

Target Analytics' Fundraising Models for Higher Education

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Elizabeth Crabtree and Lawrence Henze



Today's Agenda

- Presenters
- Target Analytics and Blackbaud
 - Data Mining and Analytics
 - Predictive Modeling for Donor Development
- Brown University
 - Data Mining and Analytics
 - Predictive Modeling
 - Success Stories
- Questions and Answers

Elizabeth Crabtree

- Director of Prospect Development, Brown University
- Areas of expertise include campaign planning, strategy and analysis, prospect identification and research, data mining and market analytics, relationship management and volunteer engagement.
- Nonprofit career has encompassed working at several diverse colleges and universities in prospect development, communications, corporate, foundation and government relations and managing a corporate foundation.
- Active member of AFP, CASE, NEDRA and APRA. Former president of Association of Professional Researchers for Advancement (APRA); served seven years on the board of directors and chaired the 2005 and 2006 APRA International Conferences.
- Frequent and nationally recognized speaker, industry expert and nonprofit fundraising consultant providing strategic counsel and advice to a highly selective and limited number of clients each year.
- Recipient of the 2007 Ann Castle Award and a 2010 CASE Circle of Excellence Award.

Lawrence C. Henze, J.D.

- Managing Director, Target Analytics
- B.A. in Political Science, Carroll University
- M.A. in Public Administration, University of Wisconsin-Madison
- J.D., University of Wisconsin-Madison
- 31 years in the nonprofit market
- 13 years as a development professional, 12 in higher education
- 18 years as a consultant to more than 700 organizations
- Pioneer in bringing predictive modeling and analytics to donor and prospect research
 - Co-founder of Econometrics in 1993
 - Founder of Core Data in 1998
 - Core Data became Blackbaud Analytics 10 years ago today

Target Analytics, a Blackbaud Company



About Us

- Target Analytics, a Blackbaud Company since 2001
 - Backed by Blackbaud's reputation and experience
 - More than 25 years of practical experience exclusively with nonprofits
- Superior software and services from one source
 - Donor predictive modeling
 - Prospect research tools such as wealth screening and prospect management software
 - Donor benchmark comparison reports and program assessments
 - Integration with The Raiser's Edge and BBEC
- With the addition of NOZA, we've added more prospect research solutions, such as file screening and subscription to the searchable database of over 50 million gifts
- Our Mission
 - Help nonprofits maximize fundraising results...***at every stage of the donor life cycle!***

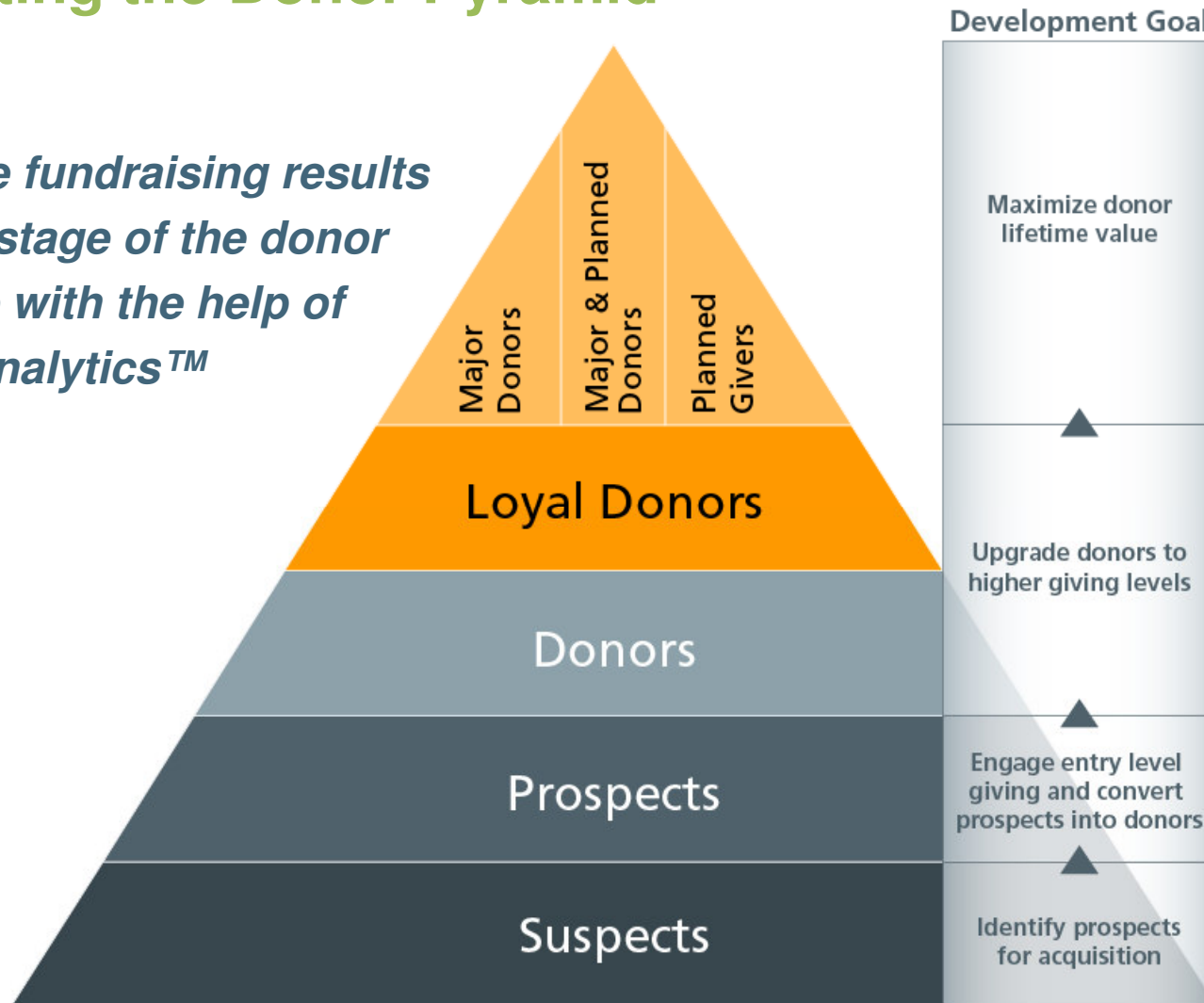


Higher Education Clients – 1000+

- Brown University
- Harvard University
- Stanford University
- Boston University
- University of Michigan
- University of Chicago
- West Virginia University
- University of Arizona
- University of Wyoming
- Colorado State University
- Fairfield University
- University of Illinois
- San Diego State University
- DePaul University
- Bradley University
- Carroll University
- St. John's University
- Creighton University
- Fairmont State University
- St. Mary's University (TX)
- College of Saint Benedict
- Pomona College
- Corning Community College
- Houston Community College Fdn.
- Dallas Community College Fdn.

Supporting the Donor Pyramid

Maximize fundraising results at every stage of the donor life cycle with the help of Target Analytics™



Analytics Begins With Data Mining

- ***Data Mining***: Automated or manual extraction or query of information from a constituent database: segmentation analysis, correlation studies, descriptive predictive modeling
- ***Predictive Modeling***: Discovery of underlying meaningful relationships and patterns from historical and current information within a database; using these findings to predict individual behavior

Data Mining – Internal Data

- Look for internal and transactional data to tell us donor/non-donor characteristics
 - Internal
 - Age
 - Gender – watch out here
 - Major
 - Degree
 - Type of Relationship/Constituency Code
 - Number of relationships
 - Transactional
 - Membership
 - Ticket purchases
 - Special events



Data Mining – External Data Adds Depth and Breadth

- Data appended to your file:
 - Census
 - Cluster data
 - Equifax Niche data
 - Summarized credit data
 - Philanthropic Data
 - NOZA, Donor Bank
 - Wealth
 - Hard asset data



The Benefits of Data Mining and Modeling

- A comprehensive view of your database
- Jump starting prospect identification and classification
- Potential cost savings
- Clean your database
- Understand donor/non-donor characteristics
- Create cost-effective appeals
- Increase gift revenues
- Staffing and resource allocation
- Knowing your institution, turning knowledge into results

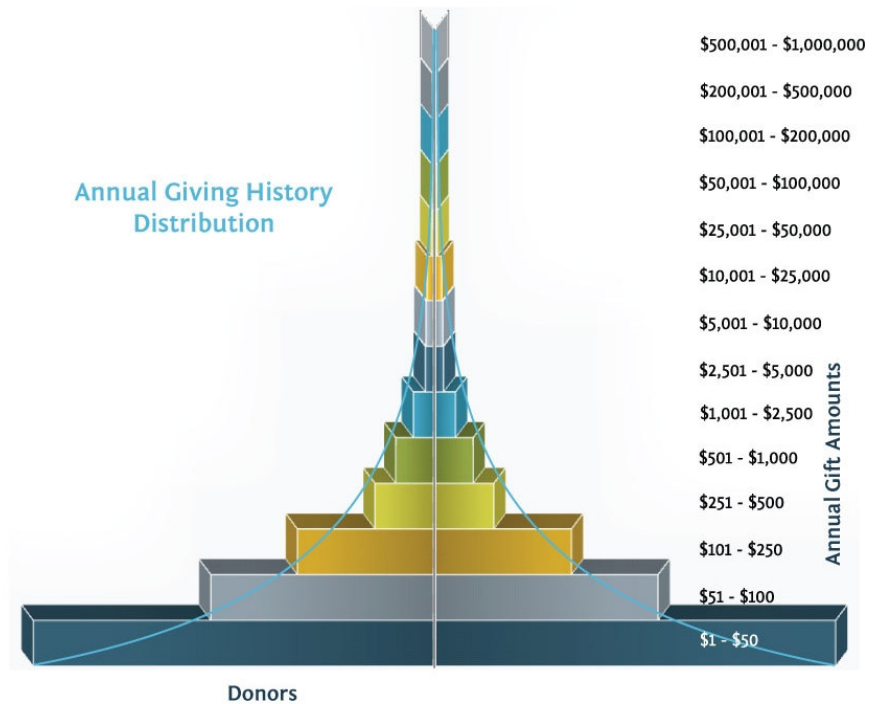
Predictive Modeling for Donor Development

Reality Check – What Shape is Your Pyramid?

