



IFSA EDUCATIONAL SERIES TODAY'S TOPIC

Developing an AML Peer Model for Monitoring

Presented by: Geff Vitale AML Education Manager



geff.vitale@metavante.com

www.MetavanteRiskandCompliance.com

Topics to be Covered

INTERNATIONAL FINANCIAL SERVICES ASSOCIATION

IFSA

- What is Peering and why use it
- Basics of a Peer Model
- Tolerances for monitoring
- Determining attributes to group by
- Viability of groups
- Detecting Suspicious Activity

What is Peering, Why use it?

INTERNATIONAL FINANCIAL SERVICES ASSOCIATION

IFSA

Peering is the comparison of an individual or entity (customer) to a group of others that are the same (group).

- In Anti-Money Laundering Terms
 - Comparing the transactions of a customer with that of a group.
- Why?
 - Provides a method to gauge if a customer's activity is appropriate.
 - Provides a mechanism to view segments of the institution's customer base and their associated volume of transactions.



Metavante is now part of **FIS**.
Risk and Compliance Solutions

Basics of a Peer Model

INTERNATIONAL FINANCIAL SERVICES ASSOCIATION

IFSA

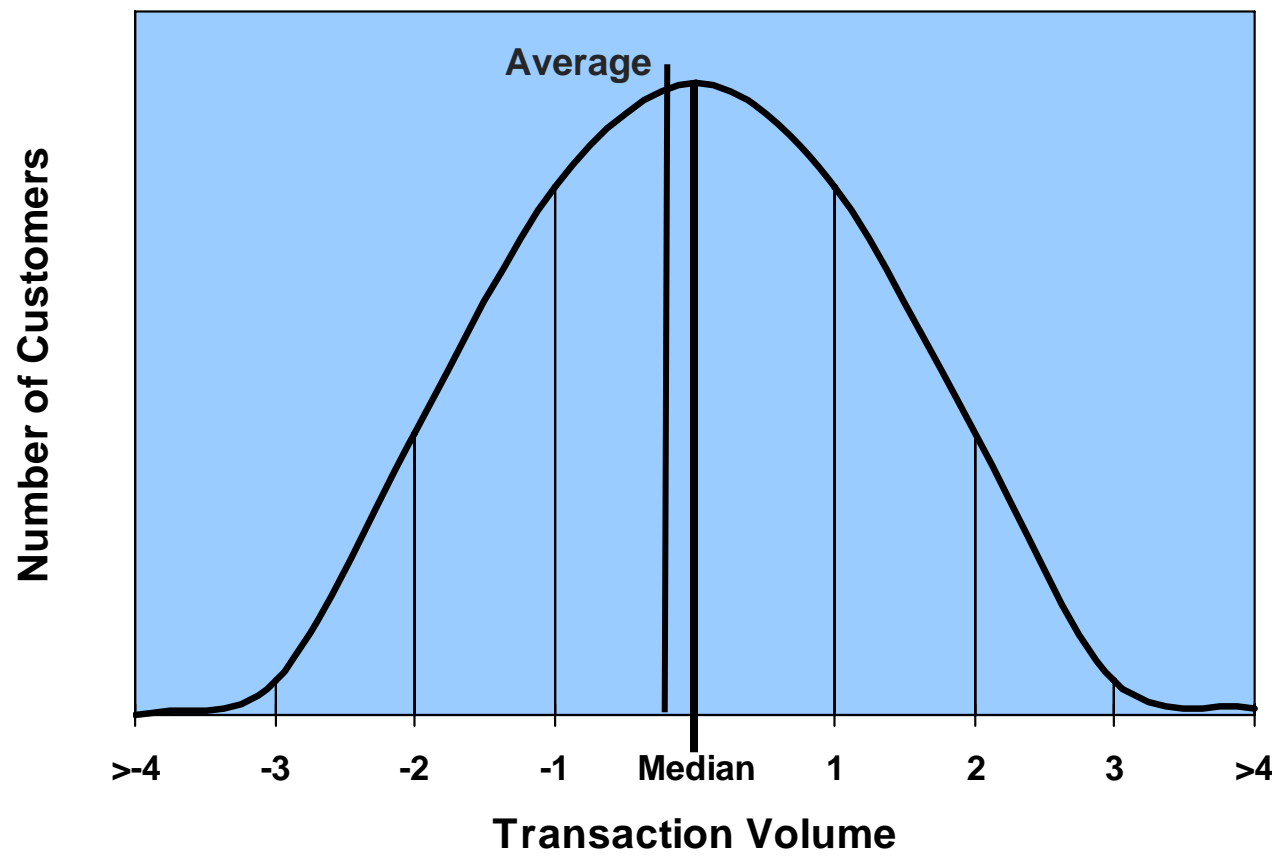
- Attributes
 - Key factors by which a group is defined
 - **Industry**
 - **Risk Class**
 - **Geography...**
 - **And Bucket**
- Average Amount, Median, Min Total Amount and Max Total Amount
 - Calculated for the group based on a monitoring period
 - **Weekly, Monthly or Quarterly**
 - Provides the basis for the monitoring
- Tolerance
 - Acceptable deviation from the group's norm
 - Represented in Standard Deviations from the Average

