New Segmentation Strategies for Risk & Marketing

Presented by
Paul Ballew, D&B Global Chief Data & Analytics Officer
Wednesday, October 22, 2014 – 11:00 AM ET
Today’s Speaker

Paul Ballew
D&B Global Chief Data & Analytic Officer
Today’s Agenda

- The Philosophy of Segmentation Strategies
- Segmentation Strategies with Standard Scores and Custom Analytics
  - Pre-screening for Risk
  - Identifying your Best Prospects
  - Taking Risks Confidently
  - Advanced Portfolio Management
- Use Cases & ROI
- Q&A
Today, as we advance the Art & Science of Data, we can segment the Universe with great degrees of precision and with less latency...
It takes powerful predictive analytics to get the Foresight needed to assess the risk or opportunity with a business and anticipate future behavior.
These new Analytics bring greater transparency, precision, and foresight into future behavior…

[Diagram showing Predictive Analytics with pathways for Approve, Target, Prioritize, Reject, Suppress]
To enable that level of precision in segmentation, D&B has built analytic solutions that provide a holistic view.

**I can predict your future behavior**

- **30% Predictive uplift**
  - D&B Viability Rating™
  - D&B Delinquency Predictor™
  - D&B Total Loss Predictor™
  - Firmographics: 2 x current coverage
  - Foundation: 2 x current coverage

**Informed Perspective**

**Make better decisions**

- Have the most complete view of accounts for various use cases
- Make better credit risk management decisions
- Improve bottom line results, grow your accounts without impacting bad debt loss
- Enhanced Decision Support
- Prospects that ‘look’ like best customers
- The full commercial opportunity
And can be combined with other segmentation tools and more complex, higher value, custom predictive analytics.

**Pre-screen and Segmentation Tools**
Swimming in data and unclear where to start?
Basic segmentation tools help organize businesses by their estimated financial outlook, demand for your products and services, or firmographic profile.

**Customer & Lead Management Actions**
How do I mobilize my audience and create new growth?
CMA/LMA help deliver the most relevant message to a receptive audience, at the right time, via the right channel to convert new customers, expand relationships, increase spend, or loyalty.

**Lead Gen Models**
Need help finding more quality leads?
Businesses with similar characteristics often have similar needs and buying behaviors of those in the past. Models help narrow focus.

**Lead Scoring**
Have qualified leads, but which do I prioritize?
Rank ordering leads by estimated opportunity size, by greatest potential to close, or by length of time to close and funneling to the right sales team maximizes revenue while optimizing resources.
To contrast, let’s imagine there were no segmentation tools to help you manage risk and opportunities within your account portfolio…

No account segmentation

Where would you focus?

Accounts would turn ‘bad’ seemingly at random

Would you treat every account the same?
By applying firmographic insights (size and industry) you could suppress some bads, but also probably too many good accounts...

No account segmentation + Firmographics

Suppress.

Narrowed universe, but still too large for effective decision making

- Bad account
- Good account
Now adding more predictive insights concentrates potentially bad accounts in increasingly granular segments for more precise suppression.

New Segmentation Strategies for Risk & Marketing

- No account segmentation
- + Firmographics
- + AR/Trade and PAYDEX
- + Standard Risk Score
- + Composite Risk Score

- Bad account
- Good account
Pre-screening for risk prior to engaging with prospects can lead to more profitable growth and a 10% improvement in marketing efficiency.

<table>
<thead>
<tr>
<th>No account segmentation</th>
<th>+ Firmographics</th>
<th>+ AR/Trade and PAYDEX</th>
<th>+ Standard Risk Score</th>
<th>+ Composite Risk Score</th>
</tr>
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<tbody>
<tr>
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<td>Suppress</td>
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</tr>
</tbody>
</table>

Legend:
- Red: Bad account
- Blue: Good account

New Segmentation Strategies for Risk & Marketing
Delinquency, Viability Rating, and Total Loss Predictors used together (Composite Risk Score) offer superior segmentation and risk discrimination.