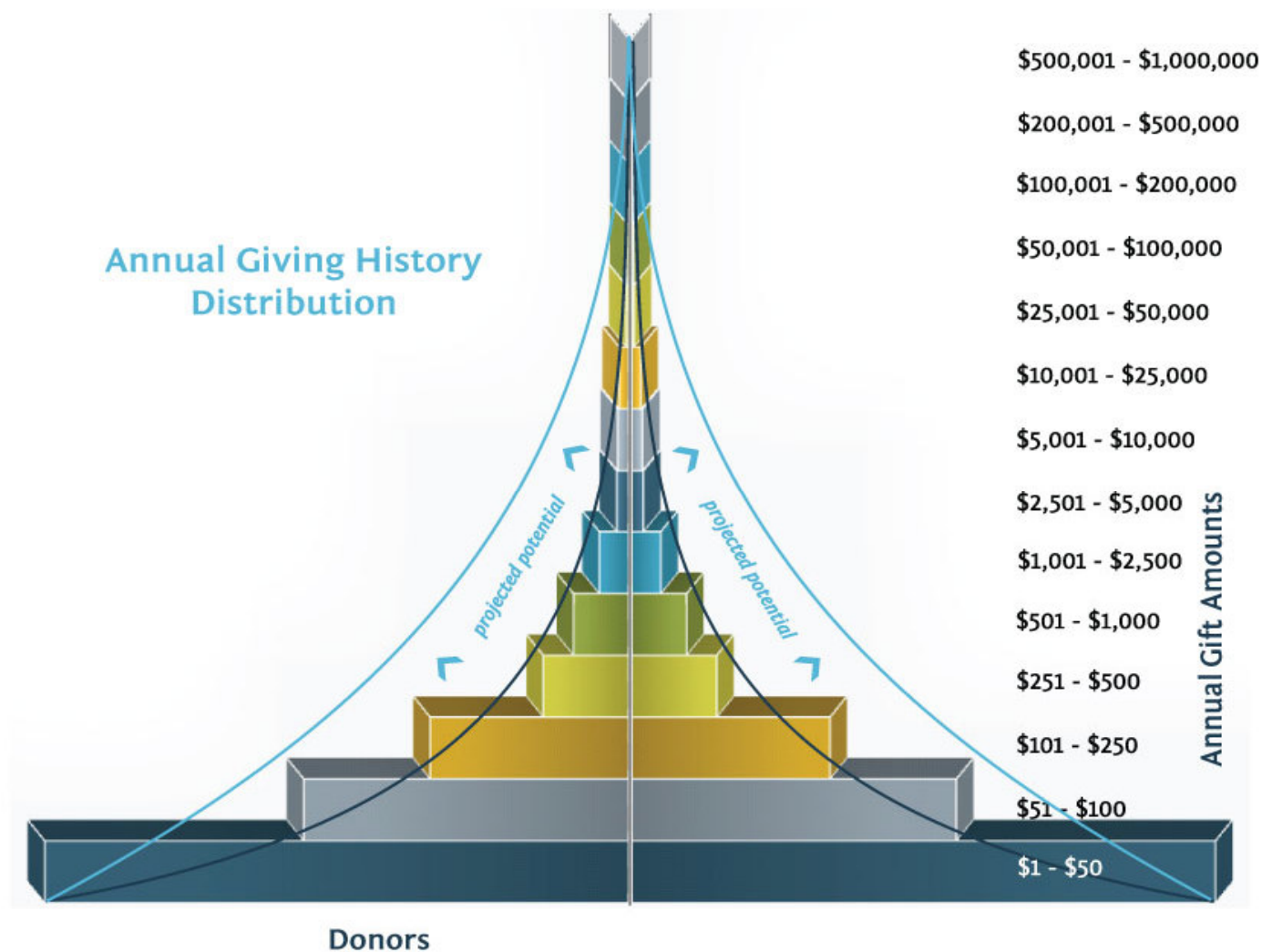
Traditional Gift Pyramid



Annual Giving History Distribution



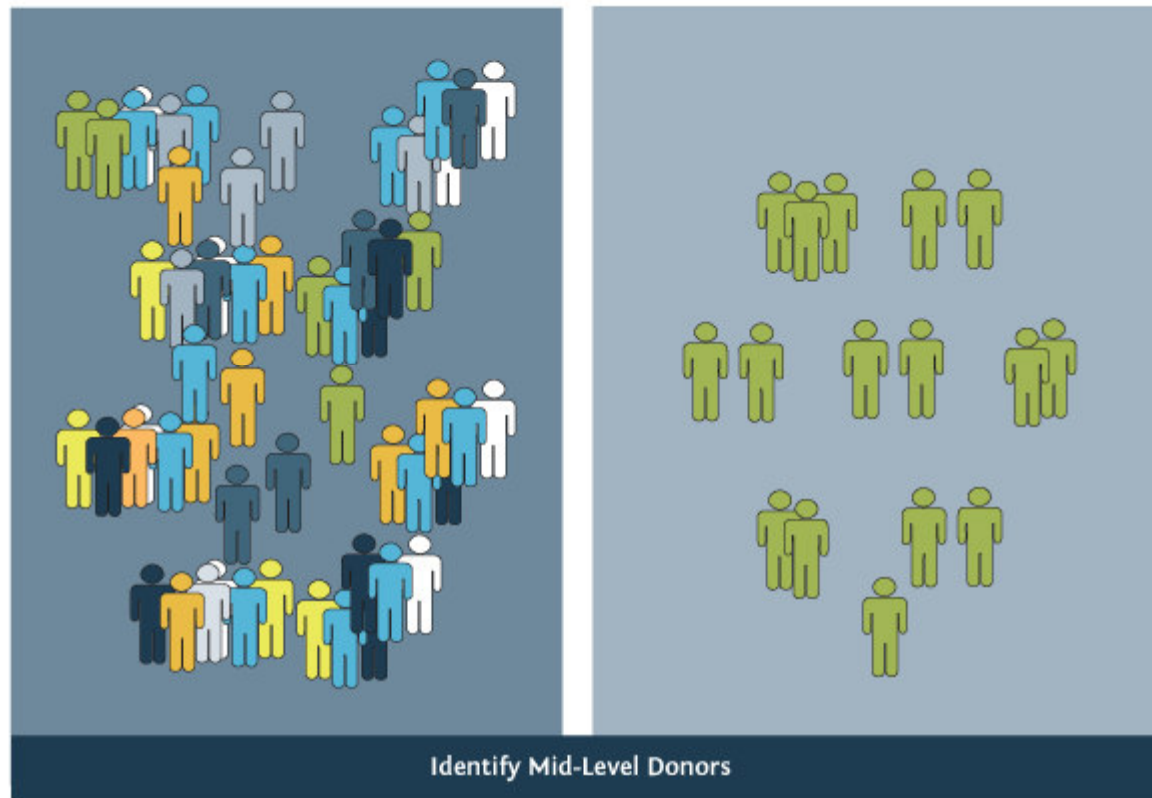
Pyramid Power



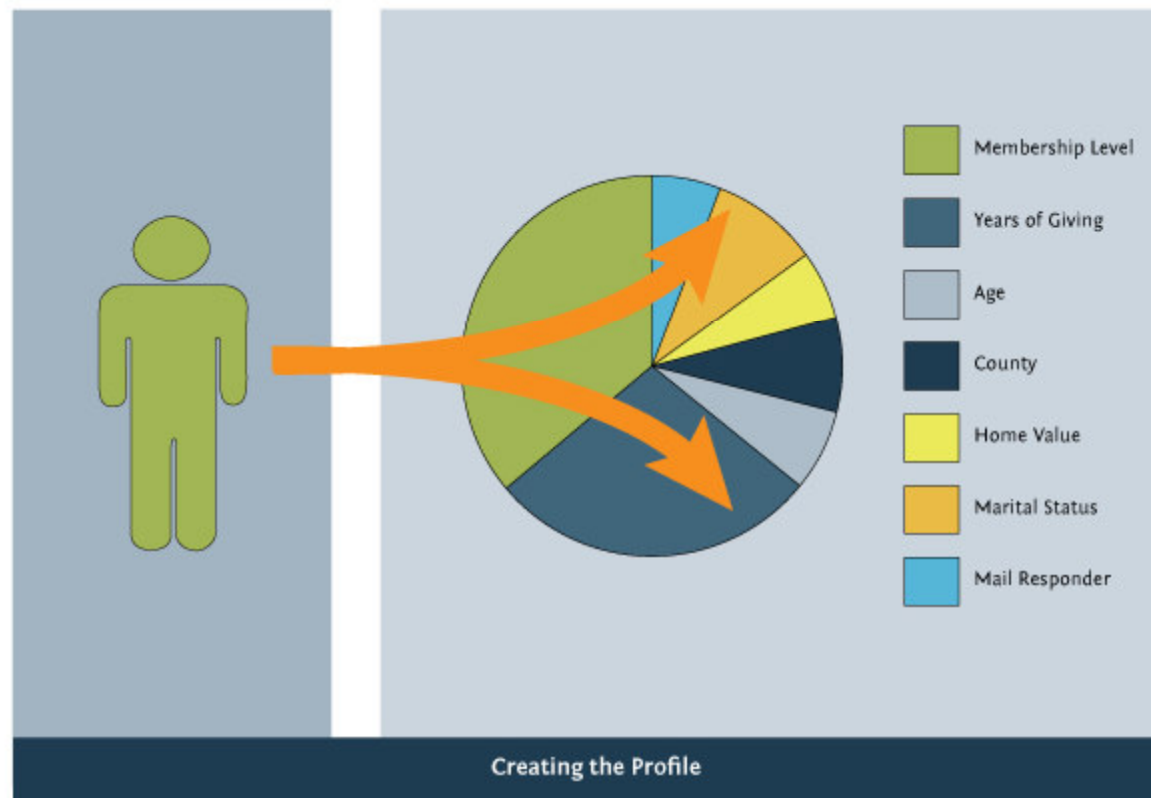
Predictive Modeling - Why it Works

- Giving profiles are complex
- Profiles vary by constituency/organization
- Profiles vary by giving level/type
- Giving propensity and capacity are different
- **Propensity and capacity scores will enable you to identify prospects to strengthen your donor pyramid**

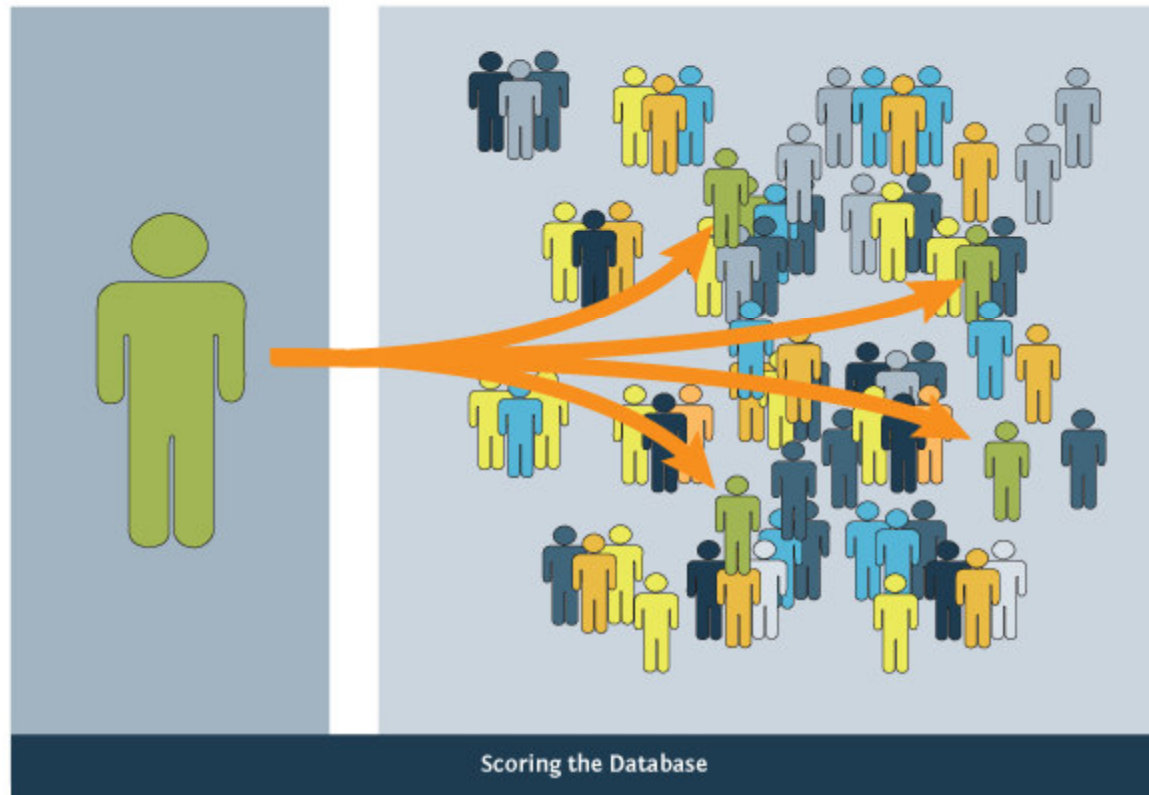
How Modeling Works: Identify the Action to be Predicted



