MERCER WEBCAST

PREDICTIVE ANALYTICS
How analytics can drive business success

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Today’s presenters

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Agenda
What we will cover today

• Strategic rationale and the analytics journey
  – What is driving the need for analytics?

• Foundational analytics
  – How do I get started?

• Advanced analytics
  – How do I get predictive?
    – RetailCo

• Lessons Learned

• Q&A
STRATEGIC RATIONALE AND THE ANALYTICS JOURNEY
What is driving the need for analytics?
HR Is Asking New Questions

What is the role of A Workforce Analytics and Planning Center of Expertise within the Next Gen HR service delivery model?

How do analytics and planning support a company’s people strategy?

How do I transition my HR organization to a “Next Gen” analytics delivery model?
Human capital risk, employability and mobility was the number one critical issue at the WEF annual meeting in Davos

“The world is moving from capitalism to talentism”

— Klaus Schwab, Founder & Executive Chairman of World Economic Forum
Big Data for HR – Why Does It Matter?
Leading HR Functions Are Leveraging Extensive Data in Their Systems, As Executives Are Demanding Insights

Meet the New Boss: Big Data
Companies Trade In Hunch-Based Hiring for Computer Modeling
–The Wall Street Journal

Big Data Upends the Way Workers Are Paid
–The Wall Street Journal
Challenging Aspects of “Big Data”

Variety

Data in Different Forms

Volume

Data at Rest

Veracity

Data in Doubt

Velocity

Data in Motion

Source: IBM Whitepapers; 451 whitepapers, and Innosight Analysis.
Your Analytics Journey
FOUNDATIONAL ANALYTICS
How Do I Get Started?
Visualize Your Workforce: Internal Labor Market (ILM®) Map

<table>
<thead>
<tr>
<th>CAREER LEVEL</th>
<th>HIRES</th>
<th>Total Employees</th>
<th>Promotions</th>
<th>Lateral moves</th>
<th>EXITS</th>
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<tbody>
<tr>
<td>6</td>
<td>20</td>
<td>195</td>
<td>26 (11.8%)</td>
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<td>5</td>
<td>52</td>
<td>273</td>
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<td>4</td>
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<td></td>
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<td>(21.1%)</td>
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<tr>
<td>2</td>
<td>299</td>
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<td>39 (12.0%)</td>
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<td></td>
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<td>(29.9%)</td>
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<td>(23.9%)</td>
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<td>1</td>
<td>65</td>
<td>338</td>
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<td></td>
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<td>(19.2%)</td>
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<td>(12.5%)</td>
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Analyze an Internal Labor Market (ILM®) Map

**CAREER LEVEL**

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<tr>
<th>Level</th>
<th>HIRES</th>
<th>EXITs</th>
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<td>22</td>
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<tr>
<td>1</td>
<td>65</td>
<td>39</td>
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</tbody>
</table>

**Total Employees**

- 195 per 100 employees
- 20 per 100 employees
- 52 per 100 employees
- 91 per 100 employees
- 442 per 100 employees
- 299 per 100 employees
- 65 per 100 employees

**Promotions**

- 26 per 100 employees
- 78 per 100 employees
- 117 per 100 employees
- 169 per 100 employees

**Lateral Moves**

- 18 per 100 employees
- 23 per 100 employees
- 23 per 100 employees
- 39 per 100 employees

**Outside hires are usurping career opportunities**

**High potential employees are giving up**
Internal Labor Market (ILM®) Map
Build Hypotheses in Response to Key Questions

- To what extent is the organization buying or building talent? Is the reality aligned with the stated sourcing strategy?
- Even if the organization is oriented to building talent, is there sufficient velocity in the system to motivate employees?
- Where are the career choke points? Are they as expected? What are the associated risks?
- Are there focal points of entry or exit, and do they reveal areas of concern?
- What is the “production” or “decision making” model? The ILM Map’s shape can point to differences.

