Analytics Training

Intro to Analytics

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Meet the Trainers:
ReSource Pro & SIGMA Actuarial Consulting Group

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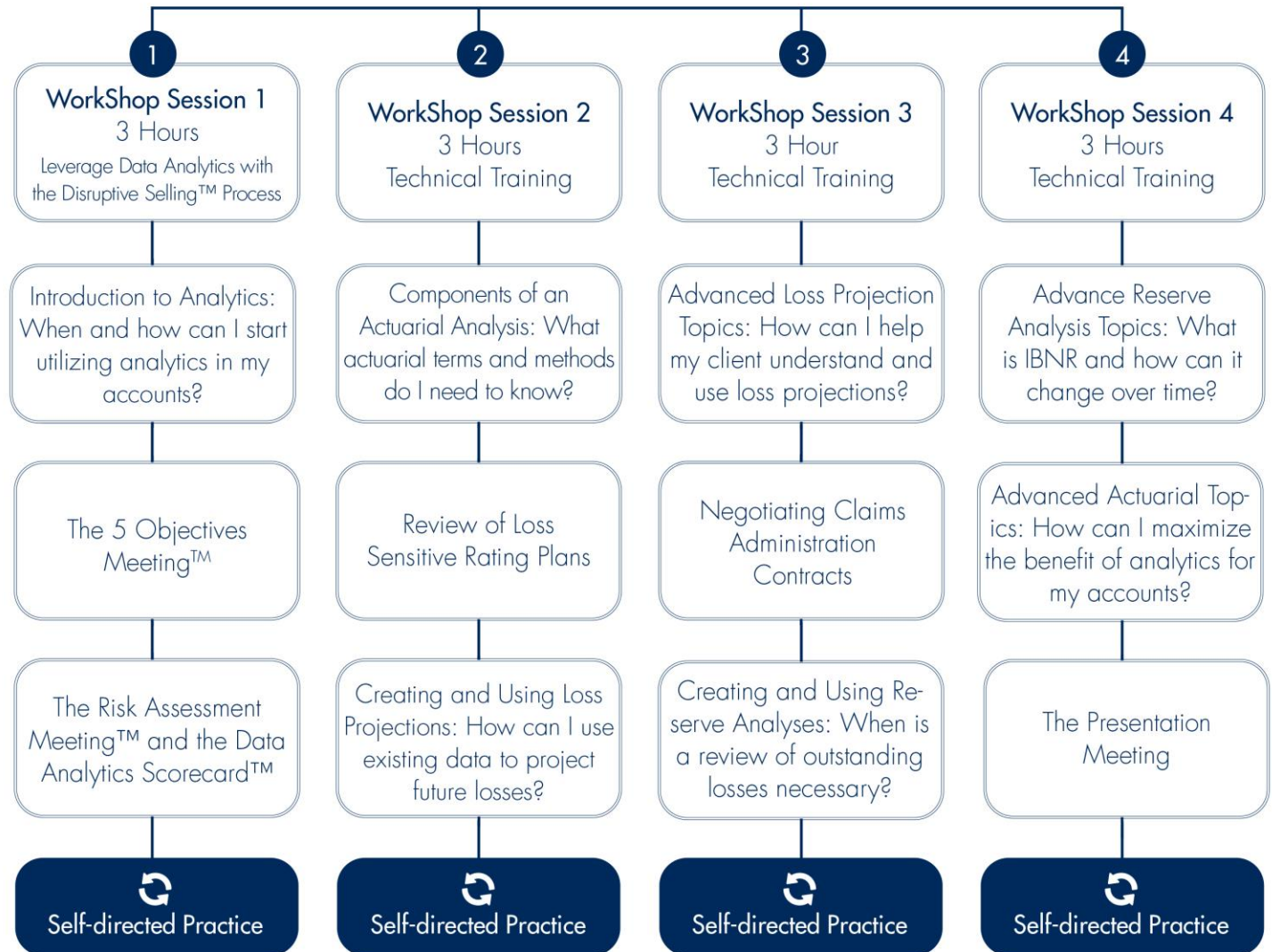SIGMA Actuarial Consulting

Frank Pennachio
Principal
ReSource Pro

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Introductions & Agenda

TRAINING

Addressing the Unique Needs of Large Sophisticated Accounts

1 — WorkShop Session 1
3 Hours
Leverage Data Analytics with the Disruptive Selling™ Process

2 — WorkShop Session 2
3 Hours
Technical Training

3 — WorkShop Session 3
3 Hour
Technical Training

4 — WorkShop Session 4
3 Hours
Technical Training

Session 1	Session 2	Session 3	Session 4
Introduction to Analytics: When and how can I start utilizing analytics in my accounts?	Components of an Actuarial Analysis: What actuarial terms and methods do I need to know?	Advanced Loss Projection Topics: How can I help my client understand and use loss projections?	Advance Reserve Analysis Topics: What is IBNR and how can it change over time?
The 5 Objectives Meeting™	Review of Loss Sensitive Rating Plans	Negotiating Claims Administration Contracts	Advanced Actuarial Topics: How can I maximize the benefit of analytics for my accounts?
The Risk Assessment Meeting™ and the Data Analytics Scorecard™	Creating and Using Loss Projections: How can I use existing data to project future losses?	Creating and Using Reserve Analyses: When is a review of outstanding losses necessary?	The Presentation Meeting
↻ Self-directed Practice	↻ Self-directed Practice	↻ Self-directed Practice	↻ Self-directed Practice

Training Series Overview

Our goal with this training program is to reinforce the necessity of analytics and show ways they can be used in relation to both pursuing and retaining clients.

