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REVIEW OF SEGMENTATION PROCESS IN CONSUMER MARKETS

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Abstract

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Although there has been a considerable debate on market segmentation over five decades, attention was merely devoted to single stages of the segmentation process. In doing so, stages as segmentation base selection or segments profiling have been heavily covered in the extant literature, whereas stages as implementation of the marketing strategy or market definition were of a comparably lower interest. Capitalizing on this shortcoming, this paper strives to close the gap and provide each step of the segmentation process with equal treatment. Hence, the objective of this paper is two-fold. First, a snapshot of the segmentation process in a step-by-step fashion will be provided. Second, each step (where possible) will be evaluated on chosen criteria by means of description, comparison, analysis and synthesis of 32 academic papers and 13 commercial typology systems. Ultimately, the segmentation stages will be discussed with empirical findings prevalent in the segmentation studies and last but not least suggestions calling for further investigation will be presented.

This seven-step-framework may assist when segmenting in practice allowing for more confidential targeting which in turn might prepare grounds for creating of a differential advantage.

segmentation process, segmentation, criteria, evaluation

INTRODUCTION AND OBJECTIVES

Market segmentation (whether consumer or industrial) has attracted a considerable attention during last 50 years. In 1956 Wendell Smith pioneered the definition of market segmentation for marketing purposes and since then more than 1800 articles in the scientific journals have been published (Boejgaard et al., 2010). Conceptually, market segmentation in its broader context means partitioning of customers into segments, within which customers of similar needs are likely to exhibit similar behavior and hence to respond alike to the marketing mix (Weinstein, 2004, p. 4).

Following aforementioned definition, this paper serves as handbook making that definition enforceable by splitting the segmentation process into seven steps as follows: market definition, selection (and evaluation) of segmentation base, selection (and evaluation) of statistical methods, segment formation, segment profiling and

marketing strategy formulation (Födermayr et al., 2008)

Moreover, as the selection of the segmentation base is the crucial step in the whole segmentation process, each base will be evaluated on chosen criteria by means of description, comparison, analysis and synthesis of the 32 studies from the academic sphere (with half of studies from the last 7 years) along with 13 segmentation systems used by practitioners (sources used for evaluation are listed in Tab. VI).

Market Definition

The first step in the process is the proper definition of the market. According to MacDonald & Dunbar (1995, p. 2) the market can be defined as: the aggregation of all the products that appear to satisfy the same need. Building on this definition, Weinstein (2006) specifies market model consisting of three levels: the relevant market, the defined market, and the target market. The relevant market

is the preliminary definition of market based on market scope (e.g. local, national, international...), product market and related generic market. Once relevant market is defined, we proceed to the next level, the defined market. The *defined market* includes assessment of penetrated market (existing customer base) and untapped market (noncustomers). At level three, we take "pre-segmented" definition and apply segmentation bases (discussed later) to identify segments. Then, from these segments we select target markets, the final elements of our model (Weinstein, 2004).

Segmentation Base Selection and Evaluation

This chapter classifies four segmentation bases. A conceptual overview of bases is provided and the available bases are evaluated according to the six criteria¹ (described more in detail in Tab. V).

A segmentation base is defined as: a set of variables or characteristics used to assign potential customers to homogenous groups (Wedel et al., 2003, p. 7). That is, we decide who will be allocated to which group. Following Frank, Massy, and Wind (1972), we distinguish segmentation bases into general (independent of products/services/circumstances) bases and product-specific (related to the both the customer and the product/service/circumstance) bases. The next dimension of classification, distinguishes whether these bases are observable (i.e. measured directly) or unobservable. Those distinctions are depicted in Tab. I.

The most widely used base is general observable, often simplified into one term *geo-demographics*. Geo-demographics acts under assumption that people living in neighborhoods and possessing same demographics tend to operate similarly (Cahill, 2006). The biggest advantage of this base lies in a ease of data collection exploiting municipal and business registers (combined with consumer surveys) resulting in stratified and quota samples. Segments are often readily accessible because of the wide availability of media usage profiles. The drawback lies in relatively low responsiveness and tendency to cluster neighborhoods rather than individual consumers (Wedel *et al.*, 2003).

Following base is general unobservable, however, frequently denoted as *psychographics*.

