Store choice model – the UnioCoop case in Hungary

Intense competition in the retail sector in Hungary requires the better understanding of consumer store choice. Our objectives were to identify the significant influencers of consumer satisfaction and the purchasing power (basket size), and to analyze the potential relationship between repurchase intention and purchasing power in the case of UnioCoop customers. A store choice model was developed and tested. We found that satisfaction was mostly influenced by shop quality, prices, selection and service, while purchasing power is mostly influenced by marital status, occupation, age and sex. Satisfaction determines repurchase intention, which has weak direct and indirect influence on purchasing power.

Keywords: store choice model, satisfaction, loyalty, basket size

Track: Marketing in Emerging and Transition Economics

1. The Purpose of the Research

Competition in the retail sector in Hungary has been strong since the economic transition in 1989, but it has been more and more intense recently. Therefore, market success requires better understanding of consumer store choice including factors affecting consumer satisfaction, repurchase intention and purchasing power (basket size). Even for a traditional industry player like UnioCoop, with 118 retail stores in almost every settlement in its relevant market, it is of utmost importance that all influencers are to be identified and measured.

Our objectives were to identify the significant influencers of consumer satisfaction; to measure the strength of relationship between satisfaction and repurchase intention; to identify the significant external factors of the purchasing power (basket size); to analyze the potential relationship between repurchase intention and basket size. Finally, we intended to make a construct to test our hypothetic model composed by the above elements.

2. Research Method

There is a great abundance of different store choice models in the literature. One of the first model is by Amstutz (1967), a process oriented model focusing on customer decisions regarding store selection. A model by Hawkins, Best and Coney (1986) – based on Engel, Kollat, Blackwell (1978) general consumer decision process model - is analysing the relationship between buying process and store choice. According to this model the consumer must make a decision on not only the product to buy but also the store where this act will take place. Heinemann's model (1974) analyses the five main steps of the buying process from the store choice perspective. The main steps in this model are the following: problem recognition, seeking store alternatives, evaluation of alternatives, store decision, post-purchase evaluation.

Engel, Blackwell, Miniard (1987) model analyses consumer store choice from different perspective. The model has two main parts: the general evaluation criteria - including place, distance, wideness and depth of selection of goods, price, promotion, staff and services - and the perceived shop image. These criteria are to be evaluated by the consumer and as a result, stores will be categorized as unacceptable and acceptable alternatives.

Unlike the models presented so far, Tietz (1993) and Arend-Fuchs (1995) models are considered as multidimensional analysis of consumer store choice. The consumer evaluates products (brands), store types and stores at the same time and as a result, the optimal source of purchasing will be chosen. These models use qualitative – attitude, lifestyle, shopping habits - and quantitative- demographic and sociographic - variables.

None of these above models include mathematical-statistical calculus, therefore Olach's (1999) store choice formula can be considered as a step forward toward predicting consumer store selection. The formula is as follows:

$$\frac{4dis + 3sel + ref + 4ser}{4}$$

where

> dis: distance –from home, workplace, parking places

> sel: selection and quality of goods

> ref: references

> ser: service, staff quality,

Another problem with the existing store-choice model is that none of them indicates the strength of relationships among the variables they use. In order to make our construct we adapted perhaps the most complex store choice model by Monroe, Guiltinan (1975), later simplified by Assael (1984, 1992).

Bloemer and de Ruyter (1998) proved that store satisfaction has significant effect on store loyalty, but the relationship between loyalty and average basket size has never been analyzed.

Our construct, the store choice model (gear-model) aims to unify the advantages and make up for the shortcomings of the previous models. It is made up of two submodels (gears) and the linking network. The first submodel, the customer satisfaction construct, is a multidimensional linear regression, in which the dependent variable is the customer satisfaction, while the independent variables are factor-variables determining global satisfaction as follows:

- store location (distance from home, distance from the workplace, parking places)
- opening hours (non-stop, weekend and Saturday)
- prices (price-value ratio, price level, sales, discounts)
- products (quality of the goods, freshness, selection, private label ratio)
- store-quality (well-arranged, cleanliness, air-conditioned, correct price indication)
- service (competence, politeness, fastness of paying, credit card usage)
- promotion (traditional and electronic promotion)

In this construct the dependent variables are all latent components, aggregated dimensions of principal component analysis. The original variables of the principal component analysis are measured by a five point satisfaction scale of the store choice criteria.

The other submodel – the purchasing power (or basket size) – is made up of a complex system of demographic variables influencing the two main indicators of purchasing power: buying frequency and the money spent (spending). The demographic variables used in this construct are: gender, age, marital status, residence, family size, education, occupation, income and settlement. The purchasing power is also a latent component, determined by buying frequency and spending (the amount of money spent in the shop).