Building the Profile

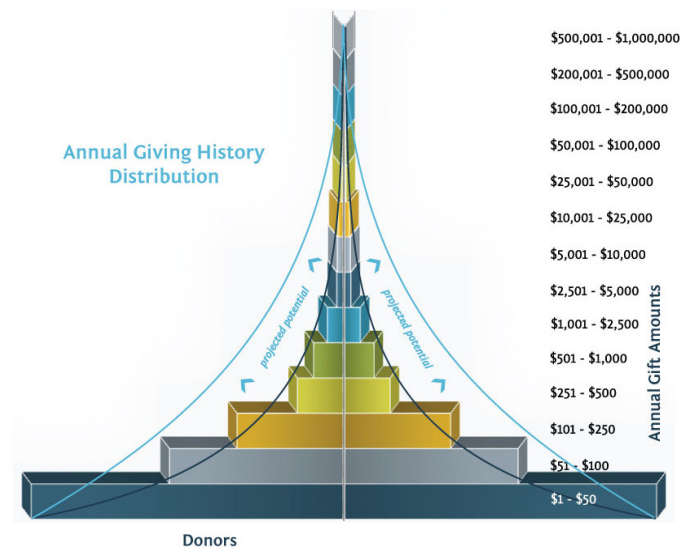


Scoring the Database



Mid-Level and Transitional Giving Model

- Previous slides speak to a new modeling service
 - Identifying individuals most likely to populate the middle of the giving pyramid, and/or
 - Individuals likely to move from mid-level to major giving
 - transitional giving



Identifying the Questions for Modeling

- Annual fund screening – the best place to start?
 - Remember the pyramid and ultimate giving
- Annual fund questions?
 - Who makes annual gifts? Is a member?
 - What does a loyal donor look like?
 - Who can give more?
 - Who is unlikely to give again?
 - Which lapsed donors are likely to be recaptures?
 - Who gives at the same time every year?
 - Who gives via direct mail? Email? Telemarketing? Website?
 - Who is most likely to make an unrestricted gift? Restricted gift?

Identifying the Questions for Modeling

- Alumni Membership modeling/cluster analysis
 - Likelihood to be a alumni association member, renew, etc.
 - Likelihood for a member to become a donor
 - Membership groupings and characteristics
- Engagement modeling

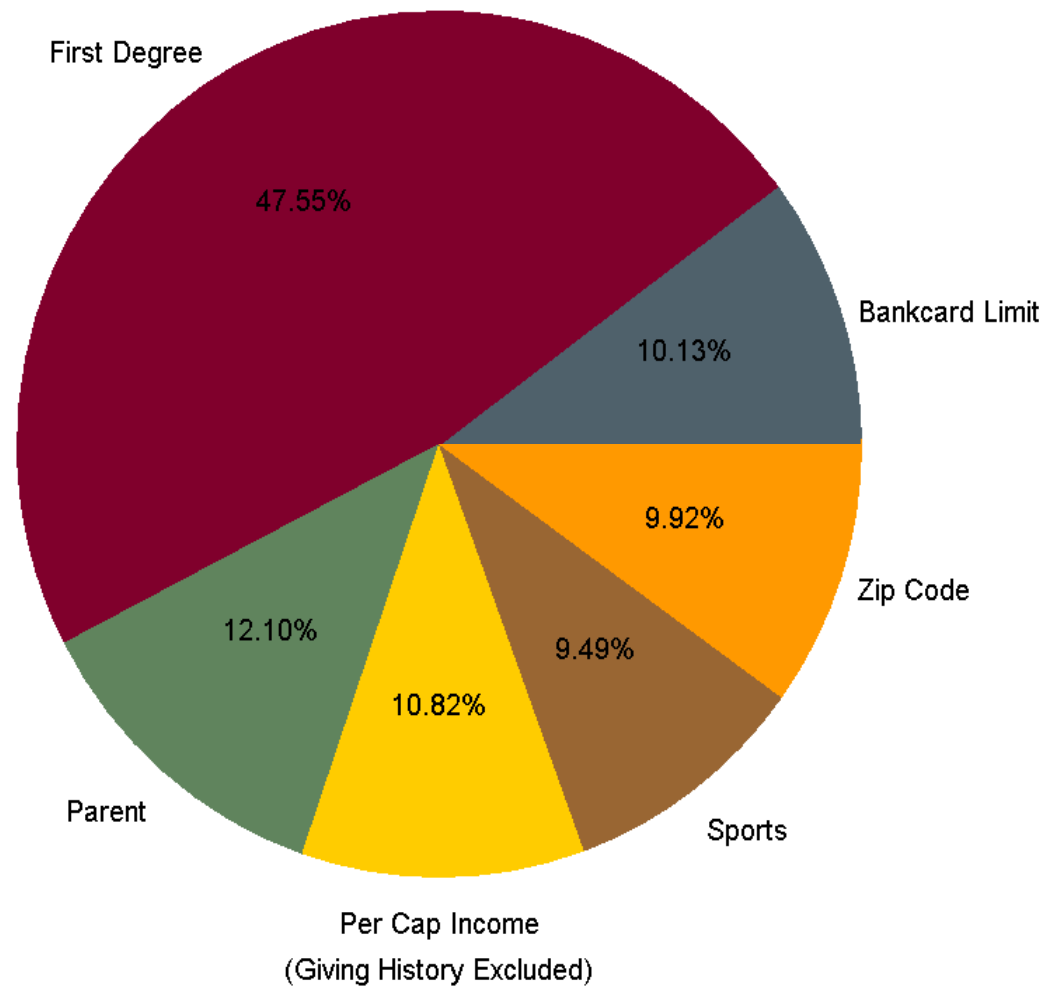
Identifying the Questions for Modeling

- Major giving or capital campaigns?
 - Identifying emerging major gift prospects
 - Pre-campaign screening
 - Mid-campaign screening
 - Post campaign screening
- Planned giving
 - Annuity likelihood
 - Bequest likelihood
 - Charitable remainder trust likelihood
- Which other questions would you like answered?

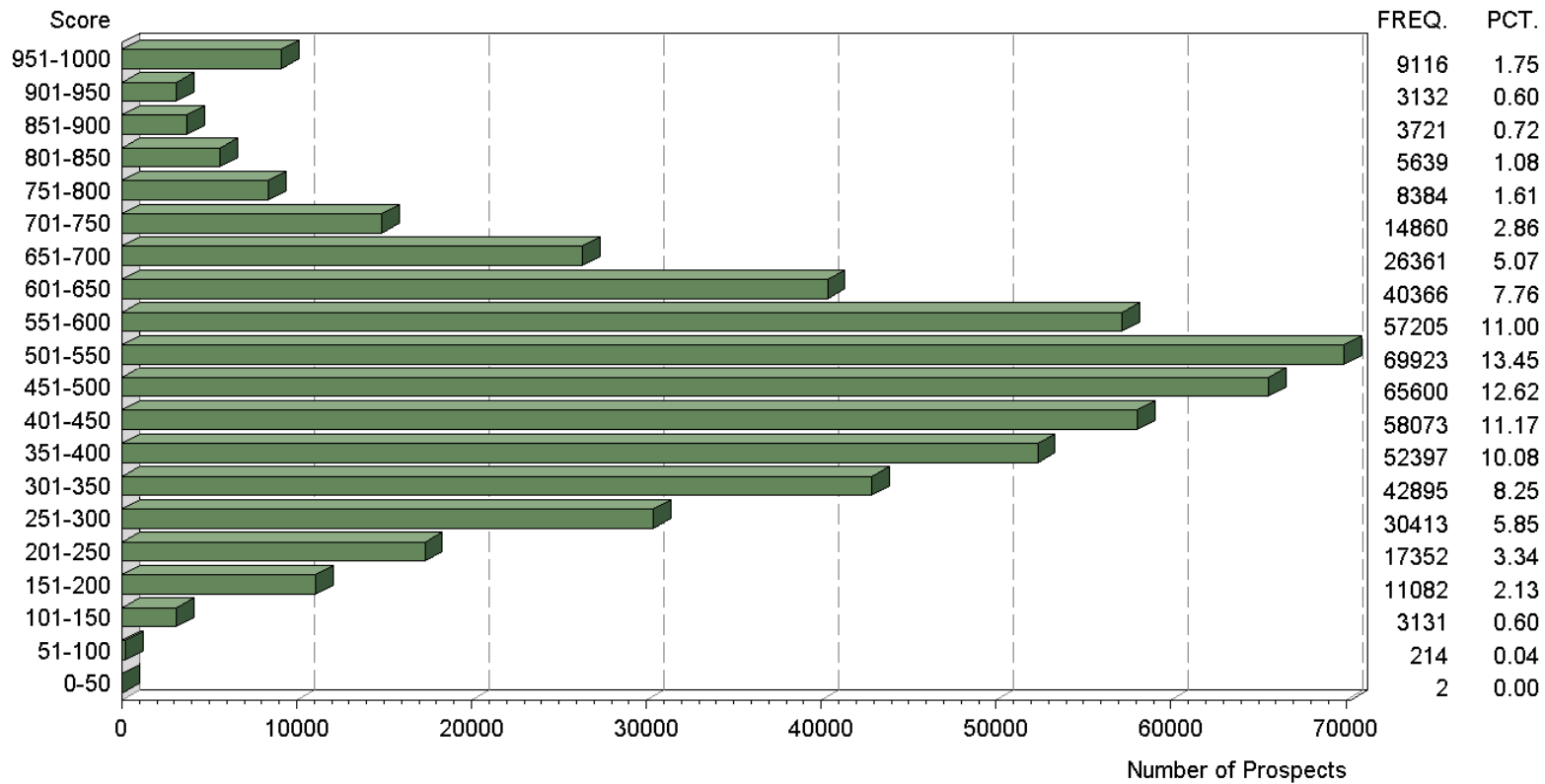
Young Alumni and Engagement Modeling

- Engagement modeling
 - Determining alumni most likely to be engaged with your institution
 - Engagement is presumed to be the precursor to giving
- Young alumni giving model
 - Looking at young alumni within the past 10-15 years as a discrete group with a different giving profile than mature alumni

