companies in three industry sectors: manufacture of food products, beverages, and tobacco, manufacture of leather and leather products, and manufacture of rubber and plastic products. The sectors were chosen for the following reasons:

- They distinguish themselves by a higher than average (28.2%) product innovation ratio (37.9%, 34.8%, and 36.6% respectively (Innovation Development: Research Data, 2003)). The sufficient ratio of new products introduction is necessary to reveal the pioneering versus later entrant advantages or disadvantages;
- They operate in the consumer goods market. The effects of advertising and its usage practices are best monitored in consumer goods markets, as advertising is the most common tool to promote products and create demand in the consumer goods sector (used by 90 percent of companies) (Kotler, 2000).

The questionnaire was sent to the companies that had been selected as the survey sample on a random basis from all currently operating companies in Lithuania. Although self-reports might lead to problems of cross-comparisons between respondents, the focus of the research is on companies' considerations about advantages and disadvantages of the first mover promotional activities, therefore the data collected about the perceptions suit the objective of the research. Views about the environment moderators influence companies' strategic decisions, therefore they should be considered to be valid as determinants of companies' overall strategic intentions (Lowe and Atkins, 1994). The initial sample did not allow assessing whether companies had experience in introducing new products, although only companies that had such experience were of interest for the research. Companies that indicated no experience of new products introduction in their practice were eliminated from further analysis. 31 respondents out of all companies that responded had experience in introducing new products.

The questionnaire was divided into two parts. The 1st part collected data about the companies' "demographics": age, comparative size, market share, profitability, growth rate, origin of capital, number of employees. This data was collected in order to assess a partial correlation of these indicators with the time of entry. The 2nd part of the questionnaire aimed to identify the views, opinions and experience of individual respondents on new product promotion costs and effects on the pioneering advantage relationship. It was constructed of a series of statements, which were evaluated by the respondent in a five-point Likert scale. Namely, the statements helped to assess the comparative time of entry with the new product, the level of the product novelty ratio, the companies' perception of the pioneering advantage/disadvantage based on their experience in Lithuanian market, distribution of advertising efforts between pioneers and followers, and the content of the used advertisements.

Based on the series of statements, the variables of entrance time, the level of product novelty, the pioneering disadvantage, the distribution of advertising effort and the advertising content were calculated for each respondent. The expected relationship between the derivative variables and respondents' practice are explained in Table 2.

served. Thus, further only the results gained from the second part of the questionnaire will be analysed.

The research question of the survey concerned the relationship between the company's time of entry (a pioneer or a follower) and variables of the product novelty ratio, the perceived pioneering disadvantage, advertising effort and advertising content. Do pioneers tend to demonstrate a higher product novelty ratio, do they perceive a higher pioneering disadvantage, spend more on advertising of new products and burden more consumer education and primary demand creation costs? The interrelationship between the research variables was also checked.

The bivariate correlation analysis for the derivative variables of the company's time of

*Table 2. Derivative survey variables*

| *Variable* | *Definition* |
|---|---|
| Time of entrance | High scores on this variable indicate that respondents are among pioneers in product category. Moderate scores indicate early followers, low scores – late followers |
| Level of product novelty | High scores on this variable indicate a high level of product novelty: products belong to new unfamiliar categories and require more consumer education efforts and generic advertising |
| Pioneering disadvantage | High scores on this variable indicate a high pioneering disadvantage as perceived by the company |
| Distribution of advertising effort | High scores on this variable indicate more intensive and preceding advertising effort if compared to the competitors |
| Advertising content | High scores on this variable indicate an intensive general consumer education and demand creation effort versus the company name or brand promotion if compared to the competitors |

## *2.2. Survey results and discussion*

No significant statistical correlation between the variables that identified the company's "demographics" (company's age, capital type, sector, number of employees, comparative market share and growth rate) and the time of entry with new products index has been ob-

entry, the product novelty ratio, the perceived pioneering disadvantage, the distribution of advertising effort and the advertising content yielded the following results.

The results show that the correlation between the time of entrance and the product novelty ratio is statistically insignificant, $r(28) = .035, p < .001$. Thus, both companies that

*Table 3. Bivariate correlation among the company's time of entrance, product novelty ratio, perceived pioneering disadvantage, the distribution of advertising effort and the advertising content*