The main purpose of psychographics is to capture the psychological make-up of a consumer, his/her values as well as the lifestyle s/he has. In this sense, psychographics is believed to form very lifelike portrayals of consumers allowing for better translation of their triggers into marketing action (strong actionability). For this reason, psychographics has become the most evolving and applied segmentation base in the last decade, particularly in the fields of media and product usage.

Specific observable base comprises variables related directly to buying and consumption behavior implying high responsiveness towards changing marketing mix. These bases employ as main method of data collection household and store scanner panels and direct mail lists. Anyway, accessibility and actionability of the identified segments is limited in view of the weak associations with general consumer descriptors (Frank *et al.*, 1972).

Next, perceptions proposed by Yankelovich (1964) lacks in stability as they are immediately affected by scrambling effects. Benefits according to Haley (1968) people seek in products are highly responsive since they demonstrate strong differences in attitudes, thus enabling managers to target specific marketing strategies to chosen markets (actionability). Intentions are believed to be strongest correlates to buying behavior hence indicating high responsiveness (Wedel et al., 2003).

Evaluation of Segmentation Bases

Tab. II summarizes four segmentation bases according to the criteria for effective segmentation (reviewed in Tab. V). Evaluation was based on a review 32 academic papers and 13 segmentation practices by means of comparison, description, analysis and synthesis (all sources are listed in Tab. VI).

In general, most effective bases appear to be general observable and unobservable and unobservable specific (applies, however, merely to benefits). As a consequence, aforementioned bases have been the most examined and followed bases in the last 7 years (for further reference see Tab. VI). The application of remaining bases, namely, specific observable and unobservable (applies merely to

I: Classification of segmentation bases

	General	Product-specific
Observable	Cultural, geographic, demographic, socio-economic variables, postal code classifications, household life cycle, household and firm size and media usage	User status, usage frequency, store loyalty, brand loyalty, stage of adoption, situations
Unobservable	Values, personality and lifestyle	Benefits, perceptions, elasticities, preferences, intentions

Source: Adapted from Wedel et al. (2003) and Frank et al. (1972)

¹ Identifiability, substantiality, stability, actionability, accessibility and responsiveness

II: Evaluation of segmentation bases

Bases/Criteria	Identifi-ability	Substan-tiality	Stability	Action-ability	Accessi-bility	Responsi- veness
General Observable	very good	very good	very good	poor	very good	poor
General Unobservable	good	good	moderate	very good	poor	very good
Specific Observable	good	very good	good	poor	moderate	moderate
Specific Unobservable Perceptions Benefits Intentions	moderate good good	good good good	poor good moderate	good very good poor	poor poor poor	poor very good very good

Source: Updated and revisited according to Wedel et al. (2003)

III: Classification of methods used for segmentation

	A priori	Post hoc
Descriptive	Cross-tabulation, log-linear models	Clustering methods, factor analysis, correspondence analysis, multi-dimensional scaling (MDS)
Predictive	Cross-tabulation, regression, logit and discriminant analysis, canonical correlation, structural equation modeling (SEM)	Classification and regression trees, clusterwise regression, automatic interaction detector, artificial neural network (ANN), conjoint analysis

Source: Adapted from Wedel et al., Market Segmentation, 2003, p. 18.

perceptions and intentions) were abandoned due to their weak actionability or responsiveness, and therefore, this paper presents only the original works.

It is obvious from the Tab. VI the most cited base in last years has been psychographics. The popularity in using psychographics lies primarily in its strong responsiveness and actionability with respect to marketing action. Besides, psychographics constructs very colorful profiles of segments enabling targeting more confidently (Jadczaková 2010a and 2010b). Hence, exploiting psychographics to its fullest potential and finding new variables comprising this base shall be the challenge for researchers specializing in this field.

Please note, however, that effectiveness of segmentation base is influenced by specific requirements of the study. Often, multiple segmentation bases (see for instance, Jadczaková, 2010a; Dutta-Bergman, 2006; Assael, 2005) are used to form segments since their combinations provide more vivid portrayal of the segment through which marketers can tap consumer potential more effectively.

Segmentation Method Selection and Evaluation

This part outlines current segmentation methods into four categories. It is the purpose of this chapter to provide a brief overview of the most used methods, rather than details of these methods. In the final part of this chapter evaluation on their effectiveness will be addressed. The evaluation of segmentation methods and their assignment to

respective bases, again, was based on a review of substantive findings (presented in Tab. VI).