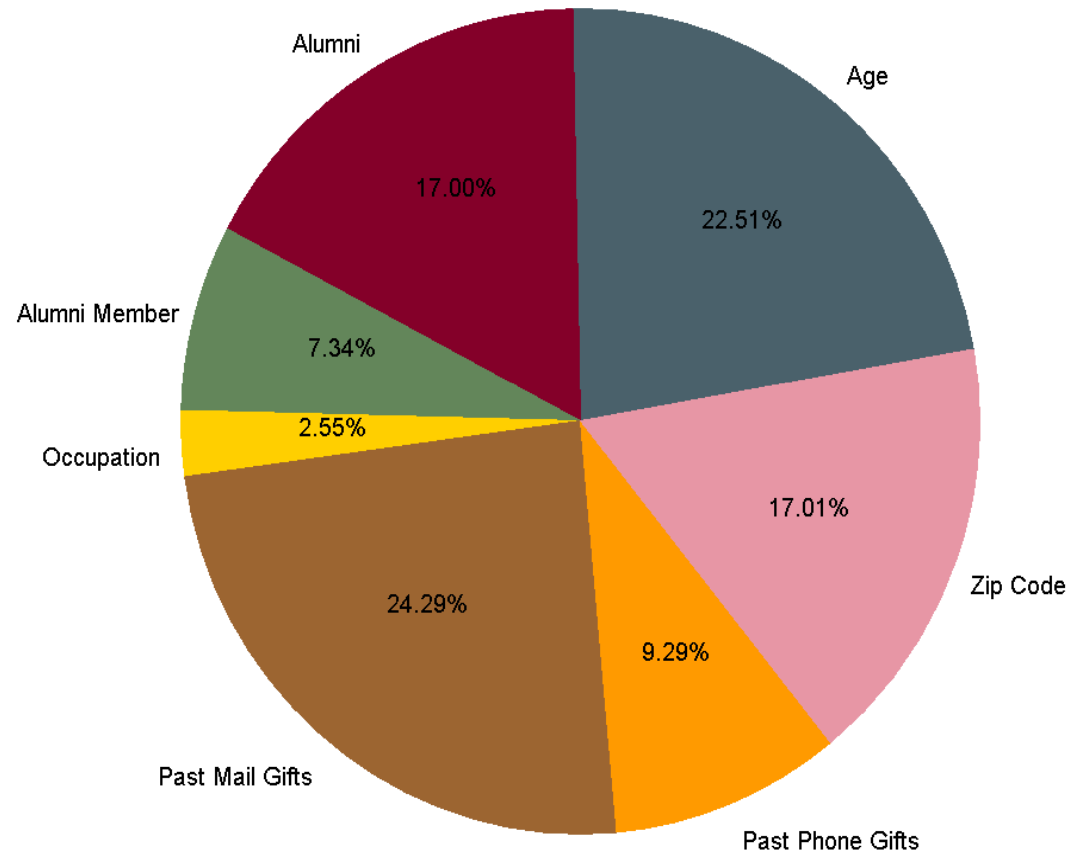
Annual Giving Model



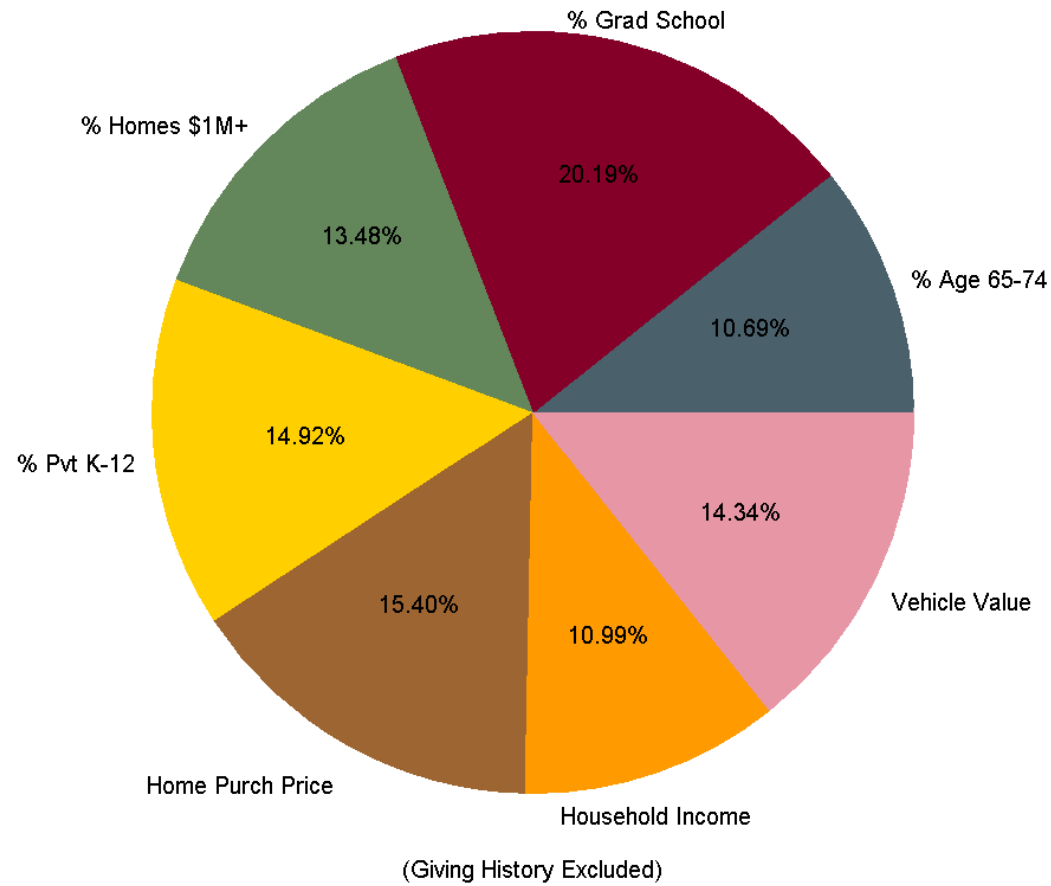
Annual Giving Score Distribution



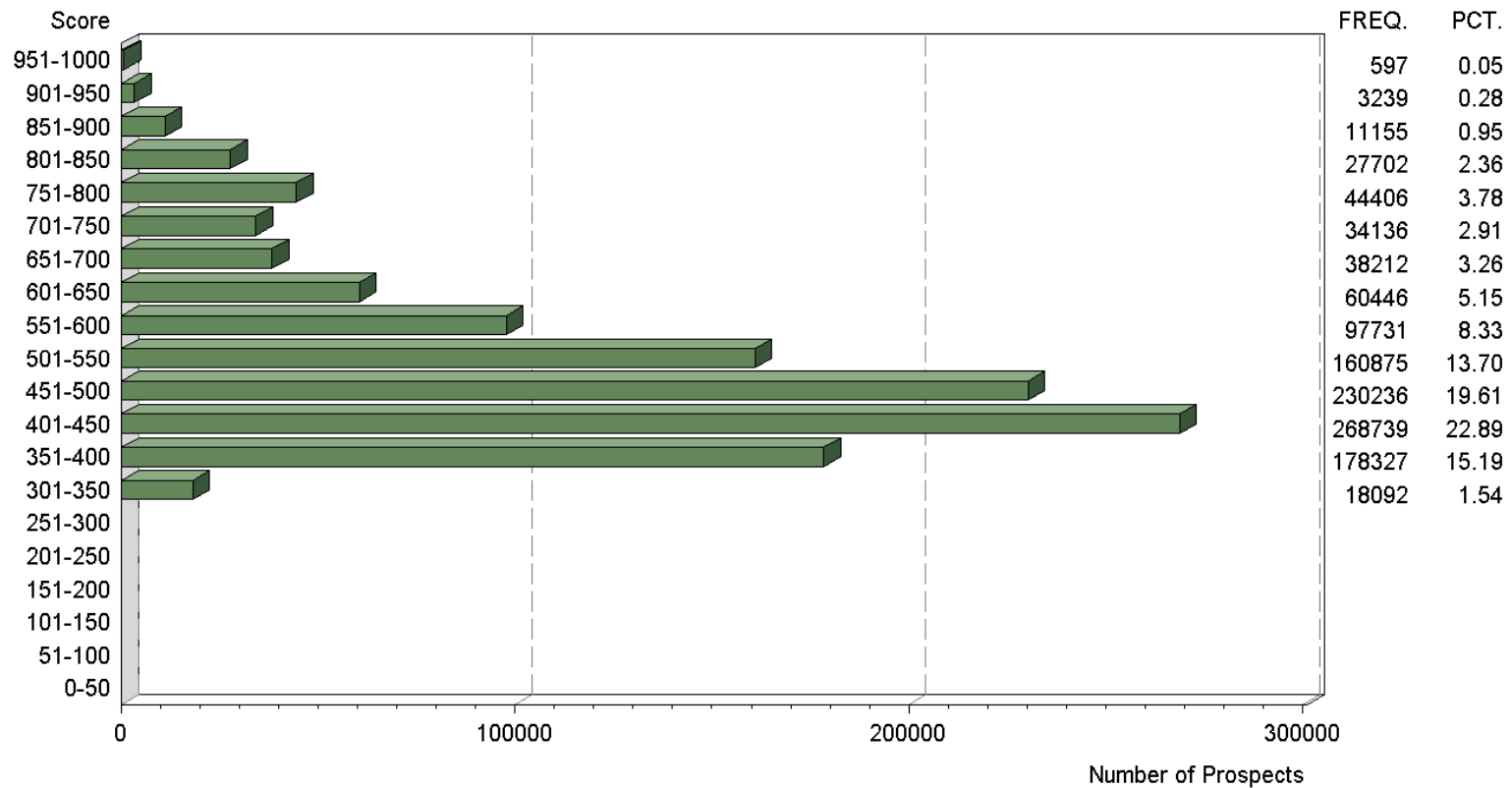
Likelihood to Give Via Direct Mail



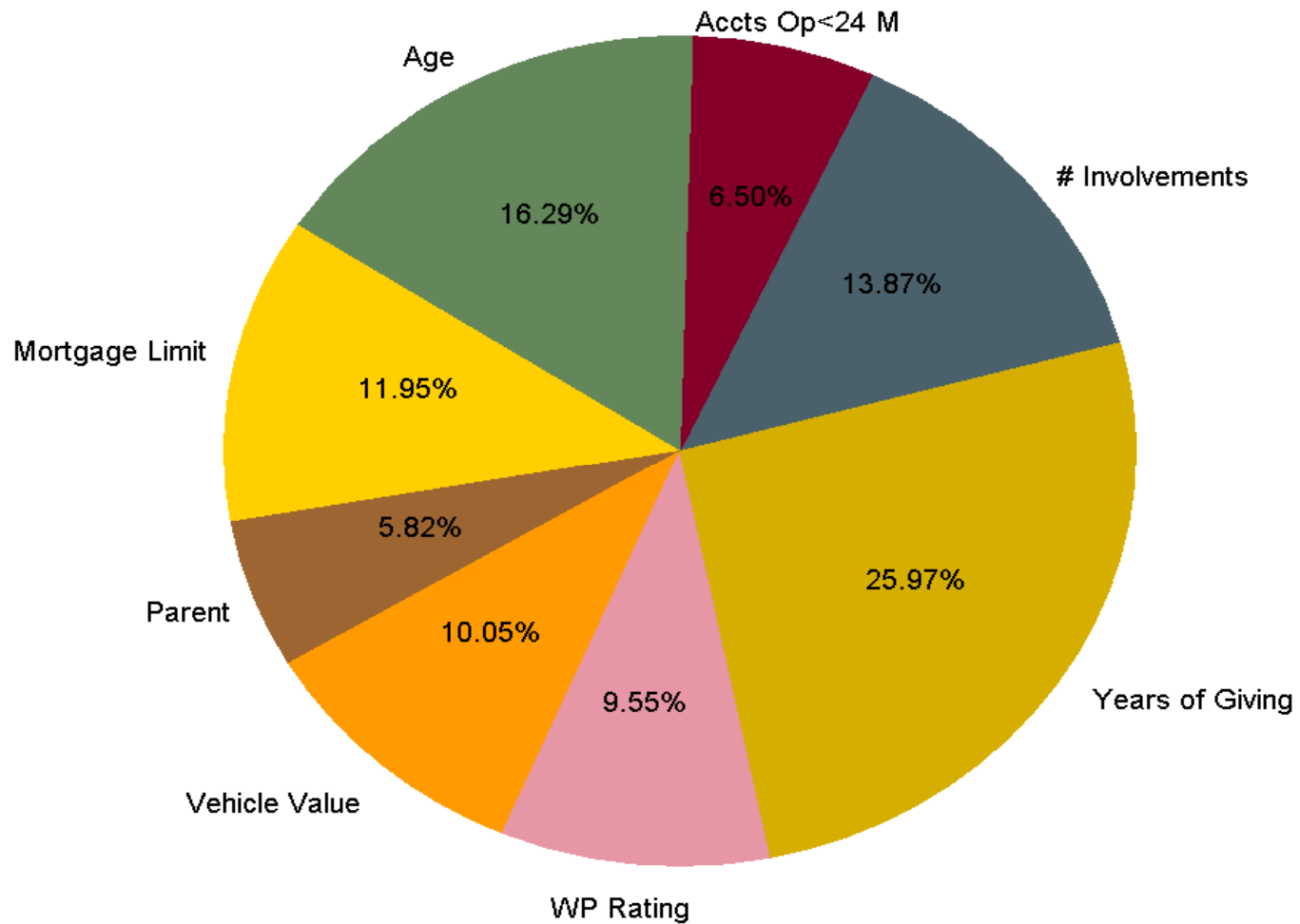
Major Giving Model



Major Giving Score Distribution



Target Gift Range Model



Target Gift Range Model

- The capacity model looks at the inclination combined with the capacity a prospect has to make a gift at a certain level to *your* organization
 - Gift range projected by the predictive model for a **one year period**
 - Target Gift Ranges are numbered 1 to 12, from \$1-50 to \$100,000+, or higher if giving history permits
