Today, leading companies are applying advanced predictive modeling to their vast and growing amounts of data to improve business performance via faster, better decision making.

Using predictive analytics for customer analytics and marketing analytics allows organizations to discover valuable insights and intelligence from their data—in doing so they uncover new opportunities to increase sales and profitability.

Market Basket Analysis is an advanced predictive model used to determine associations between items or events, and is one of many advanced models for use in Angoss KnowledgeSTUDIO™.

KnowledgeSTUDIO is a highly interactive data mining and predictive analytics workbench providing advanced predictive modeling capabilities such as linear and logistic regression, neural networks, scorecards and Market Basket Analysis. It delivers efficiency in all phases of model development from data import and profiling through to exploration, segmentation, modeling and deployment.

Market Basket Analysis ultimately results in a better understanding of your customers and their purchasing behavior, allowing you to explore associations, predict the likelihood of a customer response based on associations, and ultimately optimize your marketing and sales operations for results.

Market Basket Analysis

Market Basket Analysis is a strategic data mining and modeling technique for discovering associations between items and deriving rules that indicate the likelihood of items to occur together in groups of specific types. It also identifies items that are unlikely to occur together. This can be useful in designing marketing promotions or for anomaly detection.

Aside from discovering association rules, Market Basket Analysis helps you visualize the degree of attraction or repellence between items, view charts representing item associations, rank association rules and apply them to new data to produce recommendations.

Automatic generation of SQL code for association rules makes it possible to easily deploy them within database environments.
A typical Market Basket Analysis problem is to determine which products or product categories are likely to be purchased together. The resulting association rules can be used to build strategies around product promotions, product placement and cross-sell, among others.

Other potential applications of association rules include health sciences, fraud detection, and other areas where identifying patterns of events or behavior from transactional data is required.

Key Capabilities
Market Basket Analysis provides the following capabilities:

- Deriving association rules from historical data.
- Visualizing the degree of attraction or repellence between items.
- Graphical representation of the top items most strongly associated with a specific basket.
- Graphical representation of the rank of association rules with respect to their lift or confidence.
- Applying association rules to new data to produce recommendations.
- Automatic generation of SQL code for association rules.

Benefits
Market Basket Analysis empowers marketing and sales organizations to make better, informed decisions about how and where to deploy their efforts and resources. Moreso, strategic action plans can be developed and deployed that align resources around these insights to increase sales and profitability.

The primary objective of Market Basket Analysis is to improve the effectiveness of marketing and sales tactics using customer data collected during the sales transaction. It can also be used to optimize and facilitate business operations particularly with regards to inventory control and channel optimization.

Leading organizations are applying Market Basket Analysis modeling in the financial services, insurance, retail, health care and information communication and technology industries to deploy and improve:

- Cross-Sell / Upsell - Existing customers present an opportunity to grow revenues through cross-sell and upsell strategies.
- Product Promotions and Placement - Determine which products are most likely to be purchased together and develop highly effective product promotion and placement strategies.
- Next-Best Offer - Identify the products or services your customers are most likely to be interested in for their next purchase by applying Market Basket Analysis in an operational setting.
About Angoss Software

As a global leader in predictive analytics, Angoss helps businesses increase sales and profitability, and reduce risk. Angoss helps businesses discover valuable insight and intelligence from their data while providing clear and detailed recommendations on the best and most profitable opportunities to pursue to improve sales, marketing and risk performance.

Our suite of desktop, client-server and big data analytics software products and Cloud solutions make predictive analytics accessible and easy to use for technical and business users. Many of the world's leading organizations use Angoss software products and solutions to grow revenue, increase sales productivity and improve marketing effectiveness while reducing risk and cost.

Corporate Headquarters
111 George Street, Suite 200
Toronto, Ontario M5A 2N4
Canada
Tel: 416-593-1122
Fax: 416-593-5077

European Headquarters
Surrey Technology Centre
40 Occam Road
The Surrey Research Park
Guildford, Surrey GU2 7YG
Tel: +44 (0) 1483-685-770

www.angoss.com