
New and Emerging Underwriting Tools and Techniques

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Agenda

- Background Information
- Decision Engines
- Simplified Issue
- Electronic Database Tools
- Predictive Modeling
 - Lab Scoring
 - Data Analytics
- Questions

BACKGROUND INFORMATION

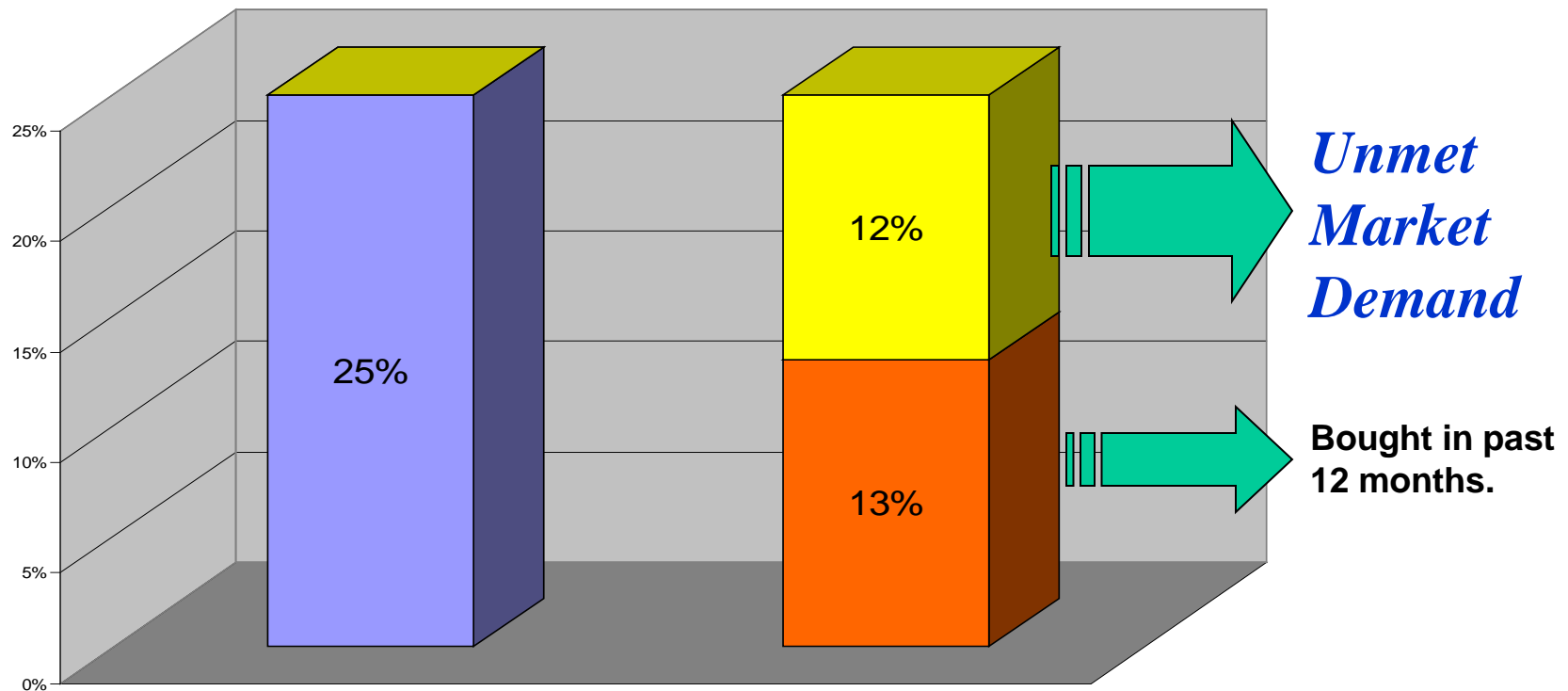
Middle Market Demand

Fact: Middle-market consumers are vastly under-insured.