Generally, an ILM map cannot tell you details about who is progressing or why employees are leaving – it is the start of a more significant conversation about how an organization manages its talent.
Buy vs. Build
Look At Patterns of Entry and Promotion Throughout The Hierarchy

BUILD
- Limited hiring at middle and upper levels
- Most entry points are at lower levels—limits touch points with the market
- Focus on promotion to feed upper levels from within
- Diffuse exit points

BUY
- Diffuse entry and exit points
- Significant number of hires at middle and upper levels
- Tend to see more hires than promotions
- Many touch points with the market

HIRES
EXITS
HIRES
EXITS
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HIRES
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HIRES
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HIRES
EXITS
Projections Based on ILM Maps Can Be Used for Workforce Planning
In This Case, Focused on Diversity

This organization needs to focus on a combination of interventions to expeditiously achieve its objectives.

*Disguised case example*
ADVANCED ANALYTICS
How Do I Get Predictive?
Statistical Modeling Gets to Cause and Effect

The key is to analyze multiple variables, then focus only on those that directly impact the bottom line.

1. CORRELATION
The factors are related

2. TIME (Directionality)
One precedes the other

3. ISOLATION (Controls)
Other factors are ruled out

Three steps are required to show causality
How Does the Workforce Impact Store Revenue and Profitability?
RetailCo: Statistical Analyses Focused on Three Broad Categories of Drivers of Both Turnover and Sales

<table>
<thead>
<tr>
<th><strong>External Influences</strong></th>
<th><strong>Organizational Practices</strong></th>
<th><strong>Individual Attributes</strong></th>
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</thead>
<tbody>
<tr>
<td>• Local unemployment rates</td>
<td>• Size</td>
<td>• Age</td>
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<td>• Distance to work</td>
<td>• Supervisor spans of control</td>
<td>• Gender</td>
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<tr>
<td>• Local labor pool (diversity, education, age, income)</td>
<td>• Promotion rates</td>
<td>• Ethnicity</td>
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<td>• Turnover rates</td>
<td>• Tenure</td>
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<tr>
<td></td>
<td>• Age</td>
<td>• Performance ratings</td>
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<td>• Tenure</td>
<td>• Compensation</td>
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<td>• Job status</td>
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<td>• Participation in training</td>
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<td>• Internal mobility</td>
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<td>• Employment status</td>
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<td></td>
<td></td>
<td>• Hire source</td>
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<td></td>
<td></td>
<td>• Location</td>
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<tr>
<td></td>
<td></td>
<td>• Diversity</td>
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<tr>
<td></td>
<td></td>
<td>• Prior year’s sales trends</td>
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<td></td>
<td></td>
<td>• Supervisor promotion rates, turnover rates, age, tenure</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Non-supervisor promotion rates, turnover rates, age, tenure</td>
</tr>
</tbody>
</table>
RetailCo: Many Factors Play a Role in Retention Including Pay, Overtime and Training

- 3% Pay Raise vs. 1.5% Raise
- 10 Hours of OT vs. 0
- First-time Hire That Month
- Took 3 vs. 0 Training Classes
- Younger (19 vs. 24 Years Old)
- Younger Neighborhood
- Employee is a Rehire
- Short (4-6 mo.) vs. Long (>1 yr) Tenure

A Change from 0–10 Hours of OT per Month Decreases an Employee's Likelihood of Leaving by >60%
RetailCo: What Internal Factors Drove the Sales of Goods?

The models on which these results are based control for individual attributes, organizational factors and external influences.
LESSONS LEARNED
Lessons Learned

1. Analytics is a journey. Focus on moving from WHAT? To WHY?

2. Measure what matters. Focus on information that can have a meaningful impact on business results

3. Focus on information that impacts critical roles and jobs first

4. Don’t wait for perfect data – just get started

5. Find a pilot partner
What’s coming up next
Workforce analytics and planning workshop series

WORKFORCE METRICS AND ANALYTICS:
Driving Business Results with Data
November 22, 2013 – Manila
November 26, 2013 – Jakarta
January 23, 2014 – Singapore

STRATEGIC WORKFORCE PLANNING:
Defining and Fulfilling Business Requirements
November 15, 2013

For more details, visit www.mercer.com/analytics-and-planning-workshops-amea
Questions?

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