

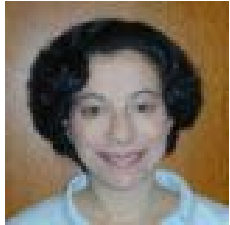
Analysis of Internet Auto Insurance Purchasing Behavior

January 27, 2011

Presenters



Roosevelt Mosley, Principal
Pinnacle Actuarial Resources, Inc.



Susan Kleinman, Director
comScore, Inc.

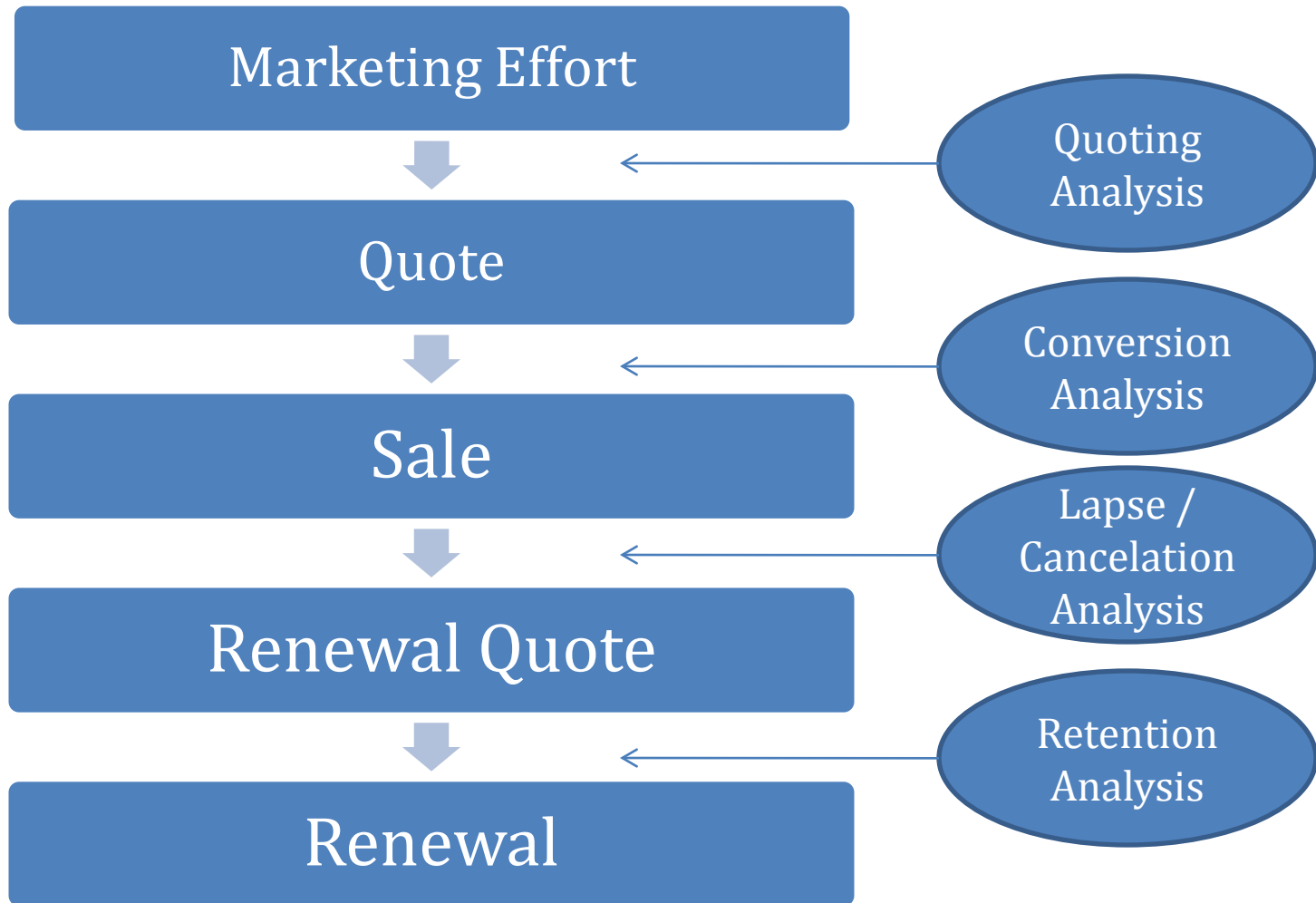


Nick Kucera, Statistical Data Analyst
Pinnacle Actuarial Resources, Inc.

Discussion Topics

- Customer response models
- comScore background and data
- Description of research
- Characteristics of shoppers
- Model development
- Examples of factors that drive conversion
- Impact of prices on conversion
- Analysis of unstructured data
- Additional research

Customer Response Analyses



Customer Response Analyses

- Quoting analysis: analysis of the likelihood of a prospective insured obtaining an insurance quote from you
- Conversion analysis: analysis of the likelihood of a prospective insured that has received a quote purchasing insurance from you
- Lapse/Cancelation analysis: likelihood of an insured not lapsing or canceling the policy mid-term
- Retention analysis: analysis of the likelihood of a current insured renewing with you

Customer Response Modeling - Challenges

- Model structure and parameterization
- New territory – learning curve
- Priority
- Internal data availability
- Internal data applicability
- Availability of price change data
- Measuring market competitiveness
- Applications



comScore Background & Data

comScore is a Global Leader in Measuring the Digital World

NASDAQ

SCOR

Clients

1600+ worldwide

Employees

900+

Headquarters

Reston, VA

Global Coverage

**170+ countries under measurement;
43 markets reported**

Local Presence

30+ locations in 21 countries



What We Do....