- “Half of U.S. households have unmet life insurance needs: Fifty-eight million say they do not have enough life insurance.”
“Household Tends in US life Insurance Ownership”, LIMRA, 2010.
- “Even among households with \$125,000 or more of annual income, one fourth believe they are inadequately insured.”
“Household Tends in US life Insurance Ownership”, LIMRA, 2010.
- “Only 4mm term life policies were sold in 2009.”
ACLI Fact Book, 2010.

Middle Market Demand

The unmet market demand exceeds \$9B per year in new premium sales.



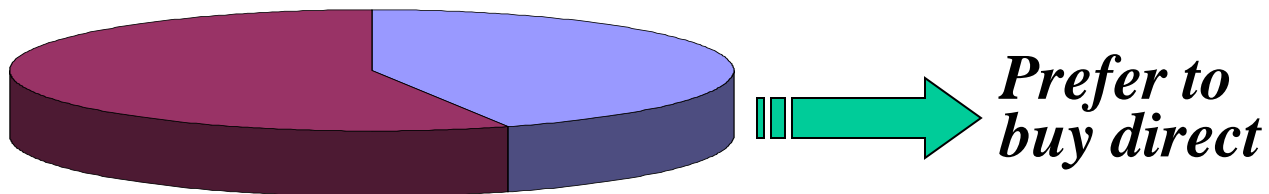
Plan to purchase life insurance
in next 12 months
(LIMRA, 2010)

Middle Market Demand

Fact: Consumers' shopping behavior and buying preferences have changed.

- 44% of potential buyers would prefer a non face-to-face method of purchase (i.e., internet, phone, mail).

"Is There Magic in the Middle Market", LIMRA, 2009.



- 1/2 of the middle-market used the internet when shopping for life insurance in the past 24 months.

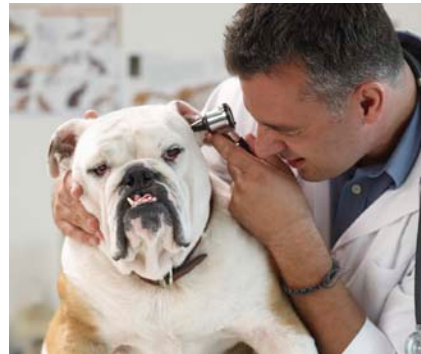
"Trends in Consumer Internet Use for Insurance", LIMRA, 2009.

The Problem in Meeting Consumer Demand

Underwriting and application processes are costly, lengthy and inefficient.



Long applications. Too many forms. Not consumer-friendly.



Expensive and invasive exam requirements.



Medical records add weeks to the process.



Few e-solutions. Require wet signatures on multiple documents.

DECISION ENGINES

Decision Engines

THE WALL STREET JOURNAL.

WSJ.com

Would You Buy a Life-Insurance Policy From This Machine?



Source: WSJ.com, Weekend Investor, March 12, 2011

Decision Engines

- Used in “Straight-Through Processing Systems” that combine application processing with decision engines that perform rules-based risk selection.
- Run Rx, MVR, MIB and other data through a decision algorithm to reach an underwriting decision.
- Good reinsurance support for the technology and the platforms.
- Multiple Vendors and Multiple Platforms.

Decision Engines

Opportunities

- Processing efficiencies and ability to handle “clean” cases.
- Allows underwriters to focus on more complex cases.

Challenges

- Training of new underwriters → fewer simple cases to start out with.
- Underwriter staffing → fewer “easy” cases – every case has either a dent or a ding.
- Costs to implement, update and maintain.
- Mortality impact if you get the rules wrong.

SIMPLIFIED ISSUE

Simplified Issue

- Products were historically “premium loaded” due to extra mortality associated with limited underwriting and antiselection.
- New technology has allowed for competitive pricing compared to fully underwritten business.
- Now use tele-interviews with drill down questions and a decision engine that analyzes multiple data sources such as: MIB, Rx Profiles, MVRs, electronic record checks.