As in previous classification scheme segmentation methods can be defined within two dimensions. The first one distinguishes between a priori approach when the type and number of segments are determined in advance (i.e. before analysis) and post hoc approach when the type and number of clusters are determined on the basis of the results of data analysis (i.e. after analysis). The second way of classifying is according to whether descriptive or predictive methods are employed. Descriptive methods explain relationships across a single set of segmentation bases, with no distinction between dependent and independent variables. Predictive methods, on the other hand, explain relationships between two sets of variables, whereas one set consists of dependent variables being explained (predicted) by the set of independent (explanatory or predictor) variables. Tab. III illustrates these categories.

Cross-tabulations deem to have been popular technique of segmentation, especially in early applications. However disadvantage of contingency tables is viewed in measuring associations among multiple segmentation bases since higher order interactions are difficult to detect and interpret in the tables. Green, Carmone and Watchpress (1976) suggested the use of log-linear models for that purpose. The objective of these techniques may be seen in obtaining first insights about segments and relationships among segmentation bases, for instance, to compare heavy and regular users of a brand by lifestyle (Wedel et al., 2003).

In a priori predictive methods, two-stage procedure is implemented. First, a priori segments are formed by using one set of segmentation bases (e.g. product-specific variables as brand loyalty), and then the profiles of segments are described along a set of independent variables (e.g. psychographic variables). That is, we first identify heavy users and then verify whether psychographics can discriminate between heavy and regular users2. Discriminant analysis, commonly applied psychographic and product-specific approach, is, however, method used to describe segments rather than to identify them. The same holds for canonical correlation and MANOVA where multiple sets of dependent and independent variables are manipulated. Even though, those techniques dispose of very strong statistical properties their usage for segmentation purposes has been proved to be somehow limited.

Other methods, closely related to product-specific measures of purchase behavior, are regression and multinomial logit model. The former derives mathematical equation measuring single dependent variables (e.g. product usage) based on two or more independent variables (Weinstein, 2004). Elasticities, for instance, are estimated by log-linear regressions. Potential of multinomial logit model lies in the area of response-based segmentation assuming that consumers are grouped into segments that are relatively homogenous in brand preferences and response to causal factors (Wedel et al., 1998).

Third category, post-hoc descriptive methods, subsumes clustering techniques and analysis based on latent variables. In demographics, first principal component analysis is applied to uncover most pertinent consumer characteristics. In second stage, cluster analysis then executes the formation of final segments (Jadczaková, 2011). In psychographics factor analysis is alike used to translate the large battery of AIO (attitudes-interests-opinions) statements to a smaller number of more meaningful key factors which are then used as inputs in cluster analysis (Jadczaková, 2010a and 2010b). If graphical representation of distances/associations between variables or objects (Jadczaková, 2011) or variables and objects is the concern, MDS or correspondence analysis might be performed. Both techniques use biplot diagram projecting relationships into a 2-dimensional plane. By doing so, it may be, for instance, investigated which customer segments are more than average attracted by which motivating concepts (e.g. products, brands, service, product attributes, etc.). Owing to this, these so called perceptual mapping techniques are highly encouraged to be used for benefit segmentation.

Last category, the post-hoc predictive approach, exploits techniques of choice modeling – *conjoint analysis* and *clusterwise regression*. Conjoint analysis

measures the impact of varying product attribute mixes on the purchase decisions. This approach ranks customer perceptions and preferences towards products. These are then evaluated and grouped for segment homogeneity. Logically, this technique accounts for benefit and perceptual segmentation studies (Weinstein, 2004). Clusterwise regression (Späth, 1979) is method for simultaneous prediction and classification. This method clusters subjects non-hierarchically in such a way that the fit of regression can be optimized. For instance, Wedel and Steenkamp (1991) suggested procedure which allows for simultaneous grouping of both consumers and brands into classes, making possible the identification of market segments at the same time

Evaluation of segmentation methods

Tab. IV summarizes the most applied methods which are then evaluated on their effectiveness for segmentation and prediction, on their statistical properties, on the availability of computer programs and on applicability to segmentation problems. Such overview shall serve as handbook prior to application of relevant methods.

Based on the results from the table the trend clearly lies within the category of post hoc predictive techniques, and last but not least in SEM. However, due to SW limitations and inability of researchers to handle sophisticated techniques, as SEM and ANN undoubtedly are, their usage capacity has not been fully exploited yet.

The selection of the right method, however, requires the same considerations as the selection of the right segmentation base, that is, one shall take into account the special requirements of the study.

