



## **Habilitation thesis review**

Author: Ing. Tomasz Trojanowski, Ph.D.  
Title: Sustainable marketing mix of food industry companies operating on the Polish market  
Reviewer: doc. Ing. Martin Klepek, Ph.D.

### **Relevance of the topic**

This is an interesting topic as sustainability is gradually entering the awareness of marketers. On the other hand, consumer behaviour is still behind most forecasts. Conscious consumers are consistently few and far between, mainly because people save energy and time and are not concerned about long-term sustainability issues in consumption. I have reservations about the very notion of sustainable marketing or marketing mix, as there is only one marketing and sustainability principles can be applied within the mix. There is no need for more marketing jargon. Just as we have realised that internet marketing is really just adding distribution and communication to the existing marketing philosophy. Overall, the topic is relevant and interesting.

### **The objectives of the habilitation thesis**

The aim of the thesis was *“to investigate and identify the ways in which marketing mix undertakings are implemented in food industry enterprises in Poland in the context of sustainable development.”* The aim is unclear and very descriptive. First, it is not clear what exactly *“context of sustainable development”* means. Same for the process of identifying *“the ways”* or *“marketing mix undertakings”*. The aim should have been much more specific. Second the aim does not aspire to explain or explore potential benefits for the business bottom line. This would not be a problem in environmental sciences but here it is. The aim is rather an attempt to describe the situation. This then renders the recommendations for the businesses vague as described later in this review. The descriptive nature of the aim is usually manifested in lower levels of academic triers.

### **Methods, results and contribution**

The methods to solve the aim of the thesis are introduced in the second chapter before the literature review which is in third and fourth chapter. It is customary that first literature review is carried out and then hypotheses are established. Therefore, this choice of structure lack logic.

The author forms main research problem or question which is then accompanied by four other research questions each connected to one marketing mix element. There are several issues with research questions. First, the second research question is yes or no question which is insufficient for this type of work. Second, the wording is again not precise. What exactly is a *“production sphere”*? This is too general to be answered objectively. Third, it project human-like behaviour to concepts. Food prices are not alive and therefore cannot *“take into account”* anything. The managers are living humans and they can take something into account.

The objectives mirroring research questions are formed in consecutive subchapter. Further in the same chapter, the hypotheses are described. There is one main hypothesis (*“Companies in the food industry in*

*Poland, undertake tailored activities in the area of marketing mix contributing to sustainable development”)* and four others (mirroring four research questions). It is not clear what “*tailored activities*” are and how do they relate to main research question. Moreover, it is not clear how these will be measured since the hypotheses have to be tested using data. The main hypothesis generalizes across the entire food industry in Poland. The industry is diverse, and different segments may have different practices and impacts on sustainable development. Moreover, later in the thesis the author presents the results of literature review concluding there is no uniform definition. It is not clear why there is a term which has no straightforward definition used in the hypothesis where it should be properly measured.

Beyond the main hypothesis there are four specific hypotheses:

H1: Food companies support sustainability through the production of pro-environmental and pro-social food products

H2: Prices of food products include economic costs, while environmental and social costs of producing food products are not included in product prices

H3: It is possible to identify those forms and ways of distributing food products in food companies adapted to the specifics of the food industry that contribute most to sustainability.

H4: Mix promotion activities are carried out incorrectly in terms of the use of pro- environmental and pro-social media, forms of communication and promotional messages.

There are also few doubts about specific hypothesis. Operationalization of phenomena under research is not ideal. For instance, what are “*forms and ways*” and how they differ? Moreover, there are some logical issues. For example, what if the managers included social costs but not environmental cost of producing food products? Then it becomes subjective to evaluate where it should be objective. Hypothesis should be constructed so two separate researchers would get same results with the same data provided. Moreover, in H4 who is an arbiter of what is correct and what is not? The verification process will be subjective.

Minimum sample size is calculated by unusual method. Usually the margin of error, confidence level (from which z-score is calculated) and population size are plugged into formula. Traditionally in business and management research the margin of error is set to 5% and confidence level to 95%. With population of 31 431 companies, it renders 380 respondents in the sample. This is more than three times higher than 104. The author claims that 8% error is fairly decent. First the real margin of error for 104 respondents is 9,4% not 8% and second it is a fairly big error.

On page 95 the tables with correlation results occur. There is no previous theory, observation or logic. It is just random statistical significance testing. This inflates the probability of getting a statistically significant result by chance alone, even if there is no real underlying effect.

There are no answers to research questions in the text. The author should refer back to them and answer those one-by-one same as he did for hypotheses.

The weakest part of the thesis is the last chapter. The recommendations are not connected to research results. The link is missing, and these could be developed by logic without conducting any empirical analysis. The processes proposed are thus not grounded in data analysis which renders the primary data collection redundant.

## Significance for practice and development of the discipline

The significance of this research for theory and practice is rather small, but the potential for further research in the area with a much more precise specification of research questions and especially hypotheses is considerable.

## Formal requirements

- The official faculty name is School of Business Administration in Karviná not Faculty of Commerce and Business in Karviná.
- All extensive tables should be inserted in appendix. One example being table 10.
- There are several instances where author calls the thesis "*paper*".
- There is a good tradition in having some text between the first chapter heading and the next heading level.
- Thousands should be separated by hitting the space bar.

## Overall evaluation

Given the flaws in the hypothesis setting, the small research sample, and the poor linkage of recommendations to results, I do not recommend the habilitation thesis for defence.

## Proposed questions for clarification during the thesis defence

1. What is the logic or theory behind your correlation analysis?
2. How the results should be interpreted given the 9,4% margin of error?
3. Discuss the advocacy vs objectivity problem (see Armstrong and Green, 2022) and evaluate your thesis through this lens.
4. Explain how your empirical analysis informs your recommendations and conclusions.

V Karviné, 30. 6. 2024

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