Today’s Host

MAC D. NADEL
National Retail/Wholesale, Food & Beverage Industry Practice Leader
Marsh

• Experience spanning a range of additional industries including both risk management and middle market clients.
• Speaker at various industry risk management conferences.
• Named “power broker” by Risk and Insurance magazine.
Today’s Panelists

Dena Abdallah
Director,
Risk Management
US Foods

- Over 22 years experience in the claims management industry.
- Manages the oversight of all claim related activities.
- Serves as a knowledge leader, working with US Foods’s functional areas to identify and minimize claims losses while managing the loss portfolio associated with employee safety, workers compensation, general, auto and product liability.

Joseph Lee
Executive Director,
Global Retail, Food & Beverage Leader
Marsh ClearSight

- More than 14 years of experience with Marsh ClearSight (formerly STARS) in various client facing roles.
- Manages global operations in addition to industry practice leadership.
- Thought leader in RMIS technology and its application to global organizations.
- Featured speaker at RIMS and IASIS on emerging risks in technology transformation.
Today’s Panelists

Steven Jones
Senior Vice President
Marsh Global Analytics

• 15+ years experience assisting clients plan, deliver and manage information management, data warehouse, business intelligence and analytics programs.
• Responsible for communicating Marsh’s analytics capabilities externally.
• Works with clients to define goals, requirements and help facilitate the execution of the analytics process.

Jenny Nelson
Vice President and Principal Account Executive
Marsh ClearSight

• 10 years of experience with Marsh ClearSight (formerly STARS) in various client facing roles.
• Responsible for the overall relationship of her clients.
• Serves as an escalation and solution point, advocates for her clients, and works closely and collaboratively with Service and Product Teams to meet client goals.
Today’s Agenda

• The Evolving Role of the Risk Manager
  Joseph Lee (Marsh ClearSight)

• Managing the Mountain of Data
  Dena Abdallah (US Foods) and Jenny Nelson (Marsh ClearSight)

• The Application of Business Analytics
  Steven Jones (Marsh Global Analytics)

• Real-Life Examples
  Dena Abdallah (US Foods) and Jenny Nelson (Marsh ClearSight)

• Questions & Conclusion
POLL QUESTION #1

• How strategic do you believe your organization considers the Risk Management role?
  – Very ... we are engaged across the enterprise and provide appropriate input to the C-Suite for decision making.
  – Somewhat ... we have some limited partnerships and strategic input within the company, but still are too often an “afterthought” in our operations.
  – Not there yet ... we’ve got some work to do to elevate our relevance and be viewed as more than just the purchasers of insurance for the company.
The Evolving Role of the Risk Manager

- Growing role in an evolving industry.
- Rise of technology.
- Growth of ERM.
The Evolving Role of the Risk Manager

Growing role in an evolving industry

- Increasing scope and responsibilities.
- Much more strategic role.
- Enabler for controlled, strategic growth.
- Educator to non-risk management colleagues.
The Evolving Role of the Risk Manager

Rise of Technology

- Availability of data.
- New real-time tools and analytics.
- Emerging risks.
The Evolving Role of the Risk Manager

Growth of Enterprise Risk Management

- The strategic risk manager.
- The functional group peacekeeper.
- Questioning the status quo.
How To Drive Actionable Intelligence on the Big Data Journey

POLL QUESTION #2

• How would you characterize the type and value of your risk management data?

  – Data Rich ... we efficiently collect our data from multiple sources and use it as a decision support tool for our risk management program.

  – The Basics ... we mostly use our data to manage and keep track of claims and losses.

  – Overwhelming ... we get lots of data from lots of feeds and inputs, but are probably only scratching the surface in how we leverage it.
Managing the Ever-Growing Mountain of Data

• TPA/Carrier: claim information, financials, adjuster notes.

• Safety/OSHA: incidents, OSHA severity.

• Legal systems: claim legal payment data.

• HR system: employee details.

• Fleet system: first party auto, vehicle information.

• Broker feed: policies, values, claims.
Next Steps in Utilizing The Data

• Aggregate key data elements.

