TRIANGULATION FORECASTING

THE ART AND SCIENCE OF OBTAINING THE MOST RELIABLE REAL ESTATE FORECASTS

The unique approach from Forum Analytics that provides necessary context for real estate forecasting

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THE THREE SIDES OF THE TRIANGLE

REGRESSION

ANALOG ENGINE

TRIANGULATED FORECAST

LOCAL MARKET PERFORMANCE

In our modeling systems, Forum Analytics implements three different ways of looking at sales potential for a given location.

REGRESSION

Our team of data scientists works with statistical and machine learning methodologies to build and refine a strong scientific predictive engine. Because of the unique nature of real estate data, they do not rely strictly on machine learning to identify feature sets and weighting, but use multiple methods to identify the strongest predictors of future store success and to build a regression model that predicts sales.

ANALOG ENGINE

Made up of a set of demographics identified in consultation between the client and Forum Analytics, the analog engine is designed to identify a key set of "peer" stores, based on demographics and other store filters. We typically return 10 options, each rated for their "similarity" to the existing site. From there the analyst can use their knowledge of the chain to filter down to a sufficient set of peers.

LOCAL MARKET PERFORMANCE

Many markets have unique characteristics to understanding how a brand performs in a specific geographic area, versus how they might perform demographically. Sometimes local market performance can be due to brand presence in an area, other times it might be related to specific regional competitors or just regional preferences.

WHICH NUMBER SHOULD I USE?

The answer is, all of them! Brick-and-mortar sales forecasting is an imperfect science and predicting consumer choice requires flexible models like Forum's. It is also complicated by hidden factors, drivers of consumer choice that no computer or algorithm can see because they follow no consistent pattern in any data source. Consumers simply choose things for reasons that can not be easily modeled, even in today's world of big data and artificial intelligence.

Forum cuts through the hype to produce the most reliable combination of forecasting tools built with the perfect balance of machine learning and human interaction. Each of our three triangulation results is essential in helping you make the most informed, reliable decision possible for a brick and mortar asset. We call it, Critical Context, and only Forum solutions provide it.

Here's a brief look at each side of the triangle:

REGRESSION FORECASTING

This is the machine learning component of our solution. Multivariate linear and non-linear regression techniques are applied and processed through custom machine learning algorithms to identify the best predictors of your success. Then our formally-trained data scientists apply additional rational testing to the machine's results to ensure a modeling algorithm that is statistically sound, but practical and intuitive as well.

ANALOG ENGINE

The analog engine is commonly known as a "peer group" comparison. If the new site in question looks like many other existing locations, you may conclude the new site's performance is likely to be similar. Analog engines are not predictive, though they are often falsely represented as sales forecasting tools. They are not. However, what they are is critical to interpreting your regression-based sales forecast. The analog results in a Forum solution provide you a data-driven, objective set of existing locations that are highly like the proposed new ones being considered. This peer group is then summarized in real time to provide you that fact-based sniff test every real estate committee or board is going to demand. When the analog peer group results largely validate the purely machine-based regression model output, you have two validation data points. When they differ, our solution provides you the necessary details and context to rationalize and dig deeper to understand your next move.
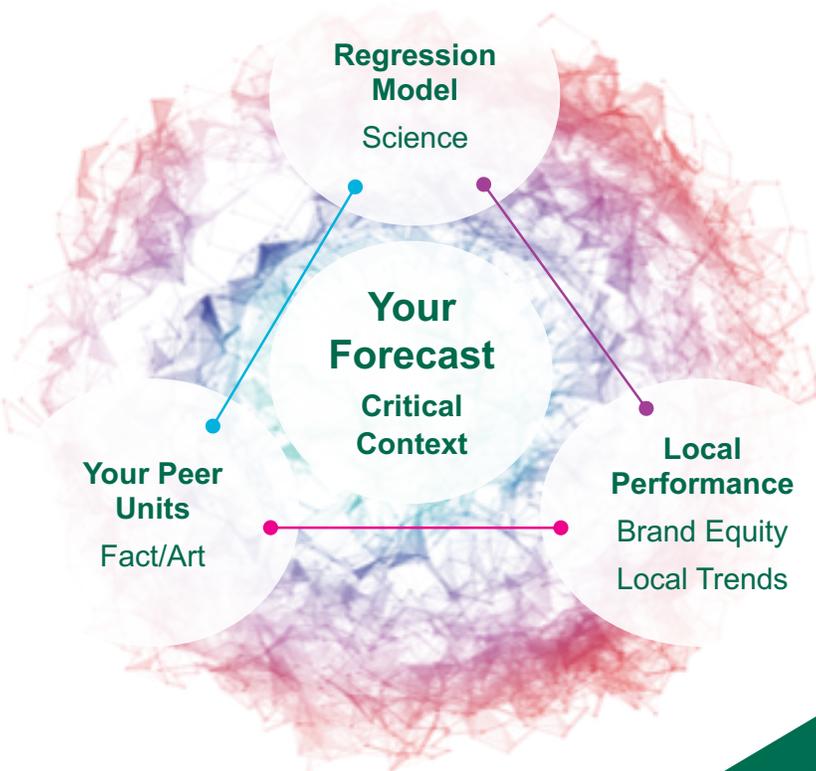
LOCAL MARKET PERFORMANCE

The last side of the triangle, and critical context data points, is the local market and your historical performance in it. Every brand has a home base where it was born, where it performs at the top of its game. However, brands need time to mature and grow outside of their home base. By utilizing local performance as our third data point, Forum can quantify the essence of brand awareness and non-local performance trends that can impact sales models and estimates. By adding it into the triangulated view of possibilities we afford you the complete picture of your market potential in a way no other vendor provides.

Ultimately the key to deciding which number to use is to ask a question:

WHICH OF THESE WAYS OF LOOKING AT THE DATA MIGHT BE MISSING OUT ON KEY INFORMATION?

Perhaps the regression model is aggressive because it is a new market, whereas the local market performance and analogs are more conservative and reflect the brand's state in the market. Or perhaps the local market performance is unreasonably aggressive based on the unique nature of nearby sites, and none of the analogs are operationally similar to the new location. In those instances, the regression alone is the way to go.

Our goal with the reports and the data we provide is always to give you the science, and the necessary context to evaluate that science. Our Triangulation Modeling approach turns data into powerful business insights to validate your instinct in real estate planning. Contact us today to start building your solution.

Regression Model
Science

Your Forecast
Critical Context

Your Peer Units
Fact/Art

Local Performance
Brand Equity
Local Trends

Bringing art and science together to guide decisions

VALIDATE YOUR INSTINCT WITH ADVANCED REAL ESTATE ANALYTICS.

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