HR Analytics From Scratch: 8 Lessons Learned in the First Year

David Harcourt
Manager, Employee Insights
Yum! Brands

#AnalyticsX
HR Analytics from Scratch
8 Lessons Learned in the First Year
Yum!
Who are we?
Insights are a big deal...

- Consumer Insights
- Operational Insights
- Public Relations
- Human Resources?

Employee Insights
Employee Insights

Develop culture of analytics in HR
- “Data First” mentality
- Support decision-making process

Build internal capability
- “Smart” consumer of consultants/vendors
- Improve over time

Support Organization Development
- Global corporate employees (“Above Store”)
- Selecting and developing top talent
8 Lessons
1. Make friends with the keepers of the data
Insights

Health/Wellness

Engagement Surveys

Employee Assessments

HRIS/HCM System

Talent/Performance Data

External Data
Some considerations…

Data Governance

Privacy Training

IT Security
2. Make the most of your strengths.
Predicting Turnover

Modeling KPIs
Focus on what you have, not what you don’t

Our Strengths:

- Well-established Organization Development function
- Multiple (calibrated) ratings
- Lots of assessments
3. Start small.
Low Value
Low Effort

High Value
Low Effort

Low Value
High Effort

High Value
High Effort
Picking the Right “First Project”

- Existing data sources
- Short timeline (1–2 Months)
- Modest, but clear business impact
Why you should start small

- Show your value in a timely manner
- Gauge the “Appetite for Analytics”
- Make little mistakes instead of big ones
4. Make sure you can do something with your results.
What if...

I wonder why...

Wouldn't it be cool to know...

Why don't we try...
What are we trying to solve?
5. Don’t overlook the simple stuff.
Maturing from Descriptive to Prescriptive Analytics

- Summarize Past and Current Behavior
- Predict Future Behavior and Adapt

- Prescriptive Analytics
  - Automatically take the ideal action on each individual
Descriptive → Predictive → Prescriptive
Original Distribution

Avg 62%
Hipo 38%

Avg Time in Role

< 1.5 years
Avg 42%
Hipo 58%

≥ 1.5 years
Avg 77%
Hipo 23%

Mobility (Global)

YES
Avg 34%
Hipo 66%

NO
Avg 53%
Hipo 47%

Avg PA (2013-2015)

< 3.3
Avg 82%
Hipo 18%

≥ 3.3
Avg 59%
Hipo 41%

< 3.42
Avg 60%
Hipo 40%

≥ 3.42
Avg 43%
Hipo 57%
Executive Assessment
Finding High-Potential Talent

Our high-potential leaders score higher than their peers.
How does the employee compare to others applying for the same job?

Who we want…

Who we tend to hire…

C1  C2  C3

C4  C5
6. Find ways to use unstructured data.
Text Analytics can help you...

- Uncover previously unknown issues
- Answer questions you didn’t know to ask
Exit Interviews
Surveys
Enterprise
Social Networks

Feedback Survey
Prepared for: [Name of Recipient]

1. What do you appreciate most about this person?
   - [List of answers]

2. What improvement could you suggest for this person?
   - [List of answers]

3. How did this person contribute to your team?
   - [List of answers]

4. Do you think this person should continue in their current role?
   - [Yes/No]

5. Would you recommend this person for a promotion?
   - [Yes/No]

[Additional comments]

Name: [Name of Interviewer]
Date: [Date]
- One theme per cluster
- Lose nuance, gain simplicity
- Useful for short survey responses

- Multiple themes per document
- More nuanced view
- Useful for more complex documents, survey responses
<table>
<thead>
<tr>
<th>Document</th>
<th>inspirational, leadership, +inspire, +leader</th>
<th>commercial, bold, insightful, perspective</th>
<th>positive outlook, leading, +answer, +ability</th>
<th>impact, +individual, friendly, culture</th>
<th>+opportunity, complex,</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>3</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>5</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>6</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>7</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>8</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>9</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>10</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>11</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>12</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>13</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>14</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>15</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>16</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>17</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>18</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
</tbody>
</table>
7. Don’t talk about the process (unless you’re asked).
The details…  The result…
proc sql;
CREATE TABLE top_100_job_data
SELECT t1.*, t2.descr as job_data
FROM ps_job t1 inner join ps_
WHERE empid in (select empid
quit;
proc sort data=top_100_job_data
by empid effdt jobcode_effdt;
run;
data top_100_job_data (drop=fin
set top_100_job_data;
by empid effdt jobcode_effdt;
retain fin 8 mkt 8 ops 8 gm 8;
if first.empid then do;

<table>
<thead>
<tr>
<th>Variable: Age</th>
</tr>
</thead>
<tbody>
<tr>
<td>multi_div</td>
</tr>
<tr>
<td>0</td>
</tr>
<tr>
<td>1</td>
</tr>
<tr>
<td>Diff (1-2)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>multi_div Method</th>
<th>Mean 95% CL Mean  Std Dev</th>
<th>95% CL Std Dev</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>44.0300</td>
<td>42.8361</td>
</tr>
<tr>
<td>1</td>
<td>45.8946</td>
<td>43.3660</td>
</tr>
<tr>
<td>Diff (1-2) Pooled</td>
<td>-1.8646</td>
<td>-4.4090</td>
</tr>
<tr>
<td>Diff (1-2) Satterthwaite</td>
<td>-1.8646</td>
<td>-4.6293</td>
</tr>
</tbody>
</table>

| Method                  | Variances | DF  | t Value | Pr > |t| |
|-------------------------|-----------|-----|---------|------|---|
| Pooled                  | Equal     | 102 | -1.45   | 0.1491 |
| Satterthwaite           | Unequal   | 34.823 | -1.37 | 0.1796 |

<table>
<thead>
<tr>
<th>Equality of Variances</th>
<th>Method</th>
<th>Num DF</th>
<th>Den DF</th>
<th>F Value</th>
<th>Pr &gt; F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Folded F</td>
<td>23</td>
<td>79</td>
<td>1.25</td>
<td>0.4675</td>
<td></td>
</tr>
</tbody>
</table>
MEN WALK ON MOON
ASTRONAUTS LAND ON A PLAIN
AFTER STEERING PAST CRATER

Voice From Moon: ‘Eagle Has Landed’

A Powdery Surface Found by Armstrong
Get better at Collecting Data

Solve problems for your future company
1. Make friends with the keepers of the data.
2. Start small.
3. Make sure you can do something with the results.
4. Make the most of your strengths.
5. Don’t overlook the simple stuff.
6. Find ways to use unstructured data.
7. Don’t talk about the process (unless you’re asked).