Chapter 7

A Treatise on Isoattribute Curve Analysis, Consumer Induction Factor, and Country Brand Value:
A Modern Proposal

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ABSTRACT

This research has endeavored to focus on three major issues that are yet to be explored as per the existing literature on marketing. The first issue focuses on the Isoattribute curve analysis, rooted in the theory of conjoint utility analysis. In other words, the first segment concentrates on the derivation of the Isoattribute curve model which helps to attain the consumer equilibrium condition in a two-commodity world (brand or non-brand products). The second segment of the chapter has transitioned from the microeconomic model to the macroeconomic perspective based on a 'single-country' approach, i.e., USA, based on a derivation of consumer induction factor (CIF). Finally, the third and final segment of the chapter extends its horizon at a larger scale by conducting a cross-country time-series study of 10 years (2009 – 2018) which redefines branding in an absolutely new dimension where the 'brand values' of seven sample countries are estimated by inculcating the socio-economic, political, and working environment factors as the major dimensions.

INTRODUCTION

This research work is my sole contribution to the existing literature of applied marketing, which is totally original and seminal in nature in the sense that it has contributed to introducing three new concepts of *Isoattribute curve* and *Isopartworth line*, *Consumer Induction Factor (CIF)*, and *Country Brand Value*

(CBV) that would definitely help to advance the evolving domain of marketing analytics holistically as they have originated from the foundations of Conjoint utility analysis, Consumer behavior, and Brand analytics respectively.

The *first* segment of this article begins with the concept of *Conjoint utility analysis*. Conjoint utilities measure customer preference levels depending on the *attribute* levels of the commodities (brands) consumed and the *partworths* (relative weights) of the goods (brands) consumed. To quote Toubia (2018): "The premise of Conjoint Analysis is to decompose a product or service into attributes (e.g., number of minutes included, number of GB of data, charge for additional minutes, base price, etc.) that each has different levels (e.g., 500 minutes, 1,000 minutes, unlimited). The output of a Conjoint Analysis study is an estimation of how much each consumer in a sample values each level of each attribute. Such preferences are called partworths because they capture how much each part of the product is worth to the consumer".

Conceptualization of the Isoattribute Curve and Isopartworth Line

By using the premise of the conjoint utility analysis, the foundations of the *Isoattribute* curve and the *Isopartworth* line could be structured from a *microeconomic* perspective. An *isoattribute* curve may be defined as a *locus* of points, each representing a combination of quantities consumed for two commodities under the non – brand category or two products under the same brand category which will yield a fixed level of aggregate attribute at a given time. By maintaining parity with the property of indifference curve, it may be stated that a *higher* isoattribute curve represents a *higher* attribute level for a consumer, *ceteris paribus*.

An *isopartworth* line may be defined as the *locus* of points, each representing a combination of different partworths of two commodities under non – brand category or two products under the *same* brand category within a *fixed* budget of a consumer for a given time.

The *traditional tangency solution may attain the consumer's equilibrium condition*, i.e., by the point of tangency between the isoattribute curve and the isopartworth line where the Marginal Rate of Change (MRC) in the partworth (W) of each good must be equal to its Marginal Rate of Change (MRC) in the attribute level.

The *convexity* condition of the isoattribute curve refers to the *diminishing* rate of Marginal Rate of Technical Change (MRTC) between the attribute levels and partworths of two goods consumed. These concepts are discussed in detail under the "Methodology" section and the "Theoretical framework of Isoattribute curve analysis" subsection.

Derivation of Consumer Induction Factor (CIF): A Single Country Approach

In order to derive the Consumer Induction Factor (CIF) for the US economy, three major variables are taken into account, and they are as follows:

- Household final consumption expenditure per capita (in constant 2010 US$) growth rate or simply Consumption Per Capita Growth Rate (CPCGR)(World Bank);
- The Global Innovation Index (GII)® (A joint collaboration of Cornell University, INSEAD Business School, and World Intellectual Property Organization (WIPO)); and
- The American Customer Satisfaction Index (ACSI)®.

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