-

1: \$1 - \$50

2: \$51 - \$100

3: \$101 - \$250

4: \$251 - \$500

5: \$501 - \$1,000

6: \$1,001 - \$2,500

7: \$2,501 - \$5,000

8: \$5,001 - \$10,000

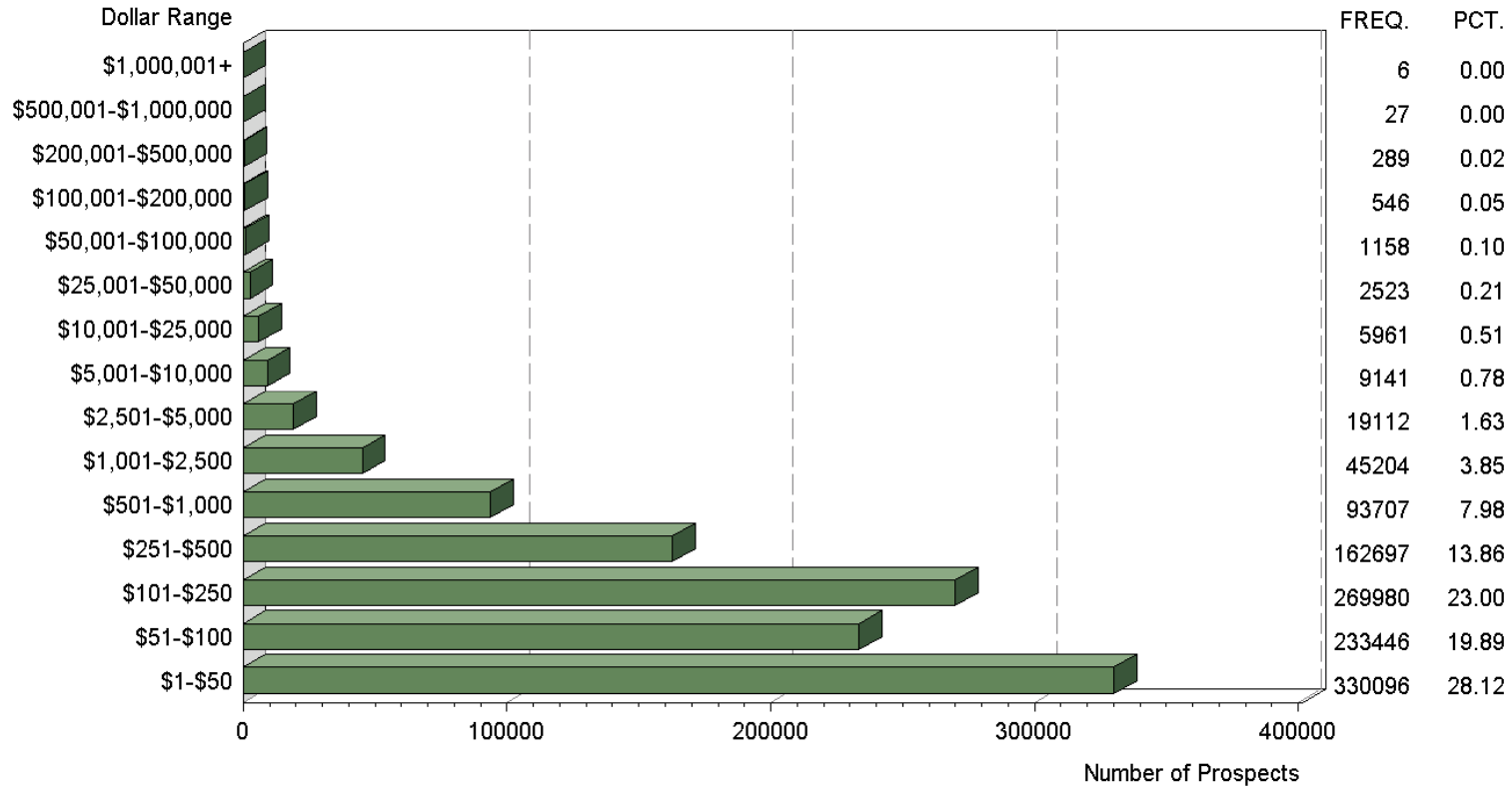
9: \$10,001 - \$25,000

10: \$25,001 - \$50,000

11: \$50,001 - \$100,000

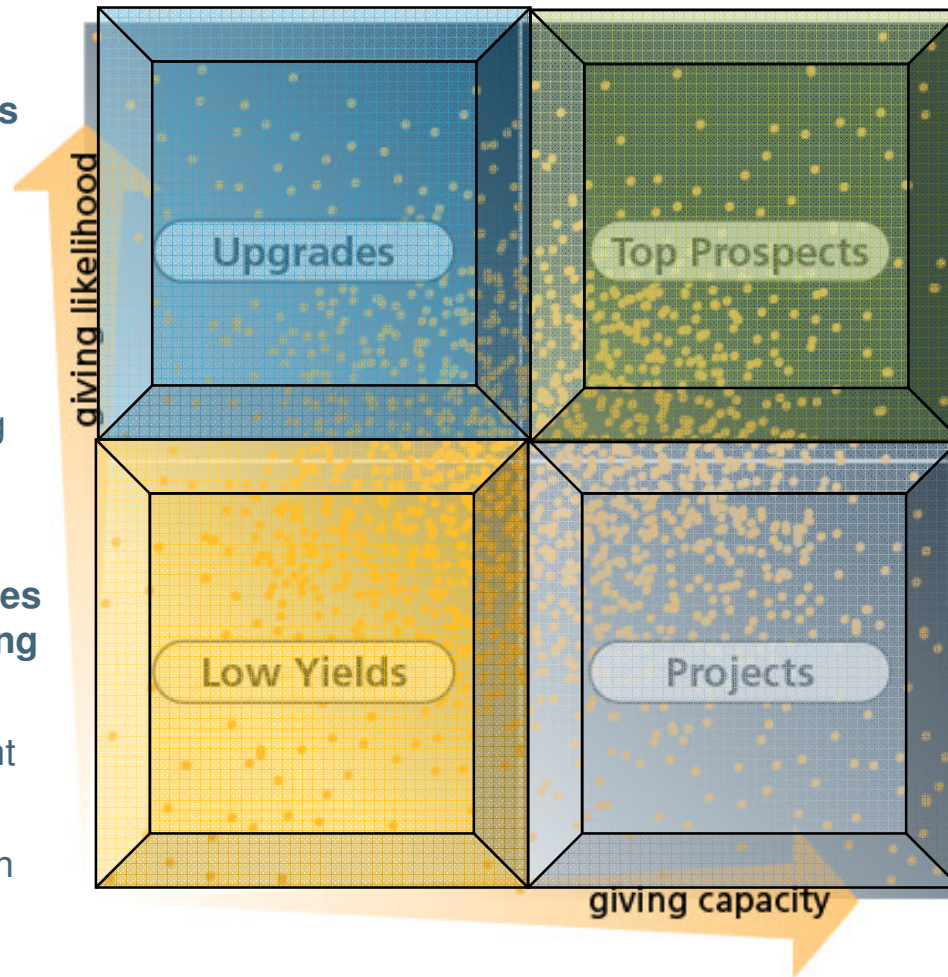
12: \$100,001 +

Target Gift Range Score Distribution



Segmenting Prospects by Likelihood & Capacity

- **High likelihood scores and mid-level target giving ranges**
 - Implement targeted upgrade, mid-level major gift strategies
 - Increase annual giving
- **Low likelihood scores and low target giving ranges**
 - Minimize investment
 - Consider reduced resource application