Basics of a Peer Model

INTERNATIONAL FINANCIAL SERVICES ASSOCIATION

IFSA

The Tolerance is the number of Standard Deviations from the Average



Basics of Statistics

INTERNATIONAL FINANCIAL SERVICES ASSOCIATION

IFSA

- A properly formed bell curve represents a homogeneous population
 - aka a normal distribution
- The Standard Deviation is the representation of how much each customer differs
 - The smaller the number for StDev the more each customer is alike
 - The larger the number, the bigger the difference between each customer
- In a homogeneous population, +/- 3 Standard Deviations represents about 99% of the population

Basics of Statistics

INTERNATIONAL FINANCIAL SERVICES ASSOCIATION

IFSA

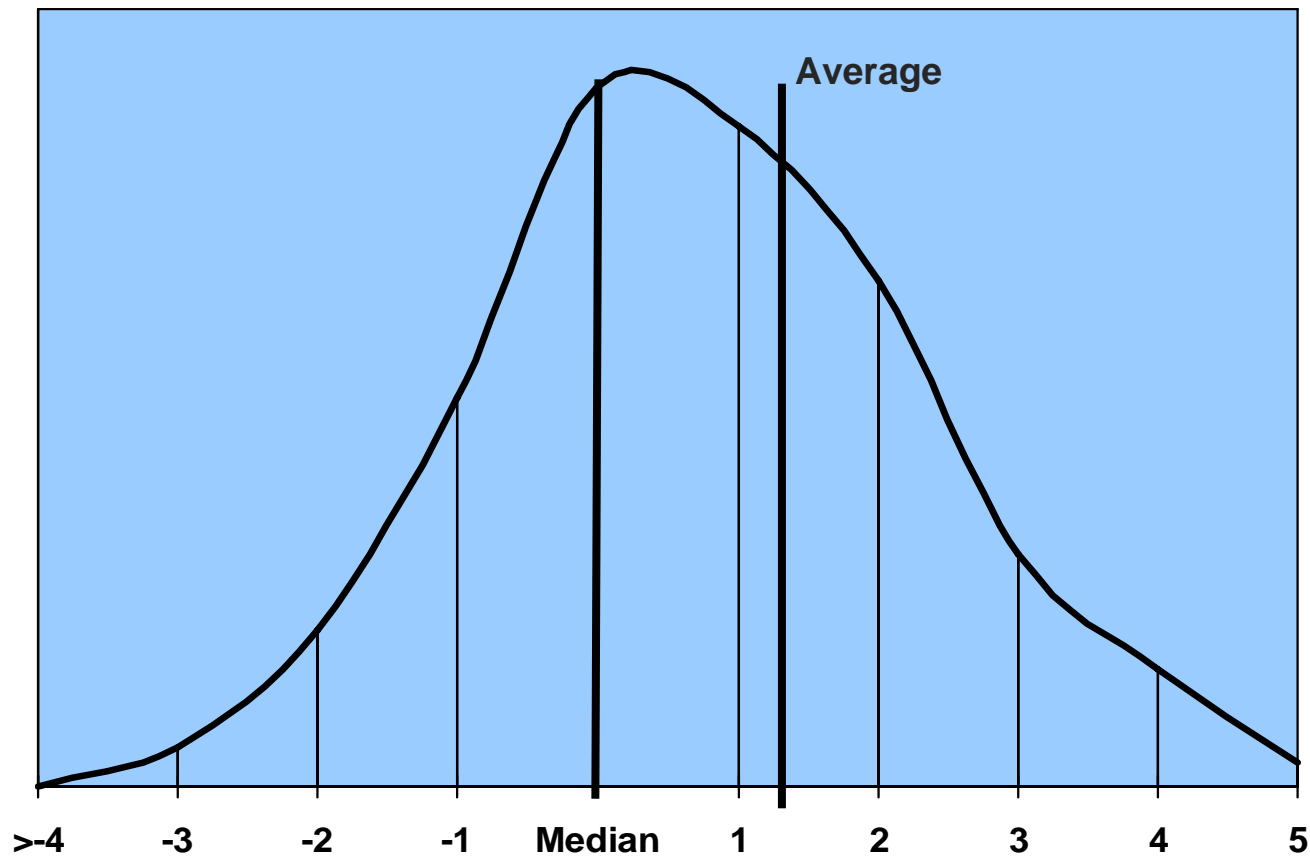
- Median is the number where half the values are lower and half are higher
 - 5,6,7,**8**,9,10,20 Median is 8
- Average is the sum of the values divided by the number of values
 - 5,6,7,8,9,10,20 Average is 9.3
 - Average is skewed by high or low values
- Rule of thumb
 - If the Median and the Average are close to each other, you have a homogeneous population
 - What is close?