<table>
<thead>
<tr>
<th>Ratio</th>
<th>Good</th>
<th>Bad</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt;100:1</td>
<td>100%</td>
<td>0%</td>
</tr>
<tr>
<td>110:1</td>
<td>99.2%</td>
<td>0.9%</td>
</tr>
<tr>
<td>60:1</td>
<td>98%</td>
<td>2%</td>
</tr>
</tbody>
</table>

D&B Total Loss Predictor (1-3) + D&B Viability Rating™ (1-2) + D&B Delinquency Predictor (1-2)

20:1 Ratio
Good 95% : Bad 5%
16,294 Accounts

In the best composite segment (above) good : bad ratio incrementally improves with the addition of each score from 20:1 to over 100:1 when all three are applied.

In the worst composite segment (right), the combination of all three scores isolates 1 bad account for every 3 good.

A customer does not have the means to manually steward 16K accounts. Strong separation of potentially good and bad accounts enables this customer to confidently automate decisions and operate more efficiently.

+ Delinquency (4-5) + Viability (8-9) + Total Loss (7-10)

8:1
Good 89% : Bad 11%

5:1
Good 84% : Bad 16%

3:1
Good 75% : Bad 25%
Improved risk/pricing segmentation leads to increased profitability and competitive advantage

Calculating even the most modest improvement in risk/pricing segmentation is impressive:

- Business Owner Policies 1% increase in premium = $380K in revenue
- Workers Compensation Policies 1% increase in premium = $331K in revenue
- Commercial Auto Policies 1% increase in premium = $678K in revenue
- Commercial Property Policies 1% improvement in premium = $781K in revenue
- Total Impact of Re-Pricing Worst Scoring 1% of Enforce Policies = $2.71M annually
Enhanced segmentation and targeting is of course not just a journey to help manage risk---the upside for sales and marketing is also substantial.

No account segmentation + Firmographics

Narrowed universe, but still too large for effective targeting.

Suppressed

Best Opportunity

Right Size
Demand Estimators make it more precise – you can see not just large accounts, but also accounts with demand for your services.

No account segmentation + Firmographics + Demand Estimators

- Suppressed
- Best Opportunity

New Segmentation Strategies for Risk & Marketing
Adding Material Change™ – you can see companies with the right size, demand and trajectory. Congratulations! You’ve identified your most attractive accounts! 😊

<table>
<thead>
<tr>
<th>No account segmentation</th>
<th>+ Firmographics</th>
<th>+ Demand Estimators</th>
<th>+ Change Indicators</th>
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</table>

- Suppressed
- Best Opportunity

Right Size

Right Size & Demand

Right Size, Demand & Trajectory
However, not all attractive accounts will be attracted to you. 😞 Apply a Custom Solution (a responsiveness dimension) to identify the best segment to target!

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<th>+ Change Indicators</th>
<th>+ Custom Solutions</th>
</tr>
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</table>

- Right Size
- Right Size & Demand
- Right Size Demand & Trajectory
- Right Size Demand Trajectory & Response

- Suppressed
- Best Opportunity
**Segmenting** by size, propensity, growth and responsiveness can **improve targeting by 20-30%**

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*Game-changing analytics provide critical advantage in a fiercely competitive industry*

**New Segmentation Strategies for Risk & Marketing**
New innovative approaches for marketing optimization can flip the paradigm and deliver compelling ROI and breakthrough growth.

Expand Prospect Pool by more than 150%

Get Ahead of Competition by differentiating between best segment with 4Xs more spend potential than worst segment with 5Xs less spend potential.

Pinpoint Up-sell Opportunities by isolating 50% of the highest growers in best 20% of the customer segments.
Businesses that are increasing sales and marketing efficiency and effectiveness at every stage of the acquisition lifecycle are getting ahead of competition.

<table>
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<tr>
<th>Attract</th>
<th>Target</th>
<th>Prioritize</th>
<th>Convert</th>
<th>Cultivate</th>
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**ACQUISITION LIFECYCLE**

- Develop more agile and precise campaigns
- Generate more high quality, low risk leads
- Deepen existing relationships and forge profitable new ones

Marketing departments are under greater pressure to contribute more to companies’ bottom lines
For example, the D&B Viability Rating™ identifies the most ‘traditionally attractive” businesses, knocking out those with the least potential lifetime value.

