

Calculations used in the RMS process

Overview

Retail Measurement Services provide you with a comprehensive view of your total market, your product sales, market share, distribution and pricing information by following a step-by-step process.

This job aid is an overview of the calculations used in the RMS process and how that impacts the data you see - providing you data that is representative of your retail market. The first page covers the estimation methods used when establishing a retail universe. The second page covers the calculations applied to the data once it has been collected.

Numeric & volumetric estimations

When establishing a Retail Universe, NIQ begins by obtaining information from public data, retailer data, client store lists or the Retail Establishment Survey. NIQ then applies Numeric and Volumetric estimations using this information, in order to determine the number of stores and their significance in a geographical area.

The definitions for each estimation method are below - keep in mind this is just an overview, as this process typically takes months to complete, involving additional steps and an extensive validation process

Key terms

Term	Definition
Numeric Universe Estimations	Evaluates the number of stores by store type in a geographical area.
Volumetric Universe Estimations	Evaluates the importance of each store type in a geographical area.

Why is this important?

The information provided by these estimations enables us to classify stores by **type**, **location** and **importance**, which is used to establish how many of each store type must be sampled in order to properly represent the universe.



Store type



Location



Importance

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Numeric & ratio projection factors

There is a lot that goes on behind the scenes in order to provide you with the most comprehensive view of your retail market. Once data has been collected, NIQ applies statistics (statistical expansion) to the sampled data to show values that are representative of all stores in the universe. In essence, we use statistics to expand the data to apply to the whole universe.

Key terms

Term	Definition	Calculation
Numeric Projection Factor	Evaluates the relationship between the total number of stores in the universe and the number of sample stores	Total Stores in the Universe/Number of Sample Stores
Ratio Projection Factor	Evaluates the importance of stores in the universe versus the sample; Importance of the store is related to its sales value and distribution of All Commodity Volume (ACV*) or NIQ Sum of Product Category (NSPC**)	Total Universe ACV (or NSPC)/Sample ACV (or NSPC)

***All Commodity Volume (ACV)** represents the total sales of a store across all products. This is the preferred methodology.

****NIQ Sum of Product Category (NSPC)** is similar to ACV, but only with NIQ categories and products.

	Store in Universe	Store in Sample	ACV of the Store in Universe	ACV of the Store in Sample
Example	Store 1	x	100	100
	Store 2		200	
	Store 3	x	250	250
	Store 4		125	
	Store 5	x	185	185
Totals	5	3	860	535
Calculation	Numeric Expansion		Ratio Expansion	

$$5/3 = 1.66$$

$$860/535 = 1.60$$

What does this mean?

In this example the **Numeric Expansion** is **bigger** than the **Ratio** at 1.66 versus 1.60:

- **When the Numeric Expansion is bigger than the Ratio:** The sampled stores (on average) are bigger than stores in the universe. This means the sales in sample store are higher than the average, and we need to adjust to avoid overestimation.
- **When the Numeric Expansion is smaller than the Ratio:** The sampled stores (on average) are smaller than stores in the universe. This means sales in the sample store are lower than average, and we need to adjust to avoid underestimation.