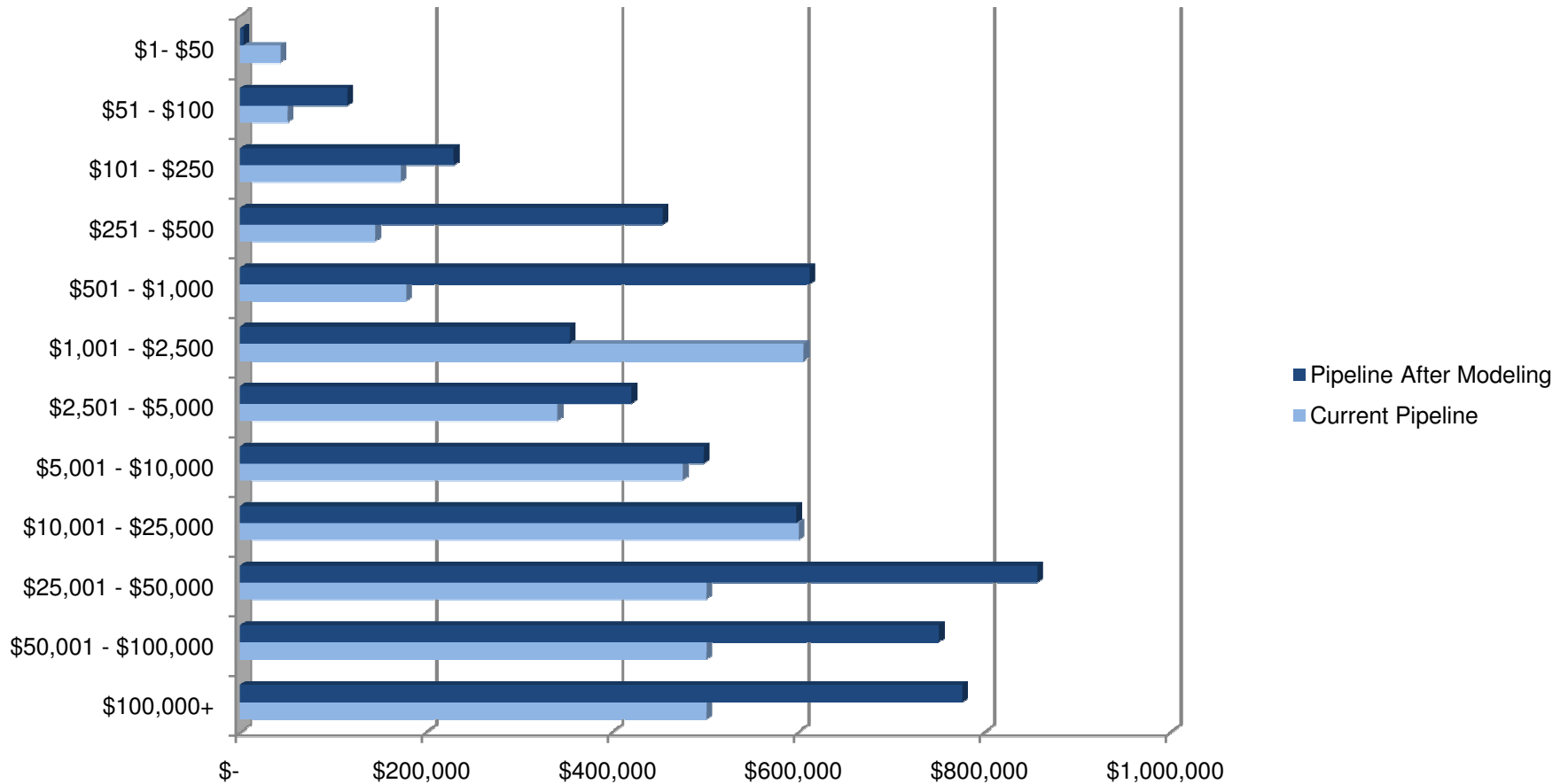
- **Highest scores and high assets**
 - Further qualification and research
 - Immediate individual cultivation
- **Lower likelihood scores, but high target giving ranges and assets**
 - Need to be sold on your mission
 - Longer term cultivation

Prospect Pipeline by Likelihood & Capacity

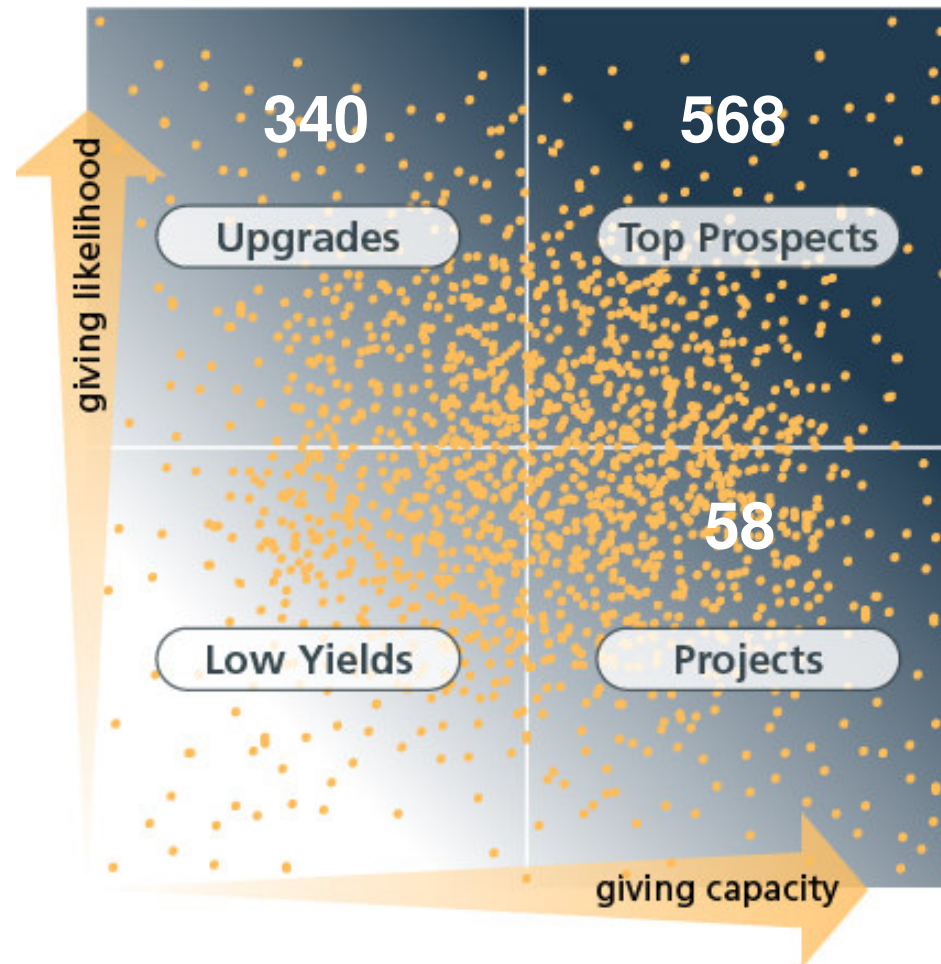
Gift Range	Gift Minimum	# of Donors at this level	Current Pipeline	# of Qualified Prospects by Capacity	# of Qualified Prospects with High Likelihood	Pipeline After Modeling	Cumulative Total
\$100,000+	\$ 100,000	5	\$ 500,000	31	8	\$ 775,000	\$ 775,000
\$50,001 - \$100,000	\$ 50,000	10	\$ 500,000	60	15	\$ 750,000	\$ 1,525,000
\$25,001 - \$50,000	\$ 25,000	20	\$ 500,000	137	34	\$ 856,250	\$ 2,381,250
\$10,001 - \$25,000	\$ 10,000	60	\$ 600,000	239	60	\$ 597,500	\$ 2,978,750
\$5,001 - \$10,000	\$ 5,000	95	\$ 475,000	398	100	\$ 497,500	\$ 3,476,250
\$2,501 - \$5,000	\$ 2,500	136	\$ 340,000	672	168	\$ 420,000	\$ 3,896,250
\$1,001 - \$2,500	\$ 1,000	605	\$ 605,000	1,414	354	\$ 353,500	\$ 4,249,750
\$501 - \$1,000	\$ 500	355	\$ 177,500	4,887	1,222	\$ 610,875	\$ 4,860,625
\$251 - \$500	\$ 250	579	\$ 144,750	7,248	1,812	\$ 453,000	\$ 5,313,625
\$101 - \$250	\$ 101	1,699	\$ 171,599	9,076	2,269	\$ 229,169	\$ 5,542,794
\$51 - \$100	\$ 50	1,008	\$ 50,400	9,122	2,281	\$ 114,025	\$ 5,656,819
\$1 - \$50	\$ 1	42,172	\$ 42,172	13,460	3,365	\$ 3,365	\$ 5,660,184

Prospect Pipeline by Likelihood & Capacity

Modeling Impact on Pipeline Potential

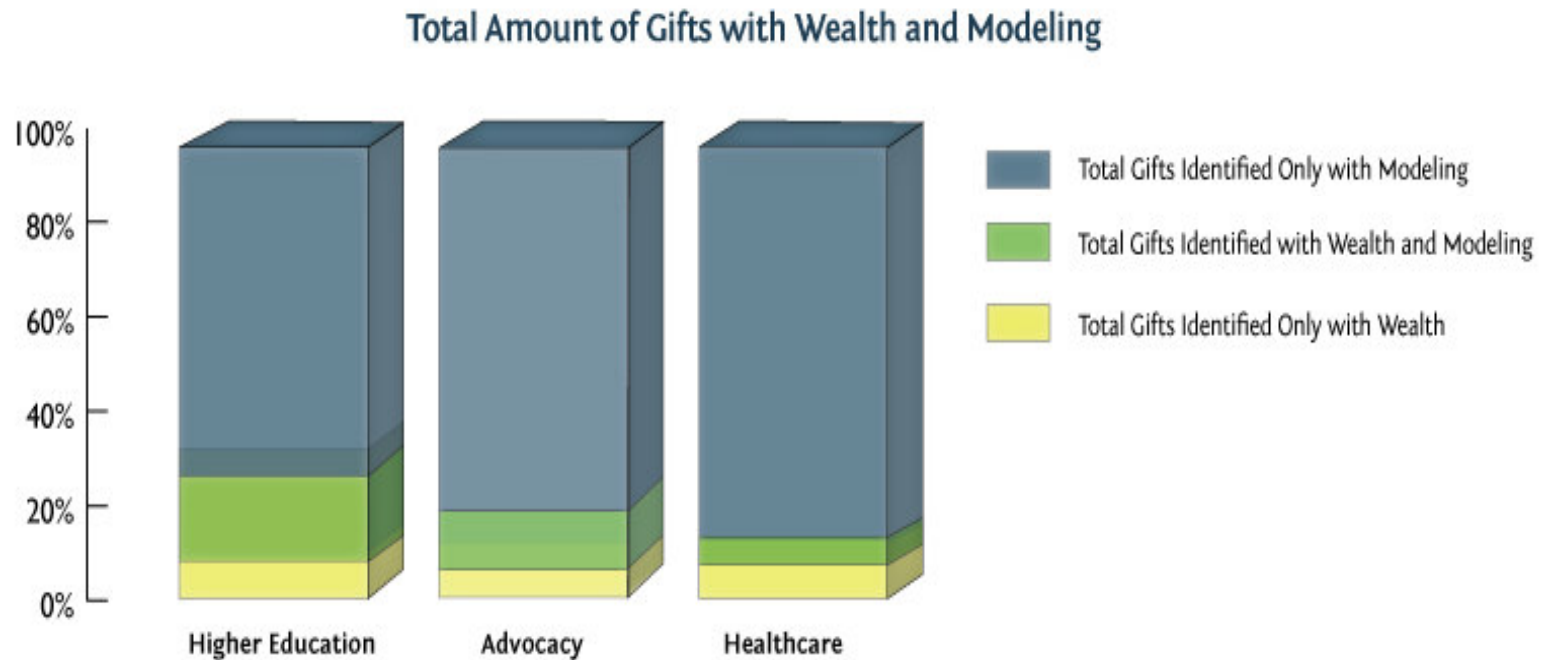


Identified Major and Transitional Giving Prospects



The Power of Combining Wealth and Modeling

- A recent study completed by one of our senior statisticians showed that Wealth and Modeling *together* account for higher gift potential in a database than either method by itself