- We provide digital marketing intelligence that helps our customers make better-informed business decisions and implement more effective digital business strategies
- We measure the continuous online activity of 1 million people in the U.S. who have granted us explicit permission to confidentially measure their Internet usage patterns.
- Our consumer panel is a representative cross-section of the U.S. population, worldwide regions and individual countries
- We also have permission to:
 - Survey panelists
 - Match to third-party databases
 - Append offline data



The Trusted Source for Digital Intelligence Across Vertical Markets

✓ 9 out of the top 10
INVESTMENT BANKS

✓ 4 out of the top 4
WIRELESS CARRIERS

✓ 47 out of the top 50
ONLINE PROPERTIES

✓ 45 out of the top 50
ADVERTISING AGENCIES

✓ 9 out of the top 10
MAJOR MEDIA COMPANIES

✓ 9 out of the top 10
AUTO INSURERS

✓ 9 out of the top 10
INTERNET SERVICE
PROVIDERS

✓ 9 out of the top 10
PHARMACEUTICAL
COMPANIES

✓ 9 out of the top 10
CONSUMER FINANCE
COMPANIES

✓ 9 out of the top 10
CPG COMPANIES

Auto Insurance Quote Detail

- Data is captured from what panelists see using scraping technology

The screenshot displays the Progressive Direct website interface for an auto insurance quote. The page features a navigation bar with options like 'GET STARTED', 'VEHICLES', 'DRIVERS', 'VIOLATIONS', and 'YOUR RATE'. A prominent offer states 'Save \$50! on your first 6-month policy when you sign online (included in rates)'. Below this, four policy packages are listed: Minimum (\$58.35/month), Economy (\$177.37/month), Recommended (\$183.04/month), and Plus (\$213.21/month). The 'Economy' package is highlighted with a red circle. The 'Policy Coverages' section includes 'Bodily Injury and Property Damage' (\$395.00), 'Uninsured Motorist Bodily Injury & Property Damage' (\$38.00), 'Medical Expense Benefits' (\$7.00), and 'Vehicle #1 - 2007 AUDI A4' with 'Other Than Collision' coverage (\$76.00). A right-hand sidebar contains a 'Help Center' with a 'Talk To Me' button, a 'Quote #' (632376082), and sections for 'Drivers', 'Violations', and 'Vehicles'.

Package	Per Month	Paid in Full
Minimum	\$58.35	\$344.00
Economy	\$177.37	\$1,028.00
Recommended	\$183.04	\$1,059.00
Plus	\$213.21	\$1,235.00

Policy Coverages

Coverage	Amount
Bodily Injury and Property Damage	\$100,000 person/300,000 accident/100,000 property [\$395.00]
Uninsured Motorist Bodily Injury & Property Damage (\$200 exclusion on Property Damage)	\$100,000 person/300,000 accident/100,000 property [\$38.00]
Medical Expense Benefits	\$1,000 each person [\$7.00]
Vehicle #1 - 2007 AUDI A4	
Other Than Collision	\$500 Deductible [\$76.00]

Auto Insurance Quote Detail

■ Data for 5 Top Auto Insurance Company Sites

- Quote

- ZIP code
- Bodily injury liability limits
- Coverage package
- Premium quoted
- Final Purchased Premium
- Company name
- Homeownership
- Whether SSN entered
- Primary driver education
- Current Insurance Information
 - Whether currently insured
 - Length of gap in coverage
 - Length of current carrier
 - Length continuously insured
 - Prior BI Limit

- Drivers

- Age
- Gender
- Marital Status
- Industry/Occupation

- Vehicles

- Vehicle year/make/model/type
- Vehicle use
- Annual mileage
- Comprehensive deductibles
- Collision deductibles

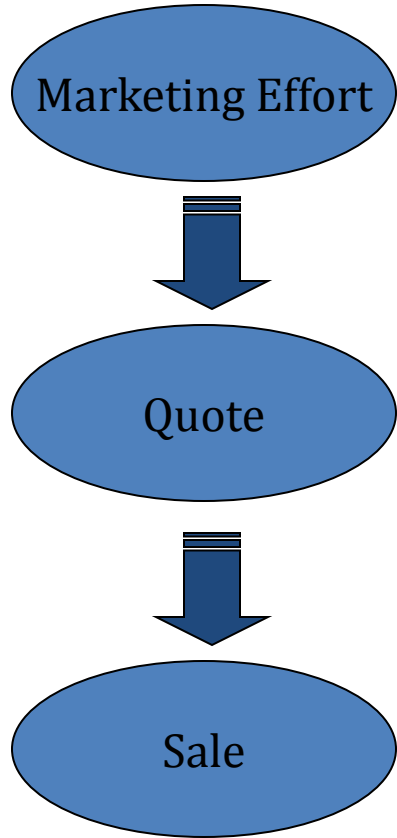
- Incidents

- Incident Type
- Incident Description

Auto Insurance Quote Detail Data – Source of Traffic Data

- Source of traffic is broken out into the following categories:
 - Paid search
 - Natural search
 - Webmail sites
 - Other referred
 - Non-referred
- For search, we know the search engine, click type (paid/natural), and the search phrase
- For webmail sites and other referred, we know the referring site