Basics of a Peer Model

INTERNATIONAL FINANCIAL SERVICES ASSOCIATION

IFSA

Try to avoid bell curves that are too skewed



Tolerances for Monitoring

INTERNATIONAL FINANCIAL SERVICES ASSOCIATION

IFSA

- The tolerance is the number of standard deviations from the Average that encompasses the majority of the population.
 - Concept is to find those customers that exceed the norm for the group
 - Activity in excess of the tolerance is deemed suspicious
- Approximately 3 Standard Deviations is desirable
 - Skewing may increase or decrease by a fraction or more e.g. 3.3 StDev
 - StDev greater than 3 can be used to increase the threshold or to include the outliers
 - If the Average is greater than the Median, a smaller StDev may be used

Determining Attributes to Group By

INTERNATIONAL FINANCIAL SERVICES ASSOCIATION

IFSA

- Attributes are facts about the customer
 - Risk Class, Type of Business or Occupation
 - Or other factors that help create a homogeneous group
 - The strength of the group is only as good as the facts on file about the customer
- Required attribute is the volume of transactions based on the monitoring period
 - All customers must be put into an appropriate bucket
 - \$0 to \$50,000 per month
 - \$50,000.01 to \$75,000 per month
 - Etc
- Bucket size should be based on the desired grouping of customers
 - Customers should remain in a bucket until a move is justified

Determining Attributes to Group By

INTERNATIONAL FINANCIAL SERVICES ASSOCIATION

IFSA

Model for Fast Food Restaurants

–Type of Business

•**Volume of Transactions**

–**Based on past transactions**

Volume of Transactions per month (Bucket)	Number of Customers
\$0 to 50,000	45
\$50,001 to 100,000	90
\$100,001 to 150,000	40
\$150,000+	10