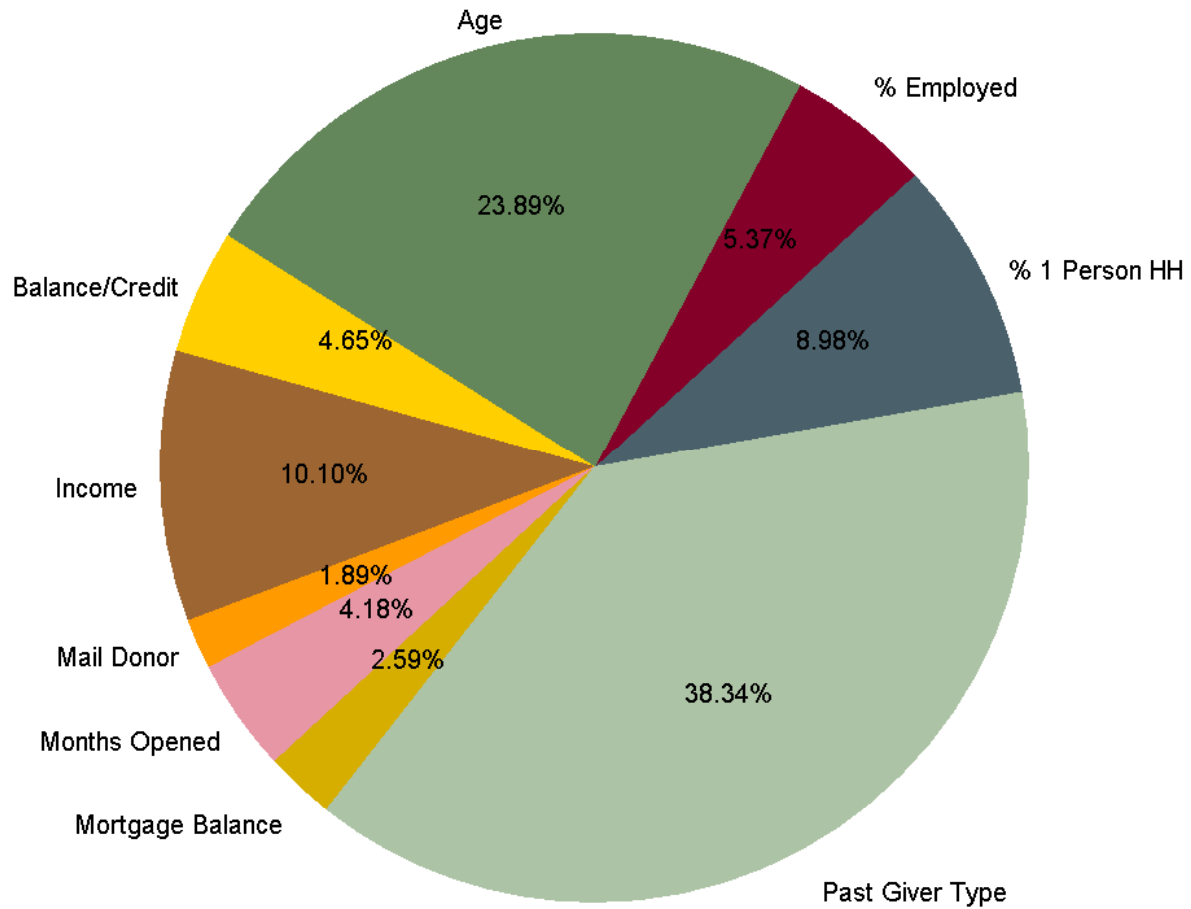


Planned Giving Likelihood Model (PGL)

Based on our national research of individuals that have made planned gifts to charitable organizations, your best planned giving prospects have the following characteristics. They:

- Are past givers to you
- Tend to be mid-age and older
- Live alone
- Live in neighborhoods where many of the residents are retired
- Maintain high incomes
- Maintain a low mortgage balance or have paid off their mortgage
- Do not apply for additional credit
- Keep their credit balances low even if their credit limits are large
- Are direct mail responsive

PGL Variable Distribution





Brown University

your passion > our purpose

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Data Mining and Modeling

- **Goals:**
 - Increase dollars raised
 - Identify new prospects and opportunities
 - Renew or upgrade existing donors
 - Improve program performance
 - Better prioritize prospects
 - Improve churn rates and yield rates
 - Provide understanding of constituents, geographic markets, positive and negative correlations
 - Benchmark results and forecast future return on investment



Data Mining and Modeling

- **Uses:**
 - Annual Fund Segmentation and Leadership Donor Identification
 - Major Gift Prospect Identification and Improved Fundraiser Portfolios
 - Campaign Feasibility and Planning
 - Planned Gift Prospect Identification
 - Geographic Analysis
 - Increase and/or Realign Fundraising Staff
 - Contribute to Event Planning Strategies
 - Communications
 - Target audiences / appeals / marketing





Outcomes

- **Annual Fund:**

- In a segmentation test, models were used to upgrade ask levels; within the test group where the target gift range model was used giving increased 16% while for all other groups giving increased 6% during the same period
- For the 25th Reunion class, identified 213 alumni capable of giving \$10K or more; this represented 16% of the class. Of these identified leaders, 44% were new or upgraded prospects
- For the 10th reunion class, identified 80% of the leadership level (\$10K+) donor prospects. Once targeted, these prospects increased in their gift size to Brown by 418%, and the majority have continued their giving post-reunion



Outcomes

- **Major Gifts:**
 - Increased the size of the major gift pool by 240%
 - Increased the quality of the major gift pool as evidenced by higher rated and higher affinity prospects
 - More than 20% of the newly discovered prospects had never before made a gift to Brown prior to the campaign
 - To date, Brown's fundraisers have been able to turn more than half (60%) of the non-donors into donors.
 - Among all new donors of \$10K or more to the campaign, 88% of them were discovered, rated and put into capacity segments using a combination of models, data mining and traditional research techniques
 - Solicitation ask amounts increased by 317% due to greater confidence in target gift range and rating quality

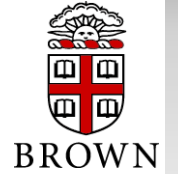


Outcomes

- **Planned Giving:**

- Using models and data mining, we developed a pool of 250 highly selective planning giving prospects out of a pool of 10,000, who were not being engaged by any other fundraising unit
- Individuals identified through data mining in the highly selective group were twice as likely to have made a planned gift to Brown as others who were similarly visited by the planned giving staff
- Fast-track planned giving conversations and appropriate vehicles

Sample Project

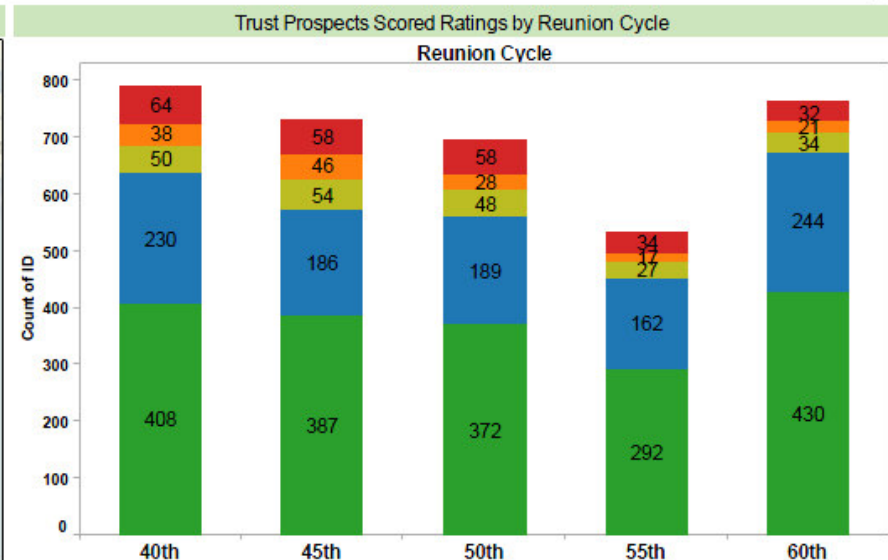
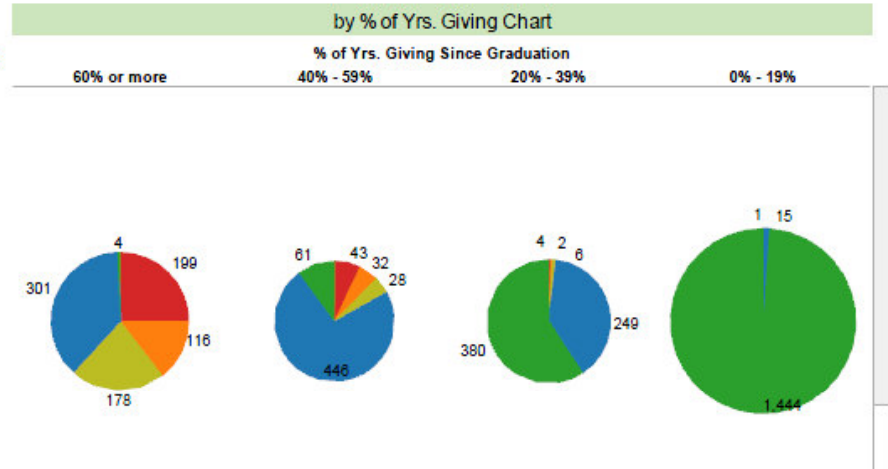


Planning Giving Trust Prospect Analysis – FY2010

Scored Rating (group)	Trust Prospects count			Grand Total
	Available	Managed with PM	Placeholder	
Excellent Trust Prospects	139	94	13	246
Very Good Trust Prospects	133	15	2	150
Good Trust Prospects	204	7	2	213
Moderate Trust Prospects	970	33	8	1,011
Low Trust Prospects	1,863	24	2	1,889
Grand Total	3,309	173	27	3,509