Pinnacle & comScore Research

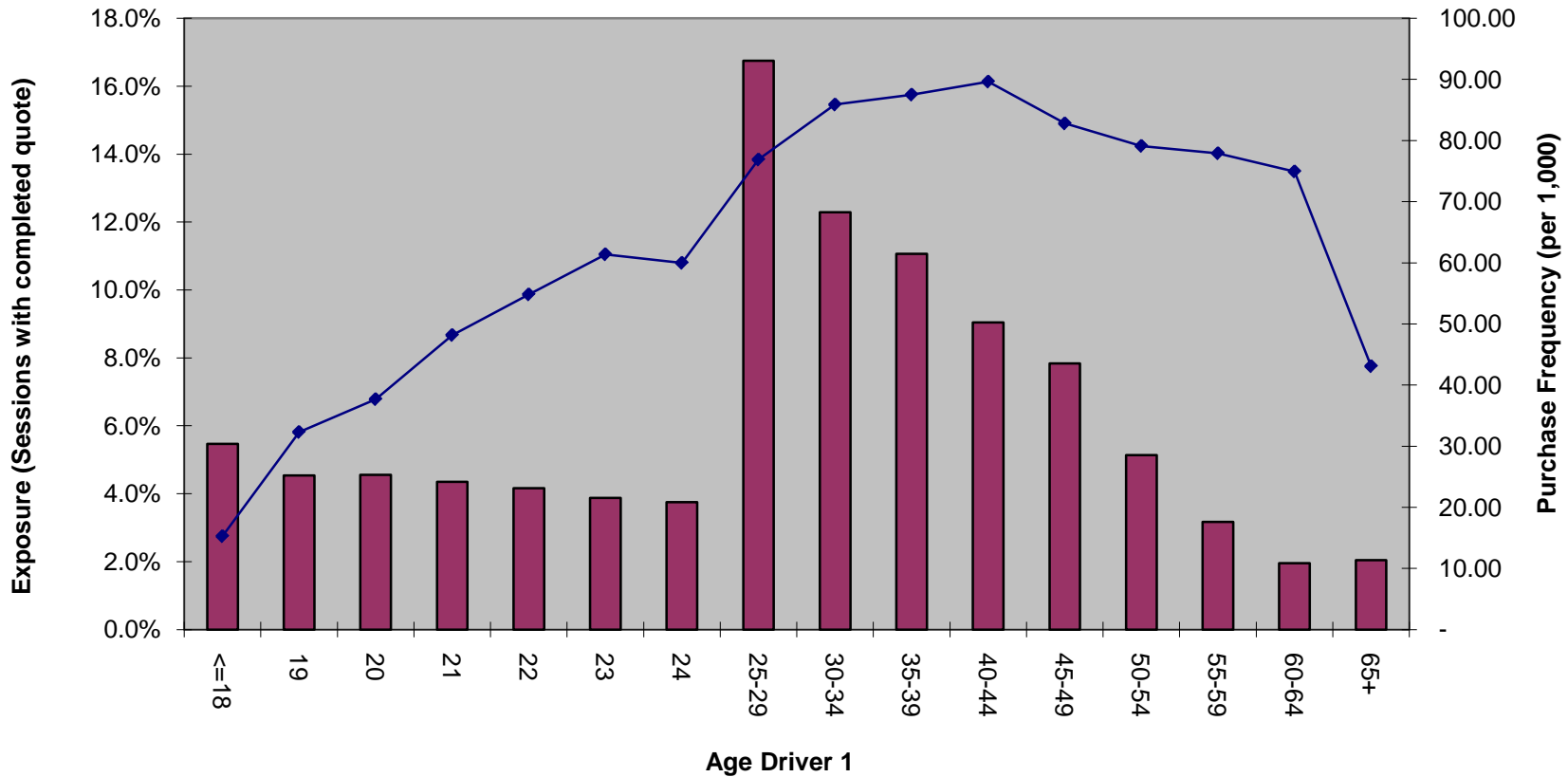


Population	Target	Description
Auto Insurance Website Visitor	Quote Initiated	Of those that visit the website, people with what characteristics are more likely to start the quote process?
Quote Initiated	Quote Submitted	Of those that initiate the quote process, what is the likelihood that they complete it?
Quote Submitted	Policy Bind	Of those that actually submit the quote, how many complete the purchase?