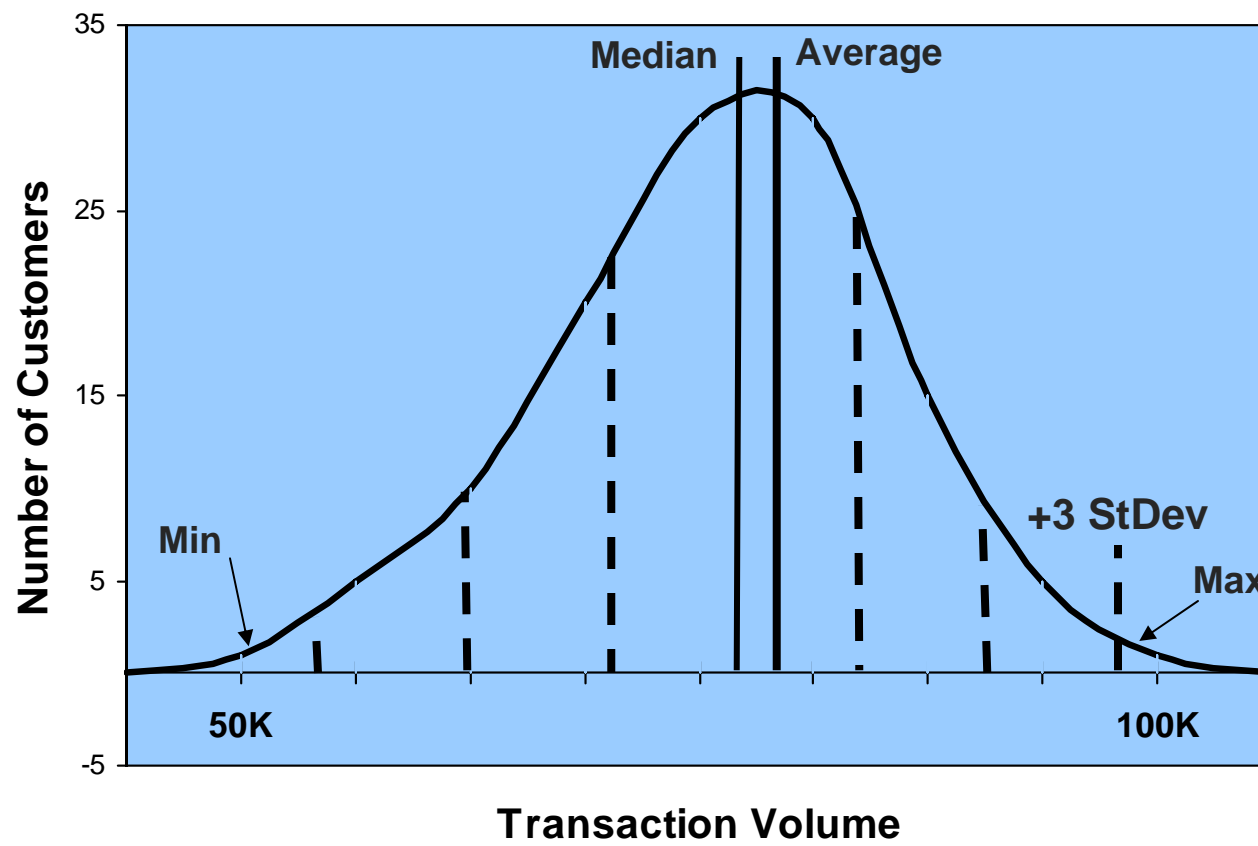
Bucket: \$50,001 to \$100,000	
Min Transaction Volume	\$50,374
Max Transaction Volume	\$98,649
Median	\$72,638
Average	\$76,826
Standard Deviation	\$7,900

Determining Attributes to Group By

INTERNATIONAL FINANCIAL SERVICES ASSOCIATION

IFSA

Plotting makes it easier to view the group



Viability of Groups

INTERNATIONAL FINANCIAL SERVICES ASSOCIATION

IFSA

- Groups need to have a significant number of customers for the statistics to be valid
 - 30 or more customers is desirable
 - If Median = Average, there may not be enough customers in the group
 - Aside from the numbers, the group should represent similar customers
- Don't get caught up in the analysis of statistics

Keep it simple - You aren't proving a hypothesis

Determining Suspicious Activity

INTERNATIONAL FINANCIAL SERVICES ASSOCIATION

IFSA

- The statistics for the group is based on past transactions
 - Last 12 months for example
 - Calculate the Average, Median, Max, Min and Standard Deviation
- Determine the total volume of transactions for the current period
 - Customer A did a total of \$160K in the month
 - More specific i.e. \$90K in Deposit and \$70K in Withdrawal
- Compare the customer's current volume to the group
 - $\text{Group Average} + \text{Tolerance} = \text{Threshold}$
- Customers that exceed the threshold are to be reviewed

Determining Suspicious Activity

INTERNATIONAL FINANCIAL SERVICES ASSOCIATION

IFSA

- Fast Food Restaurants
 - 12 Months Past Activity

Bucket: \$50,001 to \$100,000	
Min	\$50,374
Max	\$98,649
Median	\$72,638
Average	\$76,826
Standard Deviation	\$7,900
# of StDev	3
Threshold	\$100,526

Customer	Total Volume for Current Month
Burger Joint 1	\$56,147
Donut Shop 1	\$57,392
Pizza Place1	\$73,846
Burger Joint 2	\$83,742
Sandwich Shop 1	\$84,831
Donut Shop 2	\$94,732
Pizza Place 2	\$95,476
Burger Joint 3	\$103,953
Sandwich Shop 2	\$107,321
Pizza Place3	\$115,000

AML Peering Steps...