Simplified Issue

- Increasing use of web-based platforms
- NO exams or labs.
- May “bump out” some cases for an APS or pivot the applicant to full underwriting.
- Face amounts are increasing → \$500,000+
- Ages are getting older → Age 60+

Simplified Issue

Opportunities

- Ability to reach new and untapped markets through banks, wirehouses or even direct to consumer.
- Lower cost through limited underwriting and lack of exam or lab expenses.

Challenges

- Not time-tested. Will mortality hold up?
- What about Preferred Classes?
- Antiselection may still be an issue.
 - Example: Unadmitted tobacco use.

ELECTRONIC DATABASE TOOLS

Electronic Database Tools

- Customer Identification
 - Data collection
 - Verification / Authentication
- Risk Selection
 - Electronic Inspection Reports
 - Credit Reports
 - MVRs
 - IRS Transcripts

IRS Form 4506-T

Form 4506-T (Rev. January 2011) Department of the Treasury Internal Revenue Service	Request for Transcript of Tax Return ▶ Request may be rejected if the form is incomplete or illegible.	OMB No. 1545-1872
<p>Tip. Use Form 4506-T to order a transcript or other return information free of charge. See the product list below. You can quickly request transcripts by using our automated self-help service tools. Please visit us at IRS.gov and click on "Order a Transcript" or call 1-800-908-9946. If you need a copy of your return, use Form 4506, Request for Copy of Tax Return. There is a fee to get a copy of your return.</p>		
1a Name shown on tax return. If a joint return, enter the name shown first.	1b First social security number on tax return, individual taxpayer identification number, or employer identification number (see instructions)	
2a If a joint return, enter spouse's name shown on tax return.	2b Second social security number or individual taxpayer identification number if joint tax return	
3 Current name, address (including apt., room, or suite no.), city, state, and ZIP code (See instructions)		
4 Previous address shown on the last return filed if different from line 3 (See instructions)		
5 If the transcript or tax information is to be mailed to a third party (such as a mortgage company), enter the third party's name, address, and telephone number. The IRS has no control over what the third party does with the tax information.		
<p>Caution. If the transcript is being mailed to a third party, ensure that you have filled in line 6 and line 9 before signing. Sign and date the form once you have filled in these lines. Completing these steps helps to protect your privacy.</p>		
<p>6 Transcript requested. Enter the tax form number here (1040, 1065, 1120, etc.) and check the appropriate box below. Enter only one tax form number per request. ▶</p>		
<p>a Return Transcript, which includes most of the line items of a tax return as filed with the IRS. A tax return transcript does not reflect changes made to the account after the return is processed. Transcripts are only available for the following returns: Form 1040 series, Form 1065, Form 1120, Form 1120A, Form 1120H, Form 1120L, and Form 1120S. Return transcripts are available for the current year and returns processed during the prior 3 processing years. Most requests will be processed within 10 business days <input type="checkbox"/></p>		
<p>b Account Transcript, which contains information on the financial status of the account, such as payments made on the account, penalty assessments, and adjustments made by you or the IRS after the return was filed. Return information is limited to items such as tax liability and estimated tax payments. Account transcripts are available for most returns. Most requests will be processed within 30 calendar days. <input type="checkbox"/></p>		
<p>c Record of Account, which is a combination of line item information and later adjustments to the account. Available for current year and 3 prior tax years. Most requests will be processed within 30 calendar days <input type="checkbox"/></p>		
<p>7 Verification of Nonfiling, which is proof from the IRS that you did not file a return for the year. Current year requests are only available after June 15th. There are no availability restrictions on prior year requests. Most requests will be processed within 10 business days <input type="checkbox"/></p>		
<p>8 Form W-2, Form 1099 series, Form 1098 series, or Form 5498 series transcript. The IRS can provide a transcript that includes data from these information returns. State or local information is not included with the Form W-2 information. The IRS may be able to provide this transcript information for up to 10 years. Information for the current year is generally not available until the year after it is filed with the IRS. For example, W-2 information for 2007, filed in 2008, will not be available from the IRS until 2009. If you need W-2 information for retirement purposes, you should contact the Social Security Administration at 1-800-772-1213. Most requests will be processed within 45 days <input type="checkbox"/></p>		
<p>Caution. If you need a copy of Form W-2 or Form 1099, you should first contact the payer. To get a copy of the Form W-2 or Form 1099 filed with your return, you must use Form 4506 and request a copy of your return, which includes all attachments.</p>		
<p>9 Year or period requested. Enter the ending date of the year or period, using the mm/dd/yyyy format. If you are requesting more than four years or periods, you must attach another Form 4506-T. For requests relating to quarterly tax returns, such as Form 941, you must enter each quarter or tax period separately.</p>		
<p>Signature of taxpayer(s). I declare that I am either the taxpayer whose name is shown on line 1a or 2a, or a person authorized to obtain the tax information requested. If the request applies to a joint return, either husband or wife must sign. If signed by a corporate officer, partner, guardian, tax matters partner, executor, receiver, administrator, trustee, or party other than the taxpayer, I certify that I have the authority to execute Form 4506-T on behalf of the taxpayer. Note. For transcripts being sent to a third party, this form must be received within 120 days of signature date.</p>		
Sign Here	Signature (see instructions)	Date
	Title (if line 1a above is a corporation, partnership, estate, or trust)	
	Spouse's signature	Date
<p>Telephone number of taxpayer on line 1a or 2a</p>		
<p>For Privacy Act and Paperwork Reduction Act Notice, see page 2.</p>		
		Cat. No. 37667N Form 4506-T (Rev. 1-2011)