Characteristics of Shoppers

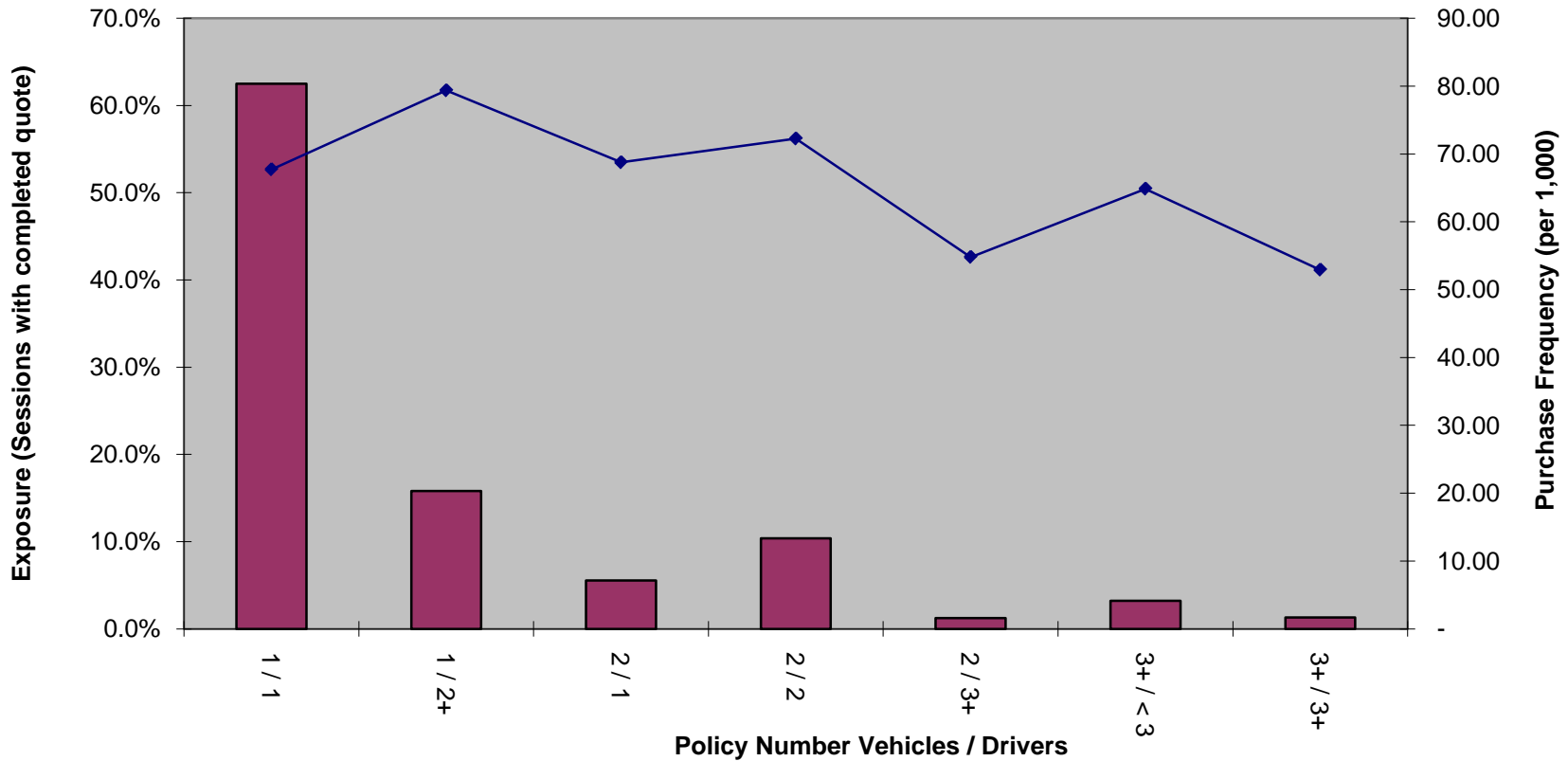
Data Summary - Driver1 Age

Model: Purchase Made During Session

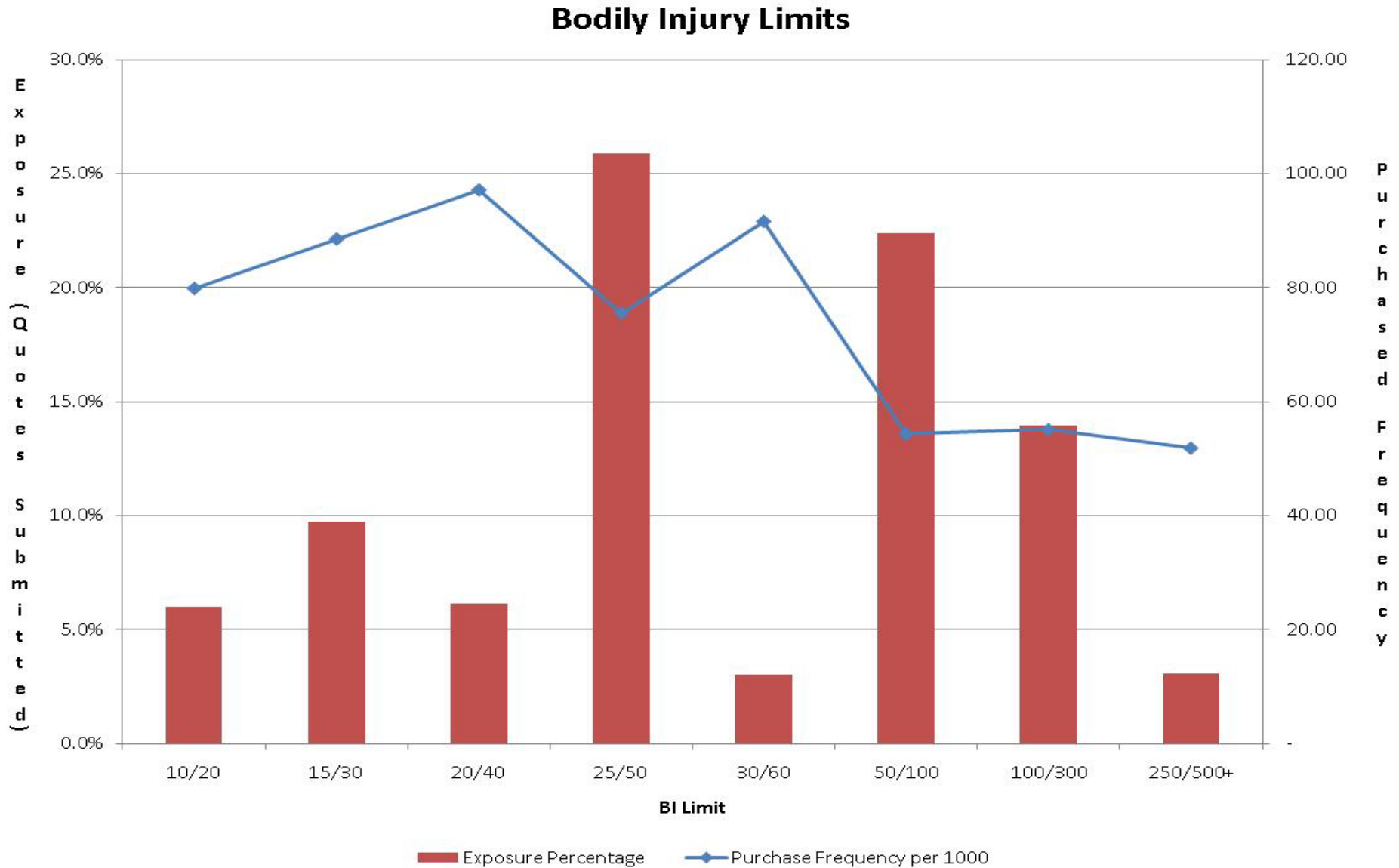


Data Summary - Number Vehicles/Drivers

Model: Purchase Made During Session