• Validate data – checks and balances to ensure accuracy.

• Understand what is meaningful for your organization.

• Design reports to look at KPIs.

• Identify critical trends.

• Implement risk mitigation programs.
How To Drive Actionable Intelligence on the Big Data Journey

POLL QUESTION #3

• Gee, I’d really like us to be able to use our own and industry data to (pick your top choice):
  
  – Help make informed decisions on how to best quantify and treat specific risks.
  
  – Quantitatively understand our company’s ability to bear risk.
  
  – Help inform the overall business strategy of my company.
  
  – Allow us to “optimize” our insurance program (get the best “bang for the buck”).
The Application of Business Analytics

Excellence in Risk Management Survey Findings
Use of Data and Analytics

2013
74%
said their organizations need to conduct deeper analysis on their risk-related data.

2015
44%
said that their senior leaders were aligned regarding the analytics needed to make key risk decisions.
2015 *Excellence in Risk Management* Survey

Investments in Data & Analytics

**FIGURE 2  Investment in Risk Management**

**PLEASE INDICATE THE CHANGES, IF ANY, TO THE LEVEL OF INVESTMENT IN THE FOLLOWING OVER THE NEXT TWO YEARS:**

- **Training others in organization on risk management issues/practices:**
  - Remain flat: 51%
  - Increase: 47%
  - Decrease: 2%

- **Risk analytics:**
  - Remain flat: 57%
  - Increase: 42%
  - Decrease: 1%

- **Risk management staff training:**
  - Remain flat: 61%
  - Increase: 37%
  - Decrease: 3%

- **Risk management software:**
  - Remain flat: 70%
  - Increase: 27%
  - Decrease: 3%

- **Risk management staffing levels:**
  - Remain flat: 70%
  - Increase: 25%
  - Decrease: 5%

- **Risk management consulting services:**
  - Remain flat: 78%
  - Increase: 19%
  - Decrease: 3%
### 2015 Excellence in Risk Management Survey

#### Use of Data and Analytics

**MY ORGANIZATION WOULD BENEFIT BY IMPROVING ITS USE OF DATA AND ANALYTICS IN THE FOLLOWING AREAS***

<table>
<thead>
<tr>
<th>Area</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quantifying risk</td>
<td>39%</td>
</tr>
<tr>
<td>Identifying risk</td>
<td>34%</td>
</tr>
<tr>
<td>Risk reporting to the board and other stakeholders</td>
<td>30%</td>
</tr>
<tr>
<td>Understanding risk tolerance</td>
<td>28%</td>
</tr>
<tr>
<td>Understanding organization's risk-bearing capacity</td>
<td>27%</td>
</tr>
<tr>
<td>Developing risk action plans</td>
<td>27%</td>
</tr>
<tr>
<td>Optimizing risk financing and insurance programs</td>
<td>26%</td>
</tr>
<tr>
<td>Informing and supporting strategic risk decisions</td>
<td>25%</td>
</tr>
<tr>
<td>Informing decisions on specific risks</td>
<td>24%</td>
</tr>
<tr>
<td>Identifying supply chain vulnerabilities</td>
<td>15%</td>
</tr>
<tr>
<td>Other (please specify)</td>
<td>3%</td>
</tr>
</tbody>
</table>

*Respondents were allowed to choose three from the list.
Key Questions for Risk Management
Big Data and Analytics Can Help Answer

1. How much risk can the company tolerate?
   • What are the company’s sources of capital and how do you prefer to deploy those resources to deal with unexpected losses?

2. Is the company adequately protected against risk?
   • Are the company’s limits and deductibles appropriate?
   • Does the insurance structure reflect corporate risk tolerance?

3. Is your insurance an efficient use of the company’s capital?
   • Cost of retaining risk vs. cost of transferring risk (premium)?
   • Whose capital is cheaper, the company’s or the insurance carrier’s?

