

CONSTRUCTING A SOPHISTICATION INDEX AS A METHOD OF MARKET SEGMENTATION OF COMMERCIAL FARMING BUSINESSES IN SOUTH AFRICA

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DECLARATION

I declare that this is my own unaided work, and that it has not been submitted to another university for any degree.

Signature

Date

ABSTRACT

This study investigates the process of index construction as a means of measuring a hypothetical construct that can typically not be measured by a single question or item in a survey study and applying it as a method of market segmentation. The availability of incidental secondary data that were gathered during 2009 provides a relevant quantitative basis to illustrate this process by constructing a commercial farming sophistication index for South Africa.

A multi-step approach was followed for the construction of the commercial farming sophistication index, namely: (1) Selection of items and definition of variables that are most likely to be indicators of commercial farming sophistication; (2) combining of variables into an index; and (3) segmentation and index validation.

Following the investigation and illustration of the process of index construction as a method of market segmentation, it was evident that this approach offers an appropriate and useful means of segmenting a market. Several factors contribute to the appeal of this approach. Amongst other, it contributes towards addressing important priorities in the area of future segmentation research, namely that of investigating the application of new base variables into segmentation models, as well as investigating new segmentation strategies. The approach also applies a creative process of combining several base variables into a single measure, namely that of an index variable. By offering classification rules based on characteristics that can easily be observed or elicited by asking a few key questions, new or potential buyers can be grouped by buying behaviour segment.

Furthermore, the multi-step process that was employed has pragmatic appeal for researcher, and provides a systematic and structured multivariate approach to segmentation. It also facilitates replication of the process when conducting future studies.

By using an index, it takes advantage of any intensity structure that may exist among attributes. This has the advantage that it places members of the market on a continuum that can lead to tracking members' development paths as they progress towards higher levels on the index.

Furthermore, illustration of the process has significant application value in other business-to-business markets, locally and internationally, where index variables can be constructed from both primary and secondary sources and used as a method of segmentation following a similar multi-step approach proposed in this study.

Lastly, the outcome of this type of segmentation method offers researchers and marketing practitioners a procedure, in the form of an equation, to calculate index scores and provide rules to segment the market based on predefined intervals. Hence, the challenge to replicate segment formation across independent future studies is addressed. This process is considered an advantage over employing a technique such as cluster analysis, where the use of new data or changes to the clustering algorithm often leads to different segment solutions.

Keywords: Segmentation, index construction, commercial farming, business sophistication

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