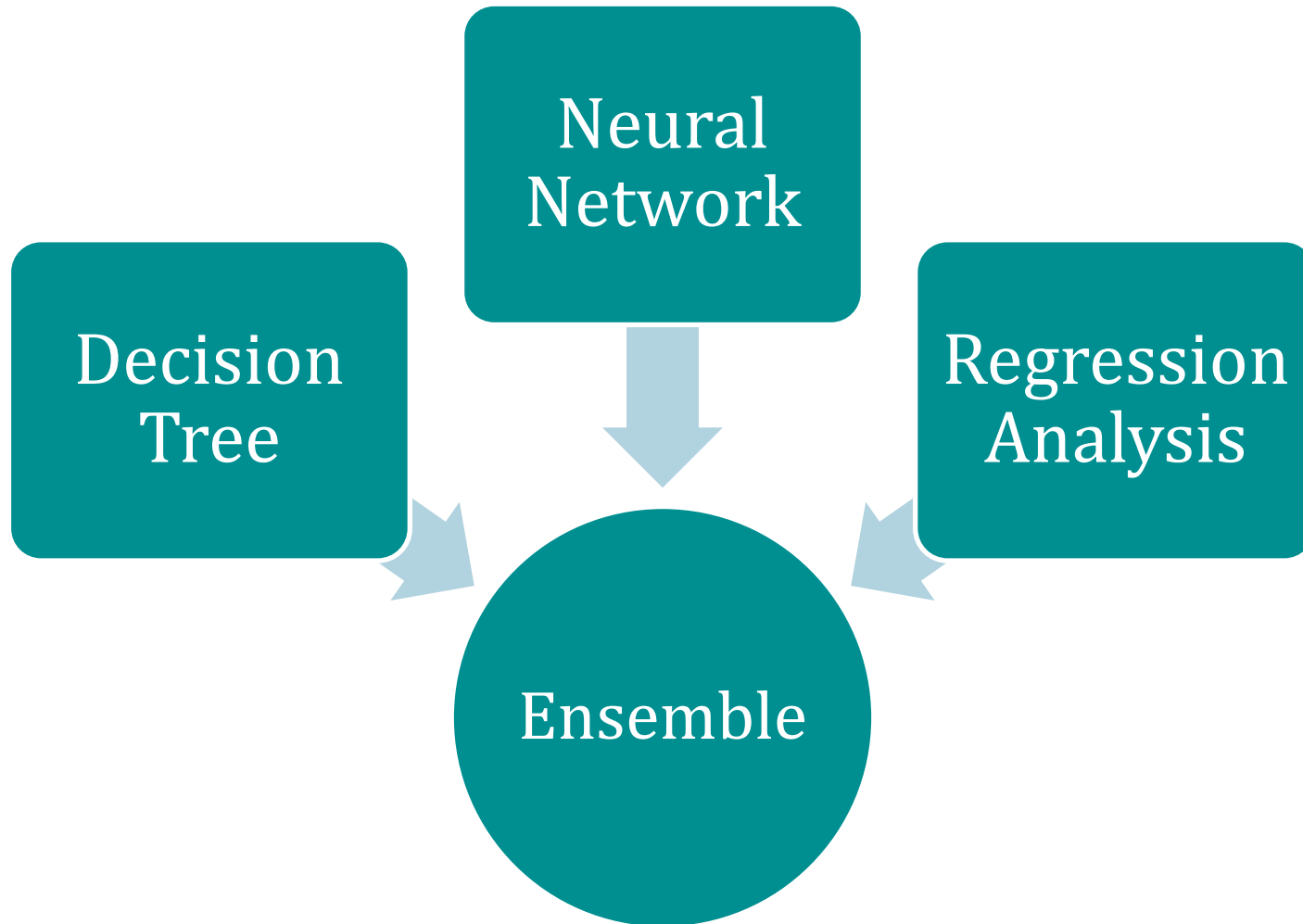


Data Summary - Bodily Injury Limit



Model Development

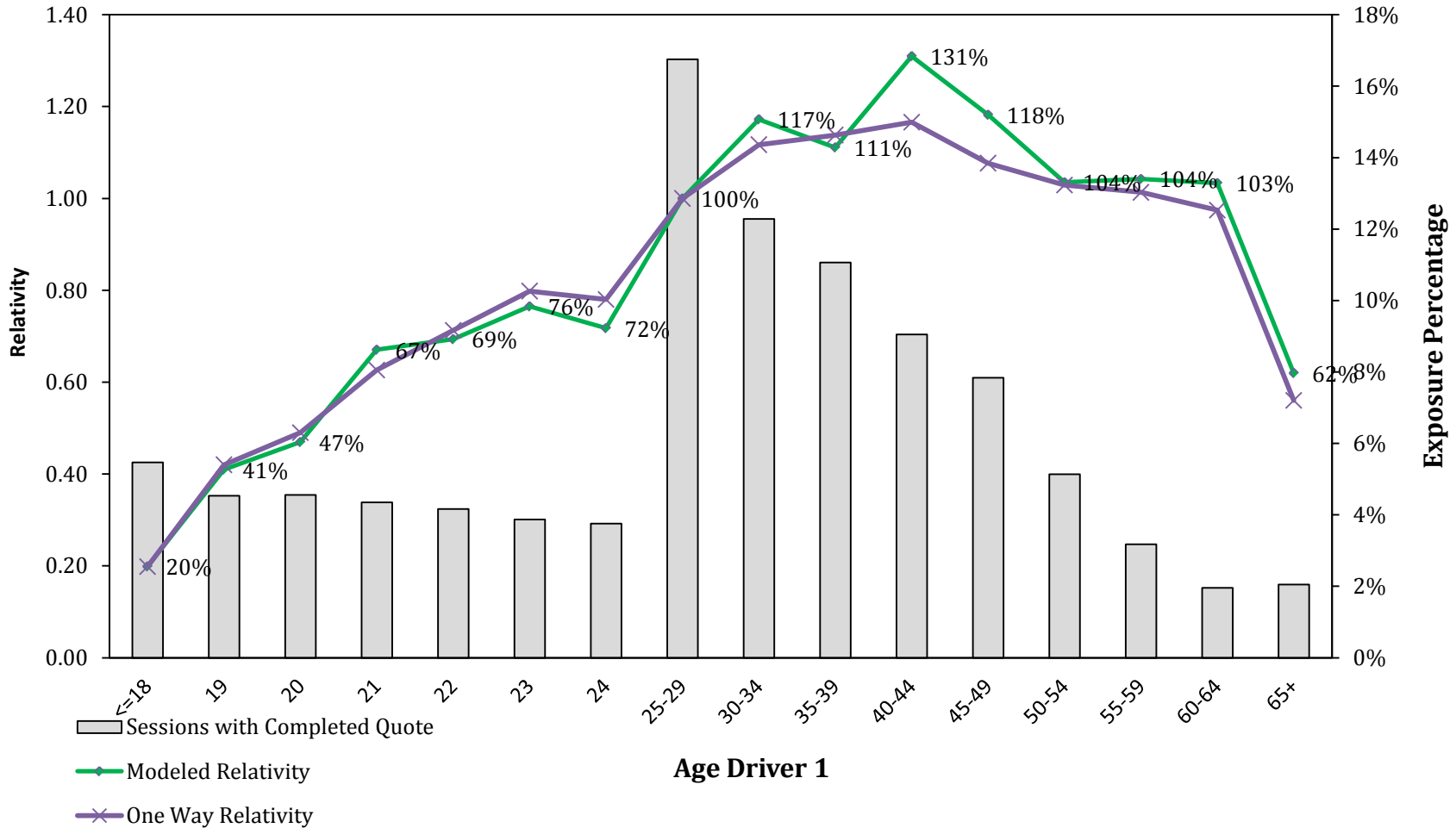
Modeling Techniques



Examples of Characteristics That Drive Conversion

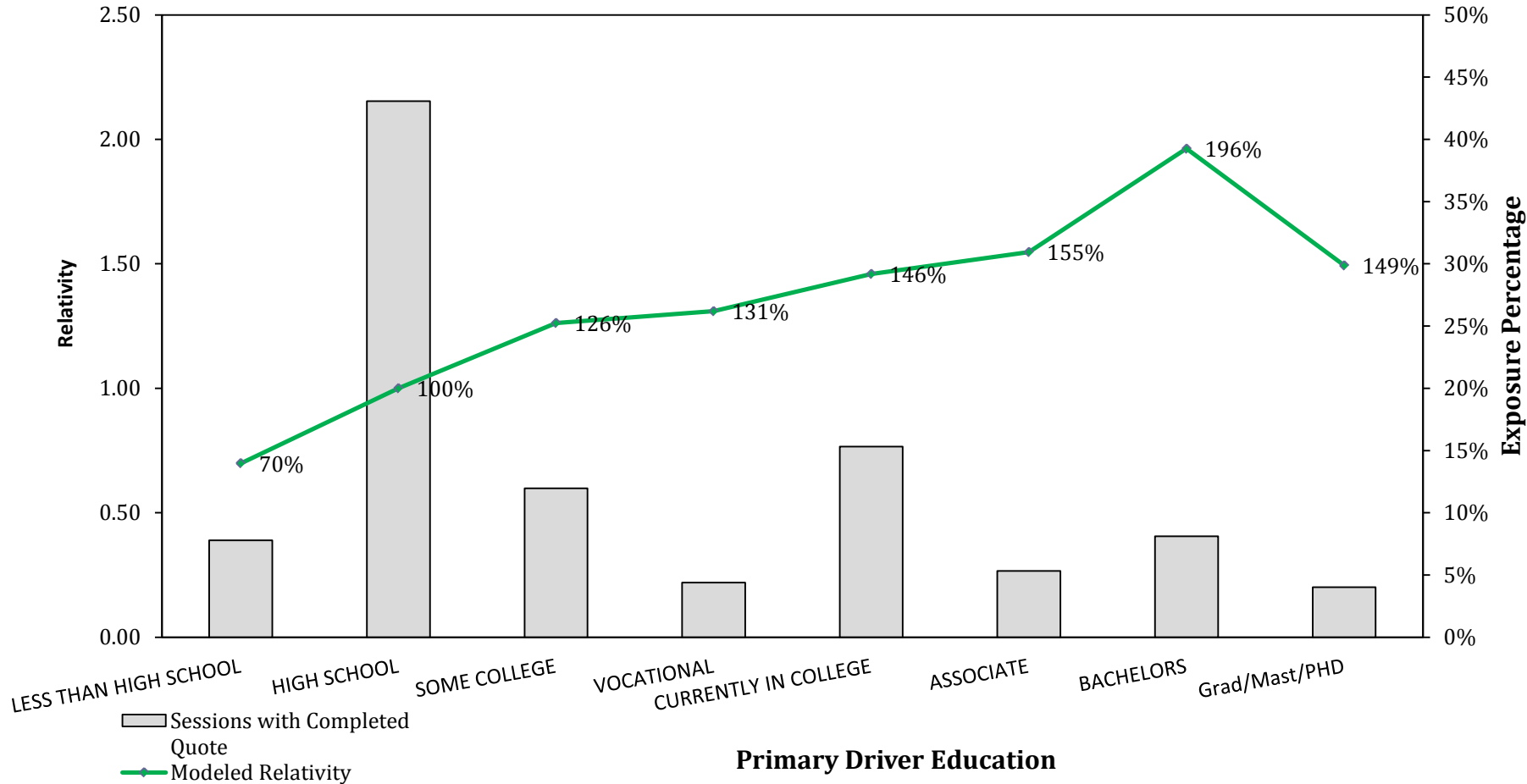
Age of Driver