<table>
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<td>Look-alike models</td>
</tr>
<tr>
<td>Basic firmographic profiling</td>
<td>Response models</td>
</tr>
<tr>
<td>Standard demand estimators</td>
<td>Opportunity sizing</td>
</tr>
<tr>
<td>Risk pre-screen scores / ratings</td>
<td></td>
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</tbody>
</table>

Attractiveness
D&B global data extends your reach to a broad universe of businesses, and enables basic segmentation and attribution of your portfolio.

Overlaying standard scores helps estimate demand, or can be used to knockout higher risk entities and narrow your focus.

As you interact in the marketplace, some businesses respond to your direct mail, telemarketing, or click your website. D&B can use this history to help you improve lead generation even further with predictive models.
With Lead Scoring, Marketing organizations can ensure that only the best, most responsive opportunities make it to Sales

**Attract**
- Portfolio / Total Market
- Foundational global data
- Basic firmographic profiling
- Standard demand estimators
- Risk pre-screen scores

**Target**
- Historical Interaction
- Look-alike models
- Response models
- Opportunity sizing

**Prioritize**
- New Qualified Leads
- Conversion models
- Time to close models
- Opportunity sizing
- Channel assignment

**Convert**
- Scored Leads
- Treatment optimization
- Sales forecast optimization

**Responsiveness**
Once leads are qualified, D&B can tell you how likely you are to close a deal, how long it may take, for which product, what the estimated opportunity size is, etc.

And as leads are worked by Sales in your CRM system, we’ll continue to provide support by telling you the optimum time to apply different nurturing treatments.
Behavioral analytics help you discover patterns and hidden buying signals that traditional methods simply miss – and provide critical differentiation.

Attract
- Portfolio / Total Market
- Foundational global data
- Basic firmographic profiling
- Standard demand estimators
- Risk pre-screen scores

Target
- Historical Interaction
- Look-alike models
- Response models
- Opportunity sizing

Prioritize
- New Qualified Leads
- Conversion models
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- Channel assignment

Convert
- Scored Leads
- Treatment optimization
- Sales forecast optimization
- Opportunity sizing

Cultivate
- Buyers
- Anticipating future needs
- Share of wallet estimation
- Customer & lead management actions

Grow
- Repeat Buyers
- Engaged Buyers

Behavioral Analytics
After conversion, we’ll suggest avenues for future growth and keeping your customers engaged.
And we’ll apply learnings from these outcomes as part of a closed feedback loop to continue to refine and optimize your sales and marketing effectiveness.

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<td></td>
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Continuous Feedback Loop

New Segmentation Strategies for Risk & Marketing
This requires close collaboration, and in later stages of the lifecycle -- robust archives of past sales activity, stage progression, treatments, and outcomes.

**Attract**
- Foundational global data
- Basic firmographic profiling
- Standard demand estimators
- Risk pre-screen scores

**Target**
- Look-alike models
- Response models
- Opportunity sizing

**Prioritize**
- Conversion models
- Time to close models
- Opportunity sizing
- Channel assignment

**Convert**
- Treatment optimization
- Sales forecast optimization
- Opportunity sizing

**Cultivate**
- Anticipating future needs
- Share of wallet estimation

**Grow**
- Customer & lead management actions

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**Dependence on internal views**

**Dependence on external views**

New Segmentation Strategies for Risk & Marketing
Use Cases
“Cloud Propensity” Model for Lead Generation

Client Need
• Identify growing companies that are most likely to utilize cloud technology
• Drive new revenue for customer’s new cloud computing platform.

Outcome
• Model validation suggests high predictive value
• Captures 54% of 3K+ customer’s cloud customers in top 2 deciles, with KS = 42%
• D&B partner web traffic data added significant lift to model performance

Our Approach
• Developed a custom ‘cloud propensity’ model based on current customer profile
• Leveraged client-data and internal assets:
  o D&B ICM
  o D&B Material Change
  o Annual Sales
  o Web Traffic Score
  o Client Data
  o Age

![Cloud Adopter Score](image)
## Client Need
- **Grow international trade finance business**
- Challenged to find and prioritize new prospects
- Target audience = U.S. businesses trading globally
- Previous effort relied on basic segmentation using:
  - Market Insight
  - Import / Export indicator
  - Linkage
  - Annual Sales

## Approach
- **Custom analytics engagement**
  - Leveraged multiple data assets to identify and rank order globally-active entities, such as:
    - Custom-developed ‘annual sales’ estimation model
    - Global trade repository
    - U.S. Customs import data
    - Contact data with international job titles
    - D&B customer behavior (cross-border inquiries, contracts, country risk report purchase, etc.)