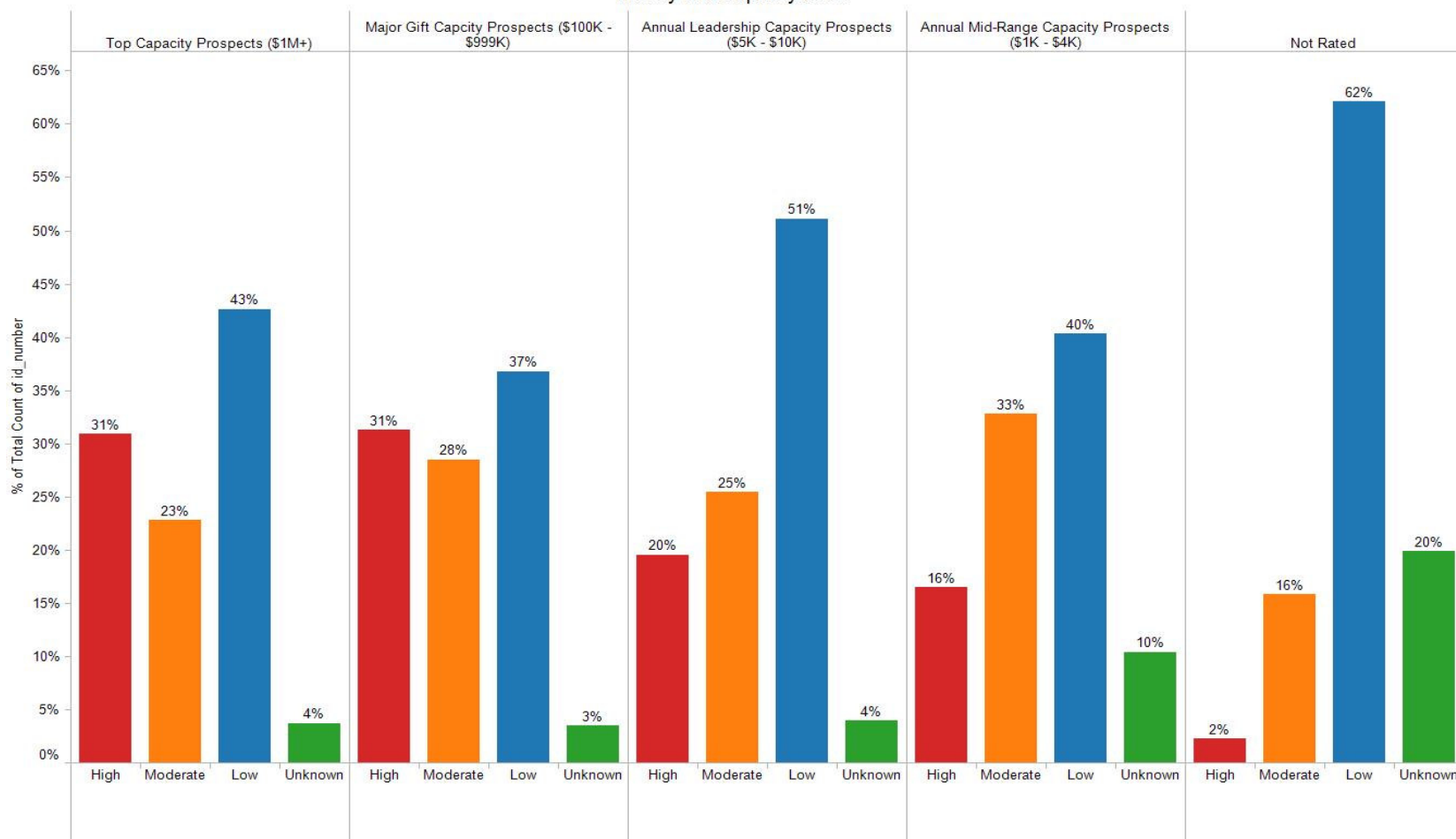
Scored Rating (group)

- Excellent Trust Prospects
- Very Good Trust Prospects
- Good Trust Prospects
- Moderate Trust Prospects
- Low Trust Prospects



Sample Affinity and Capacity Analysis

Affinity and Capacity Chart



% of Total Count of id_number for each Affinity Level broken down by Capacity Tiers. Color shows details about Affinity Level. The data is filtered on home_state and id_segment. The home_state filter excludes 11 members. The id_segment filter has multiple members selected. The view is filtered on Capacity Tiers, which has multiple members selected. Percents are based on each row of each pane of the table.

Affinity Level

- High
- Moderate
- Low
- Unknown

your

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BROWN

Impact

- Increased number and quality of prospects
- Increased levels of giving, affecting all fundraising programs – annual, major, principal and planned gifts
- Increased engagement efforts; shorter time to contact
- Improved donor acquisition, turning non-donors into donors
- Improved fundraising and program performance management
- Ability to identify opportunities and leverage resources to achieve goals
- Greater understanding of alumni behaviors and cohorts
- Commitment to using data to inform decision-making
- Commitment to future resources (budget) to support activities
- Recognition at the highest levels of the University



Campaign Impact

- 11,671 *new* prospects were identified through data mining and 8,066 of them were rated by prospect research for the first time during the campaign
 - ***These newly identified prospects represent \$339M in new gifts and pledges or about 25% of total campaign gifts***
- In addition to new prospect discoveries, an additional 1,713 prospects were upgraded in rating with 68% of the upgrades at the major or principal gift level
 - ***These upgraded prospects increased their average annual giving to the University eight-fold, making new gifts and pledges of \$400M or 27% of total campaign gifts***



Campaign Impact

- More than 72% of campaign donors of \$100K or more made their first major or principal level gift during the current campaign; and 24% of them were first-time donors
 - ***94% of these donors were newly identified or upgraded in rating; their giving represents more than \$534M or 83% of the dollars raised in the campaign by top donors***
 - ***100% of the first-time donors were newly identified or upgraded in rating; their giving represents more than \$200M***



Data Mining = Improved Data Quality

- Another benefit of engaging in data mining is improving the variety and quality of data over time
 - Collection methods become vastly improved
 - Regular data auditing and clean-up procedures produce more reliable data
 - Appended data enriches file and creates robust factors to use for correlation analysis
 - Everyone shares in the success of gathering new data and storing it in a central repository

Don't under-estimate the value of these benefits, often achieved as a result of consistent efforts in data mining, modeling and screening

Improved Data Quality = Improved Data Mining!

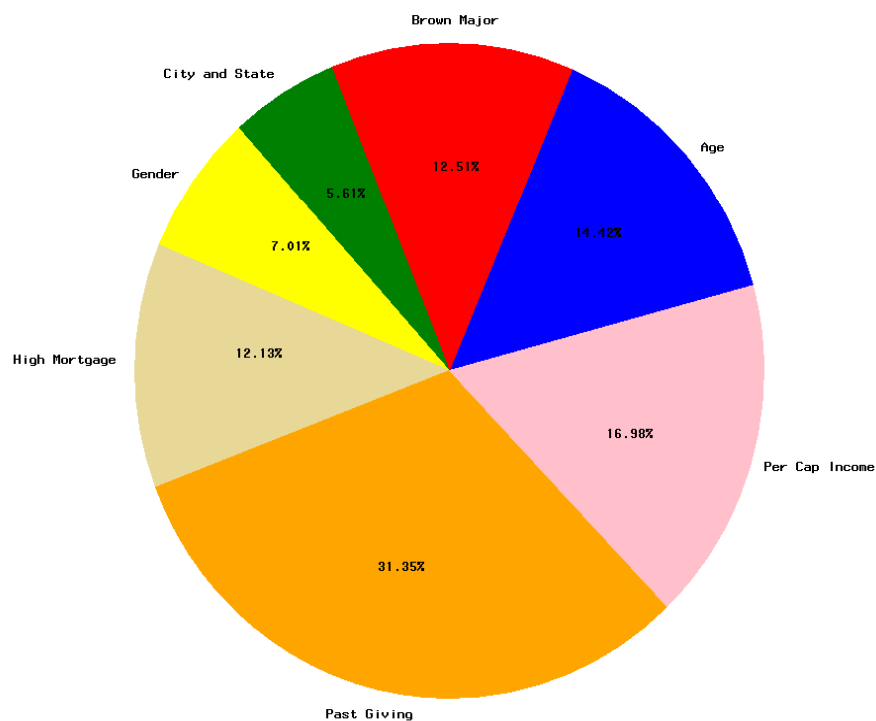
- Over time, predictive models become more precise and customized when more data variables are available to use
- Enriched data (using external appended data) provides additional and more robust factors for modeling and scoring projects, but can also be used effectively for:
 - Marketing and communications
 - Program strategy and development
 - Generational profiling – especially useful in comparing behaviors among and between class cohorts



Sample Model Variable Comparison

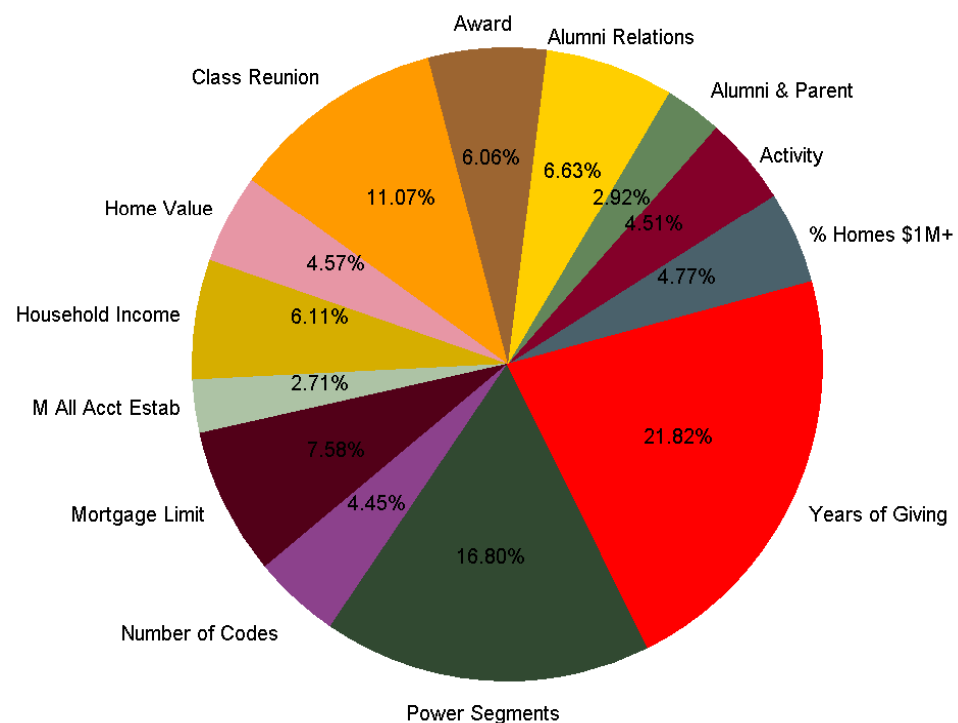
2003

About 