Applying a Decision Framework to Reduce Costs
Marsh Analytics Evolution
Increased Decision Support

- **Stochastic Modeling (iMAP)**
  - Loss Distributions
  - Risk Tolerance
  - LOB or Enterprisewide Perspective
  - On Retained Loss Positions

- **Deterministic Modeling**
  - Structure Analysis
  - Carrier Level Sophistication Around Experience and Exposure Rating
  - Predictive Pricing

- **Benchmarking**
  - Limit, Retention and Pricing Comparatives

- **ACTUARIAL POINT ESTIMATES**

- **iMAP**

**BENCHMARKING**
Define your Corporate Risk Tolerance
Three Perspectives

### Earnings Miss
The Equity Holders’ View
- Estimates the volatility built into earnings estimates.
- Arrives at an earnings miss that might cause a drop in share value.
- Typically discounts intangible assets.

### Private Equity
The Investors’ View
- Desire to minimize purchase price adjustments.
- Emphasis on allowable % of TVPI.
- Flexibility around timing of earnings misses.
- Holding period longer than typical public company investor.

### Key Performance Indicators (KPIs)
Qualitative View
- KPIs are selected from:
  - Balance sheet.
  - Income statement.
  - Access to other funds.
- Flexibility allows for reflection of company culture.
- Appropriate for private companies.
Exploring Loss Potential
Client and Proprietary Loss Data Library

Is your company adequately protected against risk?

Key Inputs:
1. Inclusion of Company individual loss data
2. Use of proprietary Marsh Global Loss Data Library
3. Additional scenario engineering for hard-to-measure loss events

Potential Considerations:
- **Auto Liability**
  - Number and Type of Vehicles
  - Miles Driven
- **Product Liability**
  - Products & Classes
  - Consumer Usage
  - Market Share & Revenue
  - Geographies
  - Damage / Liability assumptions

Potential Considerations for Property:
- Property Locations and TIVs
- Content Valuations (e.g., boiler machinery and inventories)
- COPE & Secondary Modifiers
- Catastrophe Exposure
- AOP Damage and Propensity Curves
- Mitigation investments

Graph showing retained, insured, and uninsured loss potential.
Is your insurance an efficient use of the company’s capital?

Total vs. Economic Cost of Risk

- Total Cost of Risk (TCOR)
- Economic Cost of Risk (ECOR)

TCOR

- Insurance is a cost
- No Insurance
- Current Program
- Option A
- Option B

ECOR

- Value Creation
- No Insurance
- Current Program
- Option A
- Option B

Expected Loss

Premium

IRC

Optimized Program
Assessing “Economic” Cost of Risk and Alternatives
Evaluating Efficiency of Your Insurance

Consider a Risk Financing Optimization as a trade-off analysis between retaining risk on your company’s balance sheet as compared to paying to transfer the risk to the insurance carrier.

<table>
<thead>
<tr>
<th>Key Statistics</th>
<th>Before Insurance</th>
<th>Retained After Insurance</th>
<th>(Cost) / Benefit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average Annual Losses</td>
<td>4,506,858</td>
<td>3,780,731</td>
<td>726,127</td>
</tr>
<tr>
<td>Standard Deviation</td>
<td>23,875,866</td>
<td>13,111,817</td>
<td></td>
</tr>
<tr>
<td>Coefficient of Variation</td>
<td>5.30</td>
<td>3.40</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>1 in 1.33 Years</th>
<th>25% Perc</th>
<th>0</th>
<th>3,020,342</th>
<th>-3,020,342</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 in 2 Years</td>
<td>50% Perc</td>
<td>0</td>
<td>3,020,342</td>
<td>-3,020,342</td>
</tr>
<tr>
<td>1 in 4 Years</td>
<td>75% Perc</td>
<td>0</td>
<td>3,020,342</td>
<td>-3,020,342</td>
</tr>
<tr>
<td>1 in 10 Years</td>
<td>90% Perc</td>
<td>1,619,223</td>
<td>3,270,342</td>
<td>-1,651,119</td>
</tr>
<tr>
<td>1 in 100 Years</td>
<td>99% Perc</td>
<td>85,679,570</td>
<td>3,520,342</td>
<td>82,159,228</td>
</tr>
<tr>
<td>1 in 250 Years</td>
<td>99.6% Perc</td>
<td>151,915,728</td>
<td>34,936,070</td>
<td>116,979,658</td>
</tr>
</tbody>
</table>