## Outcome
- **Identified 195K net new prospects for the bank**
  - Provided valuable knowledge on the type and extent of global activity for each entity
  - D&B insight contributes to bank study assessing the link between global expansion and profitability
  - Door is opened to future custom engagements

<table>
<thead>
<tr>
<th>Net New Prospects’ Global Activity Rank</th>
<th>Tier 1</th>
<th>Tier 2</th>
<th>Tier 3</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Original Prospects</td>
<td>80K</td>
<td></td>
<td></td>
<td>195K</td>
</tr>
<tr>
<td>D&amp;B Identified Prospects (240K)</td>
<td></td>
<td>122K</td>
<td>50K</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>195K</td>
</tr>
</tbody>
</table>
# Collections Prioritization: Order-to-Cash

## Client Need
- A way to prioritizing collection activities
- Help managing collections and loss reserves.
- A way to identify those businesses that have a propensity to go 120 days past due.
- Total bad rate was 39% which is exceedingly high.

## Our Approach
- Custom analytics engagement
- D&B had robust data (data depth A, B or C) on 93% of the company customer portfolio
- D&B created custom segmentation utilizing the Triple Play and standard scores
  - Different scorecards were created for the US and Canada.
  - Using risk overlay to collections provided additional lift.

## Outcome
- Custom segmentation utilizing Triple Play did a good job of identifying risky customers
- Individual scores alone did not prove valuable
- Creative use of custom groupings provided segmentation between “goods” and “bads”
- Company is now able to prioritize collections better

### US Customers

<table>
<thead>
<tr>
<th>Start_DP</th>
<th>DNB_Risk_Band</th>
<th>Total_Bad</th>
<th>Count</th>
<th>% Records</th>
<th>Bad Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balance&lt;=0</td>
<td>Low Bad, No Balance</td>
<td>77</td>
<td>2897</td>
<td>21.3%</td>
<td>2.7%</td>
</tr>
<tr>
<td>Current</td>
<td>High Risk</td>
<td>70</td>
<td>286</td>
<td>2.1%</td>
<td>24.5%</td>
</tr>
<tr>
<td>Current</td>
<td>Low Risk</td>
<td>822</td>
<td>4229</td>
<td>31.2%</td>
<td>19.4%</td>
</tr>
<tr>
<td>DPD1_30</td>
<td>High Risk</td>
<td>90</td>
<td>136</td>
<td>1.0%</td>
<td>66.2%</td>
</tr>
<tr>
<td>DPD1_30</td>
<td>Low Risk</td>
<td>934</td>
<td>1853</td>
<td>13.7%</td>
<td>50.4%</td>
</tr>
<tr>
<td>DPD31_60</td>
<td>High Bad, 30+</td>
<td>1011</td>
<td>1345</td>
<td>9.9%</td>
<td>75.2%</td>
</tr>
<tr>
<td>DPD61_90</td>
<td>High Bad, 30+</td>
<td>1078</td>
<td>1328</td>
<td>9.8%</td>
<td>81.2%</td>
</tr>
<tr>
<td>DPD91_120</td>
<td>High Bad, 30+</td>
<td>1242</td>
<td>1496</td>
<td>11.0%</td>
<td>83.0%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>5324</strong></td>
<td><strong>13570</strong></td>
<td><strong>39.2%</strong></td>
<td></td>
</tr>
</tbody>
</table>

Note:
1. 91.5% records have valid scores
2. Only “Current” and “DPD 1-30” Risk Band are based on 3 DNB scores (CCS9, VR-PC, TLP)