We assumed that the relationship between satisfaction and purchasing power (basket size), the core of the two submodels, can be direct and indirect. Path modelling therefore is the best tool for testing our hypothesis. In the case of the indirect link, repurchase intention is the mediator variable. We assumed that satisfaction has a significant positive impact on repurchase intention, while repurchase intention (loyalty) influences purchasing power (basket size) less significantly.   Figure 1 illustrates the measurement model for store choice of UnioCoop customers.
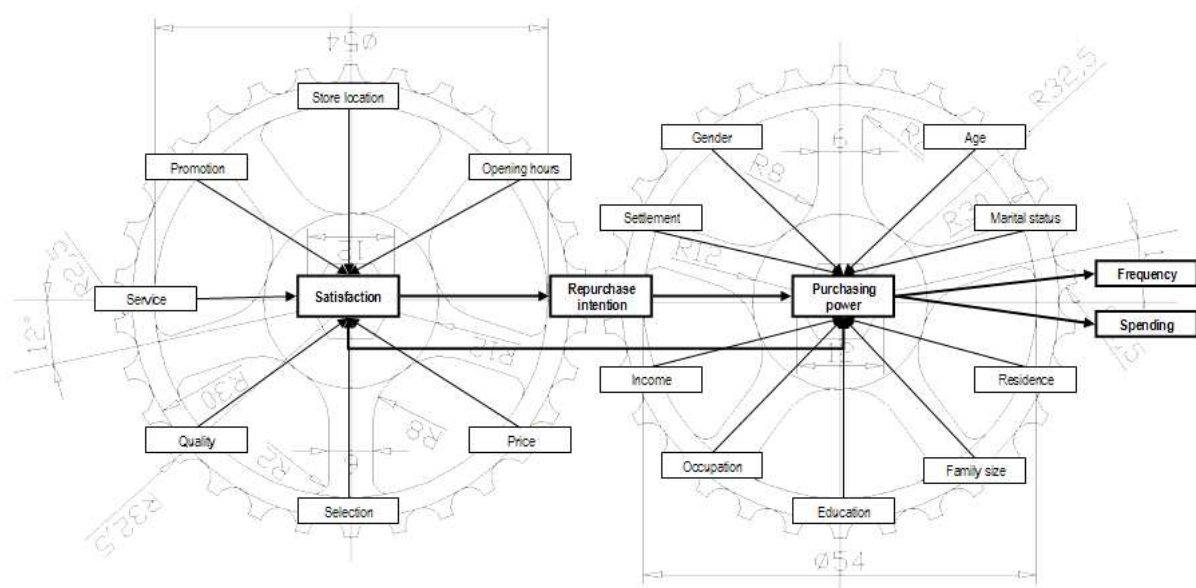
**Figure 1 Measurement model for store choice of UnioCoop customers**

For testing the model, we did primary research (questionnaire survey). The data were collected through personal interviews in UnioCoop shops in 2008. The sample size selected for this analysis was comprised of 4103 respondents, which means 95% confidence level and ±1,5% confidence interval.

3. Major Results

Customer satisfaction submodel was tested by multidimensional linear regression. The coefficient of multiple determination is average (R Square=0,36), therefore the explanatory power of this submodel is adequate. Customer satisfaction was influenced by shop quality (Standardized Beta Coefficient, SBC=0,18), prices (SBC=0,17), products (SBC=0,17) and service (SBC=0,16) to the greatest extent. Store location had no significant impact on consumer satisfaction, which might appear to be an unexpected result. As a matter of fact, this is not so unexpected if we know that UnioCoop stores can be found everywhere in Hungary, even in the smallest village, and their slogan says: "Coop. The good neighbour". Moreover, all the respondents were asked in the Coop stores.

The purchasing power submodel was tested by a series of one-way ANOVA, verified by decision tree analysis. The results of the analysis clearly show that purchasing power is mostly influenced by marital status (η =0,25), occupation (η =0,25), age (η =0,22) and sex (η =0,13). The effect of other demographic variables on purchasing power (basket size) is also significant, but much weaker than those above mentioned. The married, aged 45-60 females have the most significant purchasing power with the greatest basket size.