Model: Purchase made during session



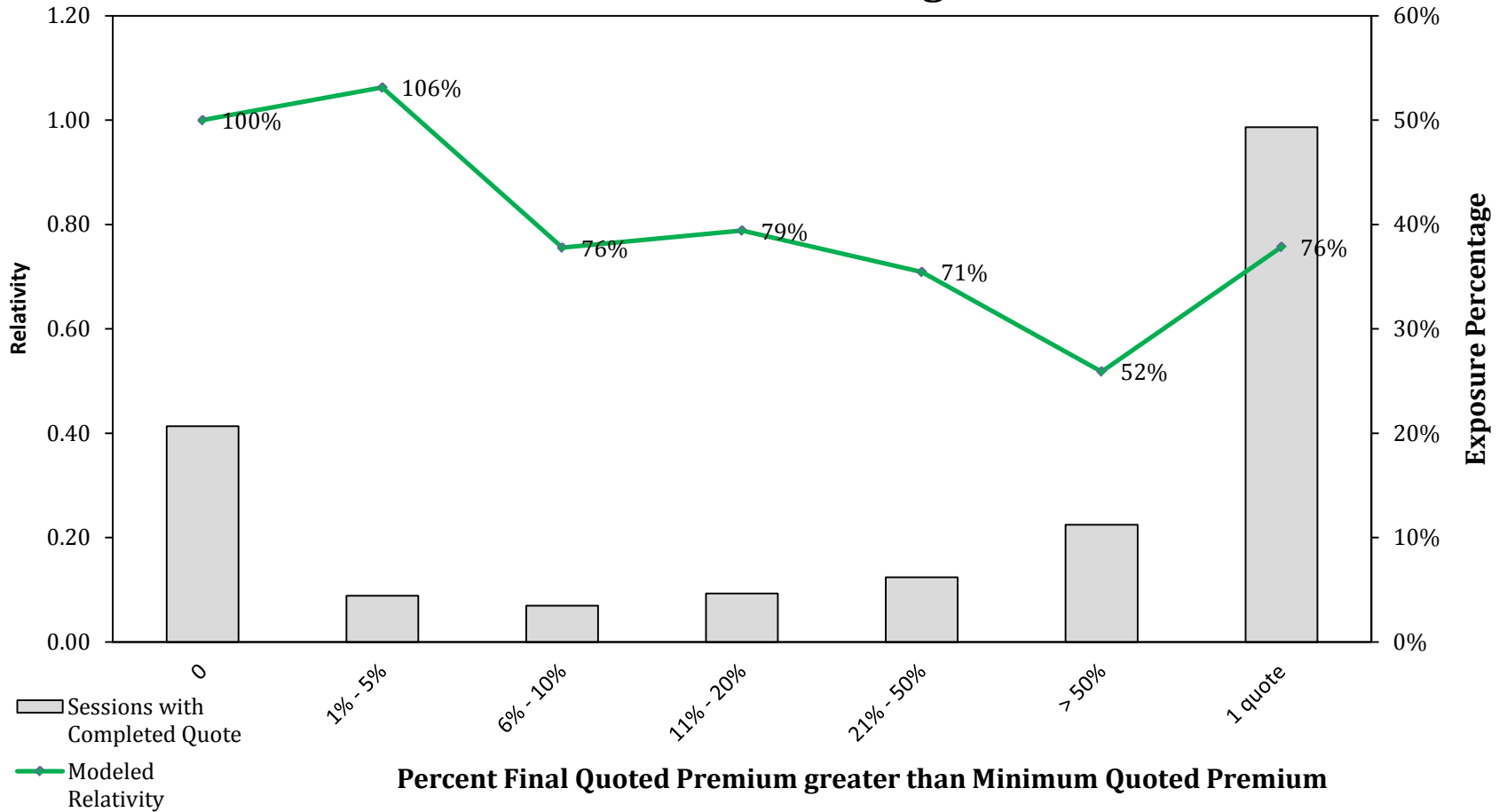
Education

Model: Purchase made during session



Price Sensitivity

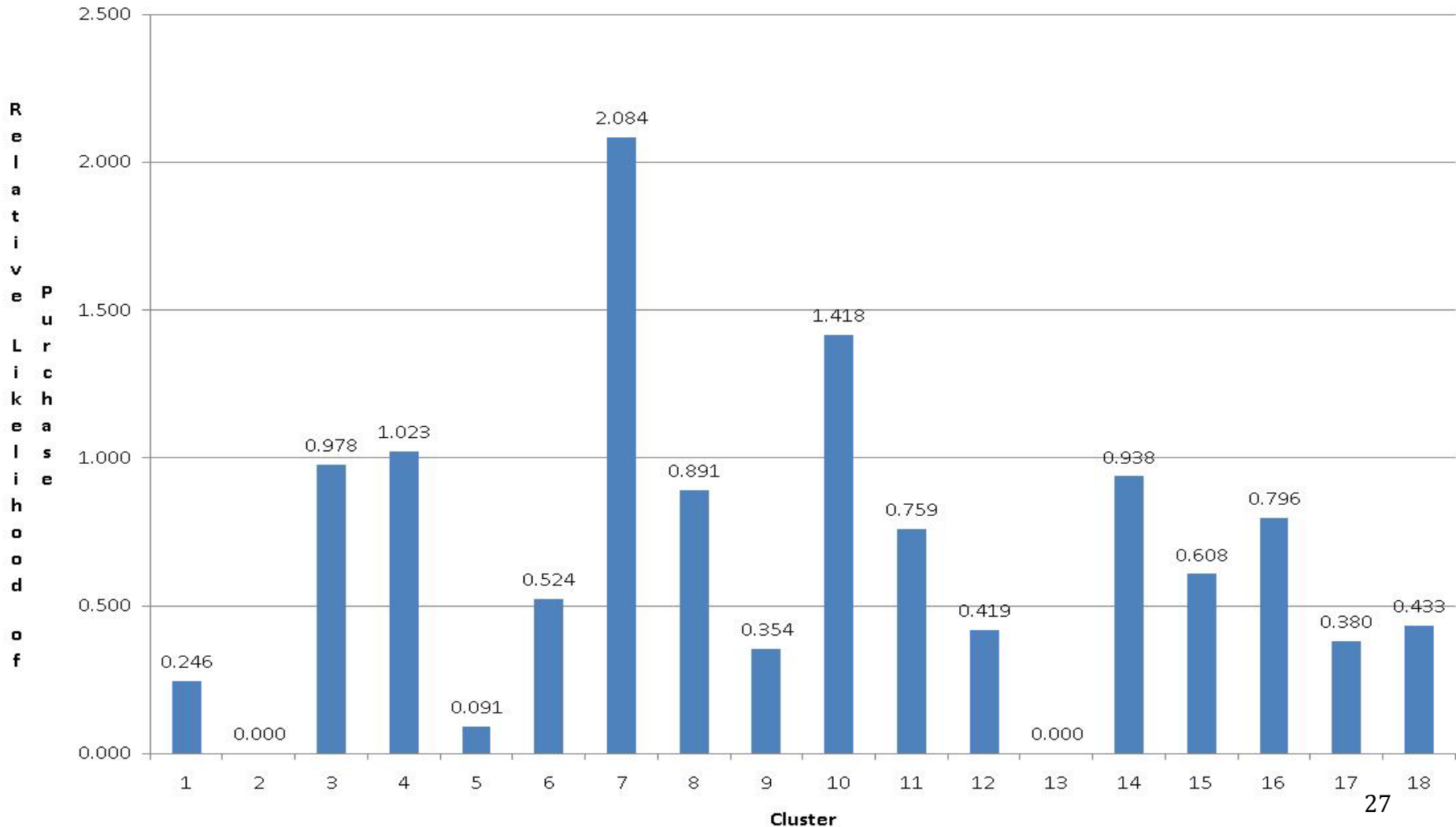
Model: Purchase made during session



Unstructured Data

Cluster Text Analysis