To conclude, selection of segmentation base(s) and method(s) are two interrelated steps which implies that the right choice of relevant method is largely affected by the choice of segmentation base.

Segment Formation

The fourth step in the segmentation process is the segment formation. In this sense, segments shall be formed in the way to stay homogenous within and heterogeneous between with regard to customer needs. According to Dibb (1999) segment formation and segment evaluation (outlined later) are two different things, in literature though often used interchangeably. The former holds for segment formation (criteria) which ought to met in all segments. While the latter stands for criteria assessing the magnitude of attractiveness in respective segments.

Nevertheless, DeSarbo et al. (2003) believes that feasibility to develop marketing action for relevant segments, projectability of that action to entire market and increase in profitability of a firm shall

IV: Evaluation of segmentation methods

Methods/Criteria	Segmentation effectiveness	Prediction effectiveness	Statistical properties	Applications known	Software availability
A priori descriptive Cross tabs Log-linear models	moderate moderate	very poor very poor	good very good	very good very good	very good very good
A priori predictive Regression Discriminant an. Canonical correlation SEM MANOVA	poor moderate good very good good	very good very good good very good good	very good very good very good good very good	very good very good poor good moderate	very good very good poor poor good
Post hoc descriptive Cluster analysis Factor analysis MDS Correspondence an.	very good very good very good very good	very poor poor very good very good	poor good moderate moderate	very good very good good good	very good good moderate moderate
Post hoc predictive Conjoint analysis Clusterwise regression ANN	good very good very good	good very good very good	poor moderate good	moderate good poor	moderate good poor

Source: Updated and revisited according to Wedel et al. (2003)

V: Segmentation criteria

Identifiability	Segments should be recognized easily so that they allow for measurement.		
Substantiality	Each segment should have sufficient size to be profitable enough.		
Stability	Each segment should be relatively stable over time.		
Actionability	Actionability Each segment should be easily communicated with distinctive promotion, selling and advertising strategy.		
Accessibility	Each segment should be easily addressed through trade journals, mailing lists, industrial directories and other media.		
Responsiveness	Each segment should differently respond (in terms of product/brand choice) to marketing mix.		

Source: Adapted from Wedel *et al.*, Market Segmentation 2003, p. 16; MacDonald *et al.*, Market Segmentation, 1995, p. 11; Weinstein, Handbook of Market Segmentation, 2004, p. 39.

be considered as other important criteria for an affective segmentation. Finally, those criteria shall assist firms in segmentation process and shall help to deliver its products/services more in line with customer needs.

Profiling and Evaluation of Segments

The core of this chapter is engaged in profiling of formed segments. In doing so, a conceptual outline of fundamental and state-of-art segmentation systems based on a review of 32 academic papers and 13 typology systems used by practitioners is provided (see Tab. VI). In addition, some fundamental segmentation systems in historical order are discussed. However, before doing so, criteria vital for effective segmentation are first formulated (see Tab. V).

Historical Perspective of Segmentation Systems

From the historical standpoint the process of profiling for marketing purposes was launched in the 1950s by motivational research, typified by Ernst Dichter. Dichter pioneered Freudian emphasis on unconscious motivations that he believed to capture through projective techniques. In motivational atmosphere, another psychologist, Abraham Maslow, introduced his concept – *Maslow's Hierarchy* of needs³ represented in the shape of pyramid with the most primitive (i.e. survival) needs at the bottom and the advanced need for self-actualization at top. Maslow supposed that every individual is driven by the need to value what one lacks (Kahle et al., 1997). Therefore, once certain level of need was fulfilled that value becomes subordinate and as a result one strives (i.e. is motivated) to achieve higher level of values.

Values as motives were likewise viewed by other theorists like Milton Rokeach (1973), Lynn Kahle

³ According to Maslow needs are essentially equivalent to values and hence he uses either terms interchangeably.