| | | TIME OF ENTRANCE | PRODUCT NOVELTY RATIO | PIONEERING DISADVANTAGE | ADVERTISING EFFORT | ADVERTISING CONTENT |
|---|---|---|---|---|---|---|
| TIME OF ENTRANCE | Pearson's Correlation | 1.000 | .035 | -.064 | .147 | .208 |
| | Sig. (2-tailed) | . | .850 | .735 | .437 | .270 |
| | N | 31 | 31 | 30 | 30 | 30 |
| PRODUCT NOVELTY RATIO | Pearson's Correlation | .035 | 1.000 | .364* | .090 | .038 |
| | Sig. (2-tailed) | .850 | . | .048 | .637 | .841 |
| | N | 31 | 31 | 30 | 30 | 30 |
| PIONEERING DISADVANTAGE | Pearson's Correlation | -.064 | .364* | 1.000 | -.291 | -.464** |
| | Sig. (2-tailed) | .735 | .048 | . | .119 | .010 |
| | N | 30 | 30 | 30 | 30 | 30 |
| ADVERTISING EFFORT | Pearson's Correlation | .147 | .090 | -.291 | 1.000 | .542** |
| | Sig. (2-tailed) | .437 | .637 | .119 | . | .002 |
| | N | 30 | 30 | 30 | 30 | 30 |
| ADVERTISING CONTENT | Pearson's Correlation | .208 | .038 | -.464** | .542** | 1.000 |
| | Sig. (2-tailed) | .270 | .841 | .010 | .002 | . |
| | N | 30 | 30 | 30 | 30 | 30 |

* Correlation is significant at the 0.05 level (2-tailed).

** Correlation is significant at the 0.01 level (2-tailed).

usually are market pioneers and companies that consider themselves as followers introduce discontinuous, dynamically continuous and continuos innovations more or less equally frequently.

The correlation between the time of entry and the perceived pioneering disadvantage is negative ($r(28) = -.064, p < .001$) (the sooner the company enters the market, the more pioneering disadvantage is perceived), however, it is statistically insignificant. Such results could be explained by the fact that self-perceptions on the advantage/disadvantage were recorded in the questionnaire rather than advantages or disadvantages actually measured. Both pioneers and early or late followers, irrespective to their time of entry, might perceive new product introduction as risky, expensive, exposed to plagiarism, a not guaranteed innovation return, etc., even if companies (early or late entrants) have never experienced negative effects of pioneering in practice.

Advertising effort and advertising content are more strongly correlated with the time of entrance $r(28) = .147$ and $r(28) = .208$, $p < .001$, however, no statistical significance is observed. Thus, market pioneers could employ a slightly more intensive advertising than their competitors, and could be more exposed to advertising plagiarism or followers benefiting from the primary demand creation. In new products advertising pioneers might tend to stress the peculiarities and benefits of the product consumption, the fact about the product novelty, and create demand for the whole product category slightly more than their competitors-followers. On the other hand, followers might concentrate more on their company and the product brand name versus general product benefits in their advertising. It suggests that companies-pioneers might appear at a pioneering disadvantage from the advertising and promotional efforts and costs perspective: they create primary demand for the product, educate consumers, and prepare consumer markets for the new product adoption, but this is not the established tendency in the market and the actual pioneering/following advantage depends on the company's individual ability to exploit it.

Not surprisingly, a strong relationship is reported between the distribution of advertising effort and advertising content ($r(28) = .542$, $p < .001$). It indicates that companies that use a more intensive advertising at higher costs if compared to their competitors, and start to advertise first in the market, also tend to demonstrate different advertising content. Their advertising is directed towards need creation and consumer education more than the advertising of companies that have moderate to low advertising expenses and start to advertise when there are other advertisers in the product category in the market. Companies that incur comparatively low advertising expenses tend to stress their company's name and brand names rather than the general product benefits or explanations how the product works. Thus, companies who have lower advertising budgets in the product category benefit from heavy advertisers' or those who start advertise earlier. It indicates an uneven distribution of advertising efforts between pioneers and followers, as the latter start to advertise in the prepared market and need to burden costs only for their brand or the company's name promotion rather than spend on demand creation.

The relationship between the advertising content and the perceived pioneering disadvantage is negative and statistically significant at .005 level ($r(28) = -.464, p < .005$), suggesting that companies that perceive a higher pioneering disadvantage tend to stress their company's name and brand name in advertising much more than the product benefits or consumption peculiarities. Such behaviour is characteristic of all companies, irrespective of their time of entry with new products.

A significant positive relationship between the perceived pioneering disadvantage and the product novelty ratio ($r(28) = .364, p < .005$) is confirmed. As could be expected, the higher the product novelty ratio is, the higher the pioneering risk is perceived, as the introduction of products that are high in novelty ratio (discontinuous innovations) requires more changes in consumer behaviour and thus more consumer education and demand creation efforts. In the case of the product failure more loss would be suffered by the pioneering company.

On the other hand, no relationship between the product novelty ratio and the distribution of advertising effort and advertising content was observed. This fact indicates that in practice some companies heavily advertise products that are just marginal innovations (for example, product line extensions) and might stress (or even overstress) both the product novelty, benefits, and company's name and brand name, or just one or a few of the listed attributes. Meanwhile, companies that introduce discontinuous innovations might not spare much attention to its advertising due to the lack of resources or insufficient attention to the product marketing. Their advertising content might include demand creation and consumer education, the company's name or product brand name all together, or just one or a few of these attributes. Thus, it can be claimed that advertising effort and content are more dependent on other variables (for example, the company's size, market share, market orientation, promotional budgets, profitability, experience in the market, etc.) rather than on the product novelty ratio.