Electronic Database Tools

Opportunities

- Speed up the process for New Business and Underwriting.
- Cost and efficiency gains.
- More convenient for producer and their client.

Challenges

- Some potential gaps with traditional Inspection Reports.
 - Medical, Habits, Avocations
 - Older Age Supplements → ADLs
- Some producers will balk at the IRS Transcript.

PREDICTIVE MODELING

Lab Scoring

Lab Scoring

- Insurance Lab Data
 - Decades of lab tests...all with a SSN.
 - Labs on over 50 million individuals.
 - Over 1 million deaths.
- Social Security Death Master File
 - More than 80 million deaths reported.

Lab Scoring

- Use multivariate analysis to determine the relative mortality risk associated with each individual test.
- Identify associations between disparate factors.
 - Example: Low cholesterol and high mortality
- Puts all of this data into an algorithm to determine a risk score/assessment based on age and gender.

Lab Scoring

Opportunities

- Experienced based method to better segment risk by considering the impact of multiple lab test values on mortality.
- Better mortality = better/more predictable profitability.

Challenges

- Information is based on applicant data (includes declines and not takens). Will the results match the insured life mortality of the carrier?
- More difficult for independent producers to target the unique niches of carriers.
- Communicating the rationale for an adverse decision.

PREDICTIVE MODELING

Data Analytics

Predicting Mortality with Data Analytics

THE WALL STREET JOURNAL.

WSJ.com

Insurers Test Data Profiles to Identify Risky Clients



Source: WSJ.com, November 19, 2010

Data Mining vs. Data Analytics

Data Mining

Analyzing huge sets of data to identify or uncover patterns and find relationships.

Data Analytics

Analyzing huge sets of data to focus on arriving at an inference or a conclusion.

→ Emerging focus on Predicting Mortality

Data Analytics

- Huge databases with information on more than 100 million U.S households.
- Thousands of variables or data elements to include:
 - Online shopping details
 - Magazine subscriptions
 - Boat registrations
 - Catalog purchases
 - Hunting permits
 - Product registration
- Data analytics used in other industries.
 - Example: Credit history is used in auto insurance.
- Strong case for validity through sound statistical and actuarial research and analysis.

Data Analytics

Opportunities

- Eliminate some requirements to speed up the process.
- Cost and efficiency gains.
- Persistency and placement.

Challenges

- Legal and public relations risk.
- “Indicators” of risk based on inference, not hard facts.
- Communicating the rationale for an adverse decision.