VI: Segmentation systems used by academists and practitioners

Segmentation base	Academists	Practitioners	
General observable Geographics Demographics	Juaneda et at. (1999), Lin (2002) Dutta-Bergman (2006), Assael (2005), Donne et al. (2011)	PRIZM, ACORN, MOSAIC, GeoVALS, CAMEO, RDA Research, Geo- Marktprofiel	
Household lifecycle, socioeconomics	MacDonald & Dunbar (1995)	SAGACITY	
General unobservable Personality traits	Cattel (1967)		
Values	Maslow (1954), Hofstede (1980) LOV proposed by Kahle (1983) RVS proposed by Rokeach (1973) SVI proposed by Schwartz (1992) Sukhdial et al. (1995) Chow et al. (2006) Singh et al. (2008)	CVS proposed by Chinese Culture Connection (1987)	
Lifestyles/Psychographics/AIOs	Davis et al. (2002), Lin (2002) Lekakos (2009), Forde et al. (2009) Dutta-Bergman (2006), Assael (2005), Youn et al. (2008) Miguéis et al. (2012) Mostafa (2009) Byrd-Bredbenner et al. (2008) Jadczaková (2010a and 2010b)	Euro-Socio-Styles, VALS, Sinus Milieus, Experience-Milieus	
Specific observable Usage frequency Stage of adoption Situations	Twedt (1967) Rogers (1962) Belk (1975)		
Specific unobservable Perceptions Benefits	Yankelovich (1964) Haley (1968), Green et al. (2000) Onwezen et al. (2012) Li et al. (2009) Olsen et al. (2009)		

Source: Author

(1983) or Shalom Schwartz (1992) who suggested another instruments for value identification and measurement respectively – *Rokeach Value Scale* (RVS), List of Values (LOV) and Schwartz Value Inventory (SVI).

In the 1960s the decade of benefit segmentation came. The proponent of benefit segmentation Russ Haley (1968) stated that segmenting of consumers is done on rational benefits people seek in products (Kahle *et al.*, 1997).

The decade of segmenting consumers on more abstract levels as values and lifestyles came in the 1970s, commonly represented by VALS⁴ Mitchell (1983) in U.S. and Euro-Socio-Styles CCA (1972) in Europe. Both concepts built its ideology on value orientation since they assumed that values are not subjected to quick changes over time and they are thus well suited for long-term strategic planning (Kofler, 2005). However, in either case, segmentation

was solely based on those values and still not respecting any ties to specific product.

PRIZM, ACORN and other geographic segmentation systems came into existence as well during this decade. The rationale behind these typologies is that people with same sociodemographic characteristics and lifestyles tend to aggregate in the same neighborhoods.

To sum it up, after profiles to formed segments are assigned, then these segments will be evaluated according to criteria for effective segmentation. Ultimately, based on profiling and evaluation, target segments are to be selected.

Selection of Target Markets

By targeting we understand selection of segment(s) a firm is going to serve by differentiated marketing mixes. The choice of number and type of segments is highly affected by strategy a firm wants

⁴ The original VALS spawned from Maslow's pyramid of needs and RVS.

VII: Marketing mix planning decisions

	Product		Place
A.	New product development	A.	Channel decision
В.	Product/service quality, features and use	В.	Shelf policy
C.	Product lines, packaging, branding	C.	Inventory policy
D.	Installations, instructions, warranty	D.	Transportation
	Promotion		Pricing
A.	Advertising	A.	Price levels
В.	Sales promotion		I. Penetration pricing
C.	Publicity		II. Skimming pricing
D.	Brand names	В.	Price changes
E.	Package designs		I. Size
F.	Point of purchase, salespeople		II. Timing
G.	Media selection		III. Duration
	I. What media?		IV. What products
	II. Reach, frequency and cost		V. Against what competitors

Source: Adapted from Engel *et al.*, Market Segmentation, 1972, p. 8–9.

to pursue (e.g. Jobber, 2004). The firm can either target two or more segments (*differentiation*) or just one segment (*concentration*) or in extreme case, every single customer (*atomization*⁵) (Weinstein, 2004).

Obviously, differentiated treatment of segments often imposes new product/service offerings, several promotional campaigns, channel development, and additional expenses for implementation and control. On the other hand, targeting means limited waste and improved marketing performance through "tailored" marketing mixes (Weinstein, 2004).

Marketing Mix Planning Decisions

Once the decision about target market(s) is taken, managers need to elaborate marketing mix (4 P's) in a way that matches different needs of segments. In doing so, each segment ought to satisfy *responsiveness* criterion to be homogenous and unique in its response towards marketing mix. In this case only the effectiveness of any segmentation strategy will be achieved. (Wedel *et al.*, 2003). Tab. VII exemplifies these marketing mix decisions managers shall design/refine.