### Canada Customers

<table>
<thead>
<tr>
<th>Start_DP</th>
<th>DNB_Risk_Band</th>
<th>Total_Bad</th>
<th>Count</th>
<th>% Records</th>
<th>Bad Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balance&lt;=0</td>
<td>Low Bad, No Balance</td>
<td>6</td>
<td>162</td>
<td>16.6%</td>
<td>3.7%</td>
</tr>
<tr>
<td>Current</td>
<td>High Risk</td>
<td>41</td>
<td>222</td>
<td>22.8%</td>
<td>18.5%</td>
</tr>
<tr>
<td>Current</td>
<td>Low Risk</td>
<td>8</td>
<td>65</td>
<td>6.7%</td>
<td>12.3%</td>
</tr>
<tr>
<td>DPD1_30</td>
<td>High Risk</td>
<td>67</td>
<td>134</td>
<td>13.8%</td>
<td>50.0%</td>
</tr>
<tr>
<td>DPD1_30</td>
<td>Low Risk</td>
<td>17</td>
<td>40</td>
<td>4.1%</td>
<td>42.5%</td>
</tr>
<tr>
<td>DPD31_60</td>
<td>High Bad, 30+</td>
<td>91</td>
<td>118</td>
<td>12.1%</td>
<td>77.1%</td>
</tr>
<tr>
<td>DPD61_90</td>
<td>High Bad, 30+</td>
<td>88</td>
<td>108</td>
<td>11.1%</td>
<td>81.5%</td>
</tr>
<tr>
<td>DPD91_120</td>
<td>High Bad, 30+</td>
<td>105</td>
<td>125</td>
<td>12.8%</td>
<td>84.0%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>423</strong></td>
<td><strong>974</strong></td>
<td><strong>43.4%</strong></td>
<td></td>
</tr>
</tbody>
</table>

Note:
1. 93% records have valid scores
2. Only “Current” and “DPD 1-30” Risk Band are based on 1 DNB scores (CCS8)
Client Need

• Grow revenue by optimizing Indirect Sales Channels
  o Discover early warning signals in the bookings data
  o Understand relationship between bookings data and macro-economic information
  o Identify top performing and growing segments
  o Forecasting model for Total $ Net Bookings

Approach

• Custom Analytics Engagement
  o Cleanse and aggregate customer purchase transaction history into single company view
  o Data Discovery: Isolate and profile segments conducting 15% of transaction while contributing 96% of total $ Net Bookings; Segment and profile transaction types; Categorize spend patterns over last 2 years
  o Develop Preliminary Spend Growth Model
  o Develop Preliminary Total Dollars Net Booking Forecast Model

Outcome

• 75% lift in percentage of top growers in first 2 deciles capturing >35% of total spend growth
• Highly correlated D&B variables: Detailed Trade, IT Spend month over month trending in amounts owing and purchased of IT related products
• Total Dollars Net Bookings has significant correlation to D&B Small Business Health Index: economic trends have bearing on the movement in Total $ Net Bookings over time
• Move into full development for production environment
Late-Stage, Qualified Lead Scoring Use Case

Client Need

- Late Stage Lead Qualifying
- Identify prospect businesses that are most likely to become customers when the prospect has been targeted for some time.

Approach

- Developed a custom ‘conversion model’ to score all prospects in pipeline and determine which are most likely to convert.
- Leveraged client-data and internal assets:
  - D&B Archive Mrktg Data
  - D&B Archive Credit Data
  - IT/Office Standard Score
  - IT Spend (Partner Data)
  - Customer Purchase Data
  - IT Infrastructure (Partner)
  - D&B Material Change
  - D&B ICM Triggers

Outcome

- Delivered late stage lift where conversion rates already exceeded 50%
- D&B is helping customer develop strategies based on insights learned from model

Lead Scoring

Have qualified leads, but which do I prioritize?

Rank ordering leads by estimated opportunity size, by greatest potential to close, or by length of time to close and funneling to the right sales team maximizes revenue while optimizing resources.
Actions you can take to transform your data and analytics environment in support of your company’s strategic goals this year and into 2015

Assess your current analytical capabilities
- In managing Risk
- In growing your business and seizing more Opportunity
- Cross-sell and Up-sell
- Globally

Current State Assessment

Insight Enrichment
- Think about the Use Cases your business could benefit from and conduct a Proof of Concept
- Engage a trust advisor to validate your findings and construct and implement a new or enhanced program to drive toward desired future state.
Thank you for joining us today!

What Questions do you have?

Let’s continue the conversation!
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