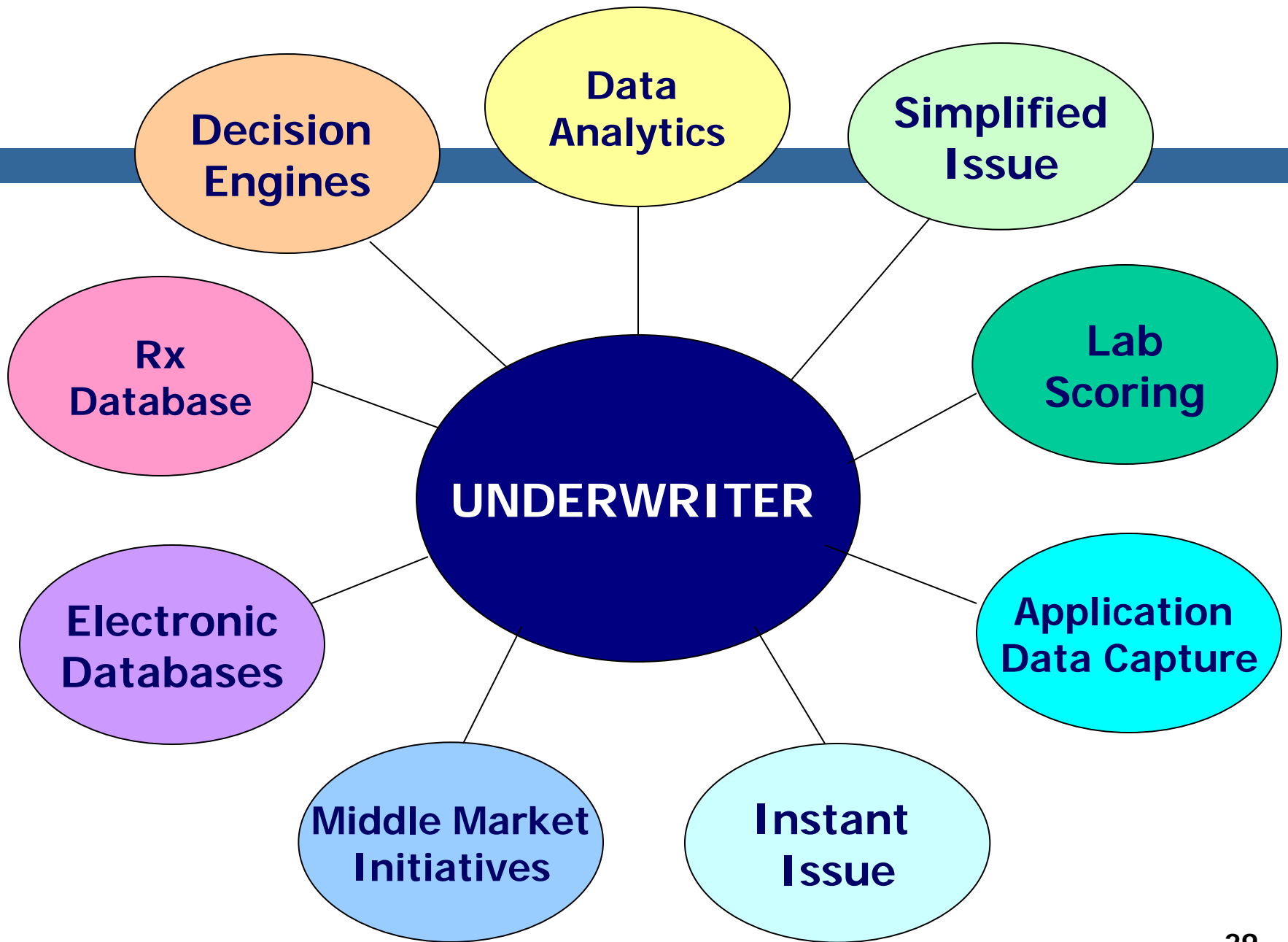
Personal Transparency

“Whether people actually believe it or not, they are significantly increasing their personal transparency. It’s all public, and it’s electronically mineable.”

Mike Fitzgerald

Senior Analyst with Celent

WSJ.com November 19, 2010



QUESTIONS

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