Enterprise Computing Solutions - Education Services

TRAINING OFFERING

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Clustering and Association Modeling Using IBM SPSS Modeler (v18.1.1)

CODE:	LENGTH:	PRICE:
0A048G	8 Hours (1 day)	£650.00

Description

Clustering and Association Modeling Using IBM SPSS Modeler (v18.1.1) introduces modelers to two specific classes of modeling that are available in IBM SPSS Modeler: clustering and associations. Participants will explore various clustering techniques that are often employed in market segmentation studies. Participants will also explore how to create association models to find rules describing the relationships among a set of items, and how to create sequence models to find rules describing the relationships over time among a set of items.

Objectives

- Introduction to clustering and association modeling
- Clustering models and K-Means clustering
- Clustering using the Kohonen network
- Clustering using TwoStep clustering
- Use Apriori to generate association rules
- Use advanced options in Apriori
- Sequence detection
- Advanced Sequence detection
- Examine learning rate in Kohonen networks (Optional)
- Association using the Carma model (Optional)

Audience

Modelers, Analysts

Prerequisites

• Experience using IBM SPSS Modeler • A familiarity with the IBM SPSS Modeler environment: creating models, creating streams, reading in data files, and assessing data quality • A familiarity with handling missing data (including Type and Data Audit nodes), and basic data manipulation (including Derive and Select nodes)

Programme

1: Introduction to clustering and association modeling • Identify the association and clustering modeling techniques available in IBM SPSS Modeler • Explore the association and clustering modeling techniques available in IBM SPSS Modeler • Discuss when to use a particular technique on what type of data
2: Clustering models and K-Means clustering • Identify basic clustering models in IBM SPSS Modeler • Identify the basic characteristics of cluster analysis • Recognize cluster validation techniques • Understand K-Means clustering principles • Identify the configuration of the K-means node
3: Clustering using the Kohonen network • Identify the basic characteristics of the Kohonen network • Understand how to configure a Kohonen node • Model a Kohonen network
4: Clustering using TwoStep clustering • Identify the basic characteristics of TwoStep clustering • Identify the basic characteristics of TwoStep-AS clustering • Model and analyze a TwoStep clustering solution
5: Use Apriori to generate association rules • Identify three methods of generating association rules • Use the Apriori node to build a set of association rules • Interpret association rules

6: Use advanced options in Apriori • Identify association modeling terms and rules • Identify evaluation measures used in association modeling • Identify the capabilities of the Association Rules node • Model associations and generate rules using Apriori

7: Sequence detection • Explore sequence detection association models • Identify sequence detection methods • Examine the Sequence node • Interpret the sequence rules and add sequence predictions to steams

8: Advanced Sequence detection • Identify advanced sequence detection options used with the Sequence node • Perform in-depth sequence analysis • Identify the expert options in the Sequence node • Search for sequences in Web log data

A: Examine learning rate in Kohonen networks (Optional) • Understand how a Kohonen neural network learns

B: Association using the Carma model (Optional) • Review association rules • Identify the Carma model • Identify the Carma node • Model associations and generate rules using Carma

Session Dates

On request. Please <u>Contact Us</u>

Additional Information

This training is also available as onsite training. Please contact us to find out more.