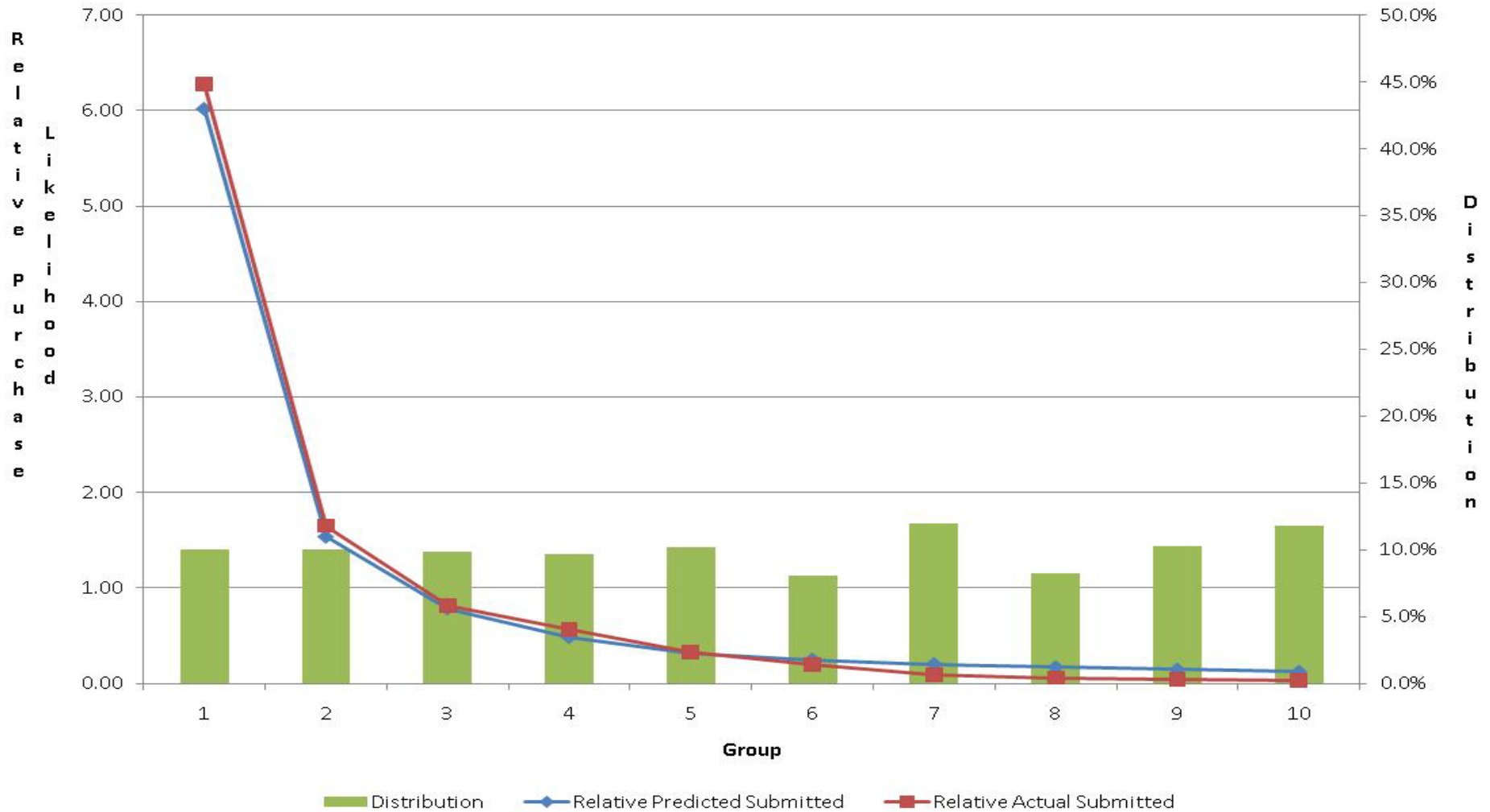
Purchase Likelihood By Word Phrase



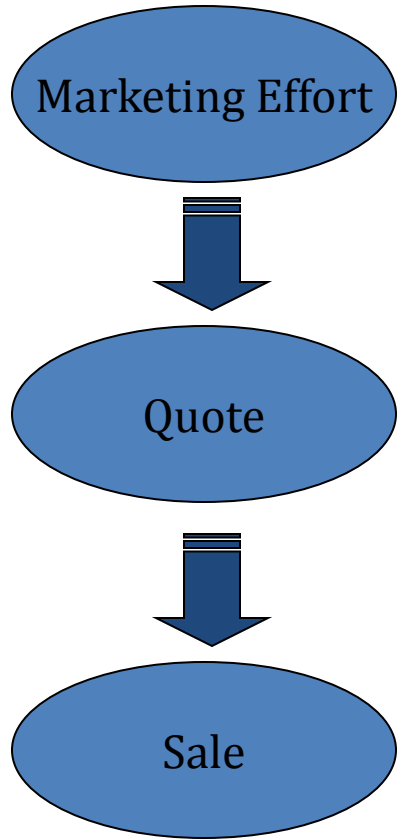
Summary & Additional Research

Lift Chart

Purchase Likelihood
Lift Chart



Additional Research



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Questions?

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Parting Thoughts...

- Please fill out the survey
- Thank you to our panelists
- Join us next month

ERM: Fundamentals and Implementation

Kevin Madigan, ACAS, MAAA

Consultant

Pinnacle Actuarial Resources, Inc.