We want you to feel comfortable enough with analytics to be able to confidently use them in your everyday work.

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Why are analytics needed?

Data sources are growing and becoming easier to access, meaning those who do not utilize them may be left behind.

More than ever, C-Suite executives require key decisions to be driven by analytics.

"Back of the napkin" calculations are no longer enough.

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Where do I start?

"Right fit" accounts typically have the requirements listed below as a minimum:

20-30 claims per year

3-5 years of loss history

$100,000 in annual premium

(approximately)

Keep in mind that these are the lowest amounts needed, and clients with more data will require increasing amounts of analytics.

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What data is needed?

Loss Data

Exposure Data

Premium Data

Program Information
(Retentions, structure, etc.)

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Obtaining Data

These data points will come from a variety of sources, so make sure you or your client understand what to ask for and where to obtain.

Above all
CONSISTENCY
Is key

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What analytics are needed?

Drill-down analytics

Benchmarking

Loss projections

Reserve analyses

Actuarial reporting

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Analytic need by size

Premium Level	Analytic Need

$500K and higher

SIGMA Analysis with Unique Triangles Recommended

SIGMA's actuarial studies provide estimates of both the expected losses and the confidence interval (a way to quantify the potential variability of losses), which are both necessary when selecting a retention level.

$250K to $100K

Loss Forecaster Recommended

For mid-size clients with sizable deductibles, but not necessarily a large volume of losses.

SIGMA Analysis Recommended

For clients with both a sizable deductible and a large volume of losses.

up to $100K

LORAN Recommended

At this size, the client's losses may be too low to maximize the benefit of an actuarial analysis, but LORAN could provide critical insight into the details of a client's loss history. Note, an actuarial analysis may still be required for regulatory or financial statement purposes.

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LORAN

Used as a starting point to drive discussion in conjunction with other options

Sample Client

Loss Reduction - Body Part

Back, a specific **Body Part**, has a large enough number of claims that it is worthy of further evaluation. **Back** will be broken down by other categories to give more insight on its claims.

Summary of Back	
Total Claims:	870
Total Losses:	$16,106,194

Breakdown by Cause of Loss

	Lifting	Fall Slip Trip	Vehicle Collision	Straining	Other
Claims:	264	134	117	88	267
Loss:	$5,134,641	$4,816,503	$1,993,600	$1,251,678	$2,909,772

Breakdown by Location

	CA	MO	NC	IL	GA	Other
Claims:	126	26	30	32	35	621
Loss:	$2,947,962	$1,168,331	$1,079,353	$933,437	$861,508	$9,115,603

Breakdown by Job Title

	Retail Associate	Supply Chain	Sales Manager	Other
Claims:	581	194	42	53
Loss:	$11,689,458	$2,876,671	$856,186	$683,878

LORAN: Loss Run Analysis
Prepared on 4/20/2020 11:23 am
By Admin User, SIGMA Actuarial Consulting Group
Title: Sample WC Loss Run
No warranty or representation is made as to the accuracy or appropriateness of the data contained herein. The data contained herein should not be relied upon as accurate until such time as it has been reviewed and certified by an accredited actuary. This analysis is for discussion purposes only and should not be used for budgeting purposes.

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App Version: 2020.02.19.2

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Communication

These suggestions can help serve as a guideline.

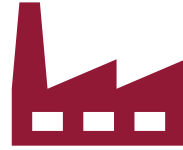Above all, communication with the client will drive your analytic pursuits.
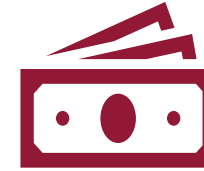
Case Study 1 – ABC Corporation

Prospective Client

Construction Industry

Primary line of work involves refrigeration needs for large scale factories

$500,000 Average Annual WC Losses

$1M - $1.5M in Annual Premium

Case Study 1 - ABC Corporation

Currently under SIR program

Interested in evaluating other risk transfer/finance possibilities

Relatively sophisticated in terms of data retention and organization

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Case Study 1 - ABC Corporation

Recently implemented improved safety procedures are reducing losses, but carrier is slow to recognize

Need ways to show this improvement analytically

This type of client cannot be obtained without analytic knowledge and confidence

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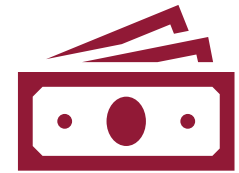**SIGMA** ACTUARIAL CONSULTING GROUP, INC.

Case Study 2 – XYZ, Inc.

Current Client

Retail Industry

Primarily sells outdoor equipment in locations across Kentucky

$50,000 - $100,000 Average Annual WC Losses

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Case Study 2 – XYZ, Inc.

▌Currently under GC program

Interested in pursuing ways to reduce their insurance costs

This may include discussions on collateral

▌Unsophisticated in terms of data retention and organization

Payroll audit

Mod

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Case Study 2 – XYZ, Inc.

If losses continue in current fashion and costs keep rising, likely to lose client as they pursue other brokers capable of making more convincing, analytic arguments on their behalf.

Clients such as this are at risk of being lost without analytic knowledge and confidence.

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Conclusion
Reviewing Losses

Retain and review loss data over time

Compare results over similar timeframes

Quarterly

Annually

Provide insights into potential trends that may otherwise be missed

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Conclusion
Benchmarking

What comparisons are available?

Mods

Loss Development

Class Codes

How to implement/analyze?

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Conclusion
Comparing Outcomes

Frequency Trends

Severity Trends

How to drill deeper and determine root cause?

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Next Session:
The 5 Objectives Meeting

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