**Insurance looks like only a cost when you don’t have losses**

Insurance begins to pay off

Substantial benefit, multiples of premium paid

**Economic Cost of Risk (ECOR)**

<table>
<thead>
<tr>
<th>Sign</th>
<th>Components</th>
<th>No Insurance</th>
<th>Current Program</th>
<th>Option 1</th>
<th>Option 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>+</td>
<td>Discounted Average Retained Losses</td>
<td>4,146,309</td>
<td>3,402,658</td>
<td>3,814,605</td>
<td>3,938,994</td>
</tr>
<tr>
<td>+</td>
<td>Premium</td>
<td>-</td>
<td>3,020,342</td>
<td>2,416,274</td>
<td>2,265,257</td>
</tr>
<tr>
<td>+</td>
<td>Implied Risk Charge</td>
<td>1,036,577</td>
<td>510,399</td>
<td>572,191</td>
<td>669,629</td>
</tr>
<tr>
<td>+</td>
<td>Collateral and Other Admin Costs</td>
<td>110,000</td>
<td>45,000</td>
<td>57,000</td>
<td>70,000</td>
</tr>
<tr>
<td>=</td>
<td>Economic Cost of Risk</td>
<td>5,292,887</td>
<td>6,978,399</td>
<td>6,860,069</td>
<td>6,943,879</td>
</tr>
</tbody>
</table>
Real-life Examples

US Foods - Chargeback System

• PIP (Premium Incentive Plan) is our chargeback system.
  – Lost-time work injuries.
  – Lost time days.
  – Vehicle accidents.
  – Lag reporting.

• Our actuaries have access to Enterprise.

• All claim data except for lost time days is pulled directly from Enterprise.

• The reports our actuaries create for the individual divisions use the claim data in Enterprise.

• Also use the claim data in Enterprise to calculate future PIP targets.
Real-life Examples

US Foods – Lowering Costs

- How did we know what to look for?
- Slicing and dicing the information.
- Claim costs going up.
  - How do you know why or where?
  - Specific division?
  - Regional?
  - Specific job/occupation?
  - Age group?
  - Injury type?
  - Body part?
- Take that data and use it to improve our numbers.
Real-life Examples

US Foods – Reaching Company Goals

• Implemented US Foods stretching program.
  – Soft tissue injuries.
    o Sprains and strains.
  – Implemented stretching program in divisions.
  – Monitored frequency of soft tissue claims.

• Results …
  – 10% reduction in sprain/strain claims.
  – $565,000 savings.
Real-life Examples

US Foods – State Your Case

• Average age of driver.
• Average age of picker.
• Average age of employee.
• How much are they lifting on a daily basis.
• What does that represent.
• Make an impact statement to your local management teams.
Real-life Examples

The Industrial Athlete - US Foods Associate

- The typical selector can lift upwards of 30,000 lbs per shift. That’s the equivalent of lifting two killer whales every night.

- The typical selector lifts the equivalent of one Ford F150 truck every hour.

- On a single trip, the typical USF delivery driver will lift the equivalent of 16,000 lbs. That’s the equivalent of a team of Budweiser Clydesdales.
Real-life Examples

US Foods – Workers Compensation Claims Make-up

- 60% of our drivers are over 40 years old.
- 21% of our drivers are over 50 years old.
- 36% of our warehouse workers are over 40 years old.
- 12% of our warehouse workers are over 50 years old.
- 58% of our hourly workforce is drivers, 42% non-drivers.
- 55% of our claims are drivers.
- 42% of our claim counts are sprain/strain accounting for 45% of the dollars.
- Pushing and pulling is the number one detail cause.
- Lifting is the number two detail cause.
- 19% of our claim counts are slip/fall accounting for 22% of the dollars.
- Slip & falls from the same level is the number one detail cause.
- Slip & falls from different level is the number two detail cause.
- 12 divisions account for 70% of the lost work days.
Thank you!

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