DISCUSSION AND CONCLUSION

It was the objective of this paper to review steps involved in the segmentation process. Driven by this objective I introduced seven (conventional) steps needed to be undertaken when segmenting. When doing so, the emphasis was placed on description and comparison with examples found in the extant literature. In order to provide a comprehensive overview, this section will discuss some further

empirical findings, and last but not least, will propose future research agenda.

Starting with step number one – market definition – market shall not be seen merely in the geographical, industry or product type context (MacDonald *et al.*, 1995). According to Weinstein (2006), market shall be unlike defined along several variables at once, such as customer needs and groups, competition, products and technologies. In addition, (Foedermayr *et al.*, 2008) advocate to examine which firms (in terms of size, for instance) under which circumstances (short-term focus, financial resources, for instance) are likely to use which market definition (narrow vs. broad, for instance).

Moving to the step number two – segmentation base selection (and evaluation) – enables marketers to describe segments, a crucial point in the segmentation process and simultaneously the most covered area in the segmentation studies. However, it might be further interesting to relate the background of a firm (size, customer focus, industry, product type, etc.) to the choice of respective segmentation variables (Foedermayr *et al.*, 2008).

Deciding on the segmentation method selection (and evaluation) comprises the third step. Here, the post-hoc predictive techniques are much more powerful. However, more sophisticated techniques such as structural equation modeling or artificial neural networks shall be those playing more important role in the future research. In this sense, it might be useful to explore whether such sophisticated techniques indeed contribute to more tailored marketing efforts and thus saved marketing expenses. Finally, the generalizability of

In literature, however, we can come across other terminology: segment-of-one marketing, customization, interactive segmentation, mass customization, micro-marketing and personalization (Weinstein, 2004).

reported findings in terms of robustness, validity and reliability shall be the priority of researchers involved in segmentation practices, having rarely been the case.

When forming segments (the fourth step), apart from frequently quoted intra-segment homogeneity and inter-segment heterogeneity, the manageable number of segments and some minimum size of the segment (in terms of number of customers, turnover, profit, etc.), in addition, shall be considered (MacDonald *et al.*, 1995).

The six criteria presented in Tab. V can assist when profiling, (and evaluating) and selecting target segments (the fifth and the sixth step). In addition to those criteria, Cross *et al.* (1990) recommend to use: segment size, compatibility with objectives and resources, profitability, growth expectations, ability to reach buyers, competitive position of a company and costs to reach a buyer. Furthermore, Foedermayr *et al.* (2008) advocate using company's mission,

corporate values and culture as other segment evaluation criteria. Further research could likewise explore whether (and how) those criteria might be directly linked to performance indicators measured on market size, ROI, satisfaction of customers, etc.

Last stage of the segmentation process relates to implementation (and evaluation) of marketing strategy. Despite the scope of published work about segmentation issues, this part is of comparably lower interest than other segmentation stages. Therefore, marketers are strongly encouraged to focus their attention here to see whether preliminary stages resulted in a feasibility and soundness of a marketing action.

To sum it up, this article aimed at revision of some crucial steps vital for effective segmentation. First, state-of-art picture of this process was outlined which in the next part, was discussed with some further results. Ultimately, possible innovations to suggested approach were indicated.

SUMMARY

One of the greatest endeavors of today's marketers is to cut marketing budgets to the level where they can fully satisfy needs of the current customer base while at the same time still have the capacity to attract new clients. In this sense, market segmentation might be used as a tool how to effectively utilize marketing efforts and yet stay competitive in the industry. However, having acknowledged that, many marketers are not familiar with some principals vital for effective segmentation. Based on that premise, this paper strives to provide a seven-step-framework which might assist marketers when segmenting in practice. In doing so, the greatest contribution is to be viewed in introduction of all steps (and not merely single ones as it has been common in a literature) along with their evaluation based on a review of 32 papers and 13 commercial typology systems.

As a result, this study advocates exploring new variables within psychographics as psychographics became a commonplace for construction of very actionable segments. Moreover, psychographics in a combination with other segmentation base, demographics for instance, is believed to form a complete profile capturing the collective mindset of a segment. To prove a responsiveness of cluster solution, those clusters shall be further validated, for example on variables measuring the importance of product selection criteria (e.g. price, quality, brand, package, etc.).

Since a large battery of questions is subjected to statistical analysis, some relative to explanatory variables, the others to explaining variables, SEM or ANN might be the methods establishing the relationships. Ultimately, the soundness of segments is to be evaluated on criteria considering both internal and external environment of a firm.

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