

Predictive Modelling using SEM with SAS

Helping clients to assess Tenant Satisfaction

Problem Statement

The client was a building administration organization, which is managing a number of high rise buildings. Client noticed a significant drop in tenant satisfaction, followed by increasing number of vacating tenants, as a result.

In order to improve services and retain tenants, the client decided to use Research2Systems' services in order to get into the root of the problem.

Solution Approach

Since the number of variables that could affect tenant satisfaction was very large, further complicated by a high interrelationship existing among dependent variables. Hence, in order to determine the significant drivers for tenant satisfaction, we decided to use Structural Equation Modelling with the following steps:

- Exploratory Analysis (Correlation Check, Multiple Regression)
- Exploratory Factor Analysis and application of business knowledge
- Path Analysis using Structural Equation Modelling:
 - Model Identification
 - Model Fit – assessed on GFI, RMSEA and Chi Square
 - Estimation

The Output

- Individual models describing significant drivers of satisfaction, for each service category
- Model describing relation among dependent and Independent variables
- Fitted model describing the significant drivers of overall satisfaction (derived from individual category drivers)
- A detailed report describing the problem areas and the solution approach

Suggested Next Steps

- More exploratory analysis is required to further identify inter-linkages (latent) between variables
- Additional analysis of other non-rating questions would be a value addition