INTERNATIONAL FINANCIAL SERVICES ASSOCIATION

IFSA

- Group customers by one or more attributes
 - Always include the Volume of Transactions
- Size the buckets to the grouping
- Find the Median, Average, Min, Max and Standard Deviation
- Plot the curve
 - Easier to determine the group's viability
- Find the best number of Standard Deviations
 - 3+ should cover most of the population
- Compare past activity of the group to the customer's current period

Summary

INTERNATIONAL FINANCIAL SERVICES ASSOCIATION

IFSA

- Peering is the comparison of a customer's activity to that of a group of similar customers
- Keep the statistics simple
- Adjust volume of transaction buckets and number of standard deviations for each bucket
- Review customers who exceed the tolerance
- Move customers to new bucket if justified
- Look to FIS for guidance and solutions



QUESTIONS ??



INTERNATIONAL FINANCIAL SERVICES ASSOCIATION

IFSA

IFSA Educational Series

Sponsored
by

IFSA Service Partners Committee

The goal of the Service Partners Committee is to broaden the industry point of view regarding issues confronting the financial community. The Services Partners Committee will add its knowledge and expertise to offer solutions in partnership with the financial community





2010 IFSA Presentation Series Schedule

Webinar Date	Presenting IFSA Supplier	Webinar Date	Presenting IFSA Supplier
January 14		July 8	
February 11		August 12	
March 11		September 9	
April 8		October 14	
May 13		November 11	
June 10		December 9	<p style="text-align: center;">To Be Announced</p>



Geff Vitale:

- More than eight years of experience in the financial services industry.
- Expertise lies in a broad spectrum of areas, including workflow design, implementation, product usage evaluation, training program development, documentation development, and application design.
- Manages training for anti-money laundering, OFAC and the Prime Compliance Suite for FIS Risk and Compliance Solutions.
- Responsible for leading the development and delivery of training services to help financial institutions meet regulatory requirements for AML training.

Fidelity National Information Services (FIS) is the world's top-ranked technology provider to the banking industry. With more than 24,000 experts in 90 countries, FIS delivers the most comprehensive range of solutions for the broadest range of financial markets, all with a singular focus: helping you succeed. Every FIS solution has the strength you need for profitability today, and the power to help you manage whatever comes next.



About the IFSA

The International Financial Services Association (IFSA) is a not-for-profit trade association whose members are the world's largest international financial services organizations. At the current time the IFSA has over 165 Members and over 600 participating organizations headquartered around the world. The IFSA's focus is on international financial services, which includes trade services products such as documentary credits, funds transfer, treasury operations, compliance, regulatory reporting, etc. The IFSA membership represents over 98 percent of the letters of credit issued in the US as well as over 98 percent of the US funds transfer volume. In the 1920's, the IFSA created the first rules for the processing of letters of credit between banks. These rules were the model for the International Chamber of Commerce Uniform Customs and Practice for Documentary Credits.

The organization was founded in 1924 and has been in continuous existence since that time. The IFSA provides a forum for members to meet and discuss the various issues related to the financial services industry. The IFSA's primary functions are education, representing the membership to international bodies such as SWIFT and the ICC as well as the US regulatory bodies, and provide a community through which members can network. Much of the work of the organization is carried out by volunteers who participate on the organization's thirteen (13) technical committees. These committees represent the major disciplines of international financial services operations. Through these committees the organization establishes operating rules and procedures for financial services institutions and work with the global regulating bodies to provide input on laws and regulatory procedures/practices. For additional information log on to our website www.IFSAonline.org or contact the IFSA at Support@Intlbanking.org.