As for the link between gears, customer satisfaction accounts for 35% of repurchase intention (loyalty), while satisfaction and repurchase intention account for 13% of purchasing power (basket size). The direct impact of satisfaction on purchasing power is weak (Standardized Beta Coefficient=0,11), while the indirect impact is also weak (0,59*0,28=0,17). Nevertheless, a strong relationship between satisfaction and repurchase intention (loyalty) (Standardized Beta Coefficient=0,59) has been identified. Figure 2 shows the tested and verified store choice (gear) model of UnioCoop customers.
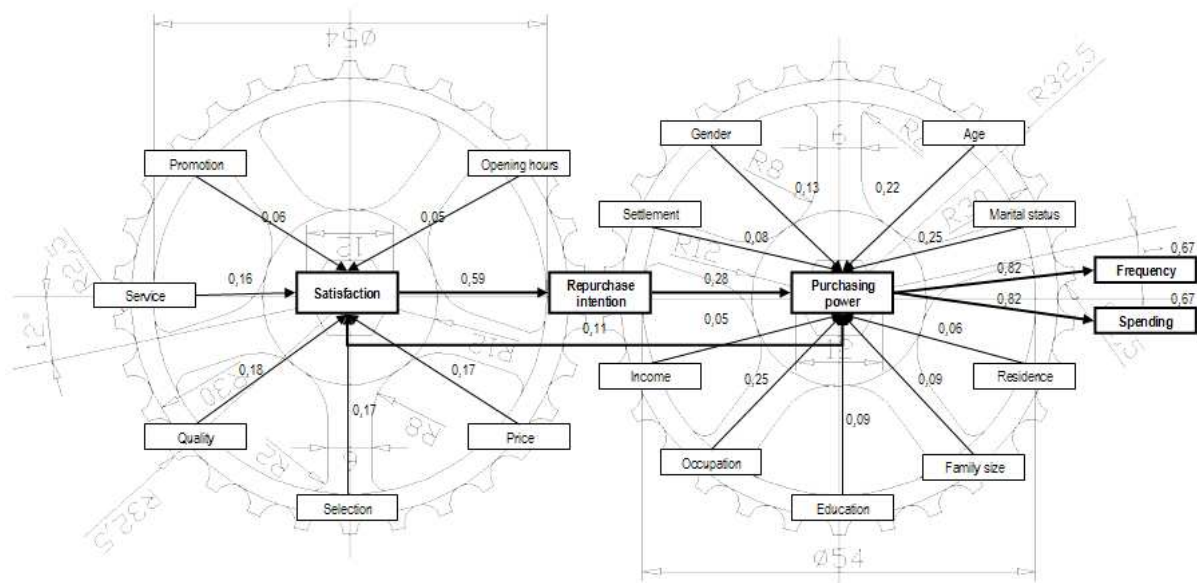
Figure 2 Verified model for store choice of UnioCoop customers

4. Implications

After testing the model, we found that customer satisfaction has - even if weak – impact on purchasing power: the money spent in stores and the spending frequency. The more satisfied a customer is, the more probable she or he will be loyal (will buy again in the same store). Moreover, loyal customers are inclined to spend more and visit the store more frequently. Additionally, customer satisfaction has a significant, but week direct influence on purchasing power (basket size).

As already mentioned, purchasing power is mostly influenced by marital status, occupation, age and sex. The effect of other demographic variables (residence, family size, education, income and settlement) on purchasing power is also significant, but rather weak. The married, aged 45-60 females have the most significant purchasing power, with the greatest basket size, therefore they can be considered the most important target group for UnioCoop.

Customer satisfaction was mainly influenced by shop store-quality, prices, selection of goods and services. For market success, Unio-coop stores must be well-arranged and clean. The prices should be affordable, the customers seek value for the money. Perhaps the most critical factor for UnioCoop is the service quality, which is also very important for their customers, while UnioCoop's perceived service quality is still low. UnioCoop must improve its performance in these fields.

The UnioCoop store choice model has some limitations as well. Since we asked UnioCoop customers only, the results cannot be generalized and it is not possible to see the differences between customers and non-customers, and UnioCoop customers and other customers. As the interviews have taken place in UnioCoop stores, it is hard to analyze store location effect on decision.

In the future we would like to fine-tune this model by using representative sample.

Key References

Amstutz, A. E. (1967). Computer simulation of competitive market response, Cambridge

Arend-Fuchs, C. (1995). Die Einkaufsstattenwahl der Konsumenten bei Lebensmitteln,., Frankfurt am Main Fachverlag, p. 88

Assael, H. (1992). Consumer behavior and marketing action, Kent Publishing, Boston.

Bloemer,J.,de Ruyter K. (1998). On the relationship between store image, store satisfaction and store loyalty. European Journal of Marketing, 32 5/6, 499-513 Engel, J. F., Blackwell, R. D., Miniard, P. W. (1987). Consumer behavior, CBS Publishing Asia LTD

Engel, J. F., Blackwell, R. D., Kollat, D. T. (1978). Consumer behavior, Hinsdale

Hawkins, D. I., Best, J. B., Coney, K. A. (1986). Consumer behavior, Business Publications, INC.

Heinemann, M. (1974). Einkaufsstattenwahl und Firmentreue des Konsumenten, Verhaltenwissenschaftliche Erklarungsmodelle und ihr Aussagewert für das Handelsmarketing, Münster.

Monroe, K. B., Guiltinan, J. P. (1975). Sequence of effects in store choice, A path analytic exploration of retail patronage influences. Journal of Consumer Research, 2-21

Olach, Z. (1999). A marketing szemlélete és gyakorlata, Ligatura Kft, p 268

Tietz, B. (1993). Zukunftsstrategien für Handelsunternehmen, Deutscher Verlag Frankfurt am Main.