### *2.3. Ways to enhance the pioneering and following advantages and mitigate disadvantages*

In order to avoid negative effects of the primary demand creation for overall product category, market pioneers should concentrate more on the brand name and advertising claim bind in their advertisements, use techniques that strengthen memory for the brand name in advertising (the brand name repetition, the use of brand name in rhyme with the brand claim, attract consumers' attention by creative and memorable advertising, etc.). The most ideal effect of successful promotional efforts would be the creation of prototypicality, so that all later entrants would be assessed by comparing product characteristics with the perceived superior pioneers' product characteristics (Carpenter and Nakamoto 1989). Also, for the pioneer it would be recommended to stress the new product's characteristics, which most likely will become commonalities among parity products in the future, as commonalities are recalled better for the pioneer (Zhang and Markman 1998).

Laboratory experiments suggest that followers or those who have lower advertising budgets should position themselves as distinct from the pioneer rather than close copies (Carpenter and Nakamoto 1989), or turn into account alignable product differences, which are remembered uniformly well across entrants (Zhang and Markman 1998), for example, by employing comparative advertising. If a later entrant is enhanced, product modifications (non-alignable differences) should be highlighted in advertisements, as they are recalled best for the enhanced follower (Zhang and Markman 1998).

## Conclusions

The present paper offers a look at the issue how advertising is distributed across the pioneers and followers, having pre-research assumption that the pioneers who introduce new products and start to promote them first burden costs for the primary demand creation and consumer education, whereas followers enter the prepared markets and concentrate their promotional efforts on their brand promotion.

The self-response survey of Lithuanian companies that have experience in new product introduction has demonstrated that there is no relationship between the time of entry and product novelty ratio. An insignificant negative correlation was observed between the time of entry and the perceived pioneering disadvantage. A significant relationship between the advertising effort and the advertising content was reported. Companies that have higher advertising budgets and start promotion of their products earlier use advertising that explains the product benefits and peculiarities of their performance to consumers, thus burdening consumer education and need creation costs. Advertising content is closely related to the perceived pioneering disadvantage: the higher the perceived pioneering disadvantage, the more companies stress their brand or company's name rather than general consumer education messages in their advertisements. The higher product novelty ratio is, the more pioneering risks are perceived. There is no relationship between the product novelty and the advertising efforts or advertising content.

The pioneers can enhance their pioneering advantage by creating prototypicality and emphasising commonalities, whereas followers should concentrate on alignable differences or superior features in their advertisements.

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## LIETUVOS INOVATYVIŲ ĮMONIŲ PIONIERIAVIMO IR SEKIMO ELGSENA PRODUKTŲ POPULIARINIMO SRITYJE

**Indrė Pikturnienė**

Santrauka

Straipsnyje nagrinėjama, kaip reklama pasiskirsto tarp rinkos ir sekėjų, laikantis hipotezės, kad įmonės, pirmosios pasiūlančios rinkai naujus produktus, patiria didesnius pirminės paklausos kūrimo ir vartotojų ugdymo kaštus; tuo tarpu sekėjai įeina į paruoštas rinkas, ir jiems reklamoje tikslingiau akcentuoti savo prekės ženklo išskirtinumą.

Lietuvos įmonių, įvedusių į rinką naujus produktus, apklausa parodė, kad nėra produkto įvedimo į rinką laiko ir produktų naujumo lygio ryšio. Nereikšmingas buvo nustatytas produkto įvedimo laiko ir suvokiamo pionieriavimo trūkumo atvirkštinis ryšys. Reikšmingas nustatytas reklamos pastangų intensyvumo ir reklamos turinio ryšys. Įmonės, kurių reklamos biudžetai santykinai didesni ir kurios pradeda reklamuoti produktus naujoje kategorijoje anksčiau, naudoja daugiau reklamos, kurioje aiškinama produkto nauda ir vartojimo ypatumai. Reklamos turinys susijęs su suvokiama pionieriavimo rizika: kuo įmonė suvokia didesnę riziką, tuo daugiau ji reklamoje pabrėžia savo prekės ženklą ar įmonės pavadinimą, o ne bendrąsias prekės savybes. Taip pat didesnė pionieriavimo rizika suvokiama, kai produkto naujumo lygis yra aukštesnis. Tačiau nėra pakankamos produkto naujumo lygio ir reklamos pastangų intensyvumo ar turinio koreliacijos.

Straipsnyje pateikiamos rekomendacijos, kaip įmonės galėtų padidinti pionieriavimo ir vėlesnio įėjimo pranašumus, kurdamos savo marketingo kampanijas.

*Įteikta 2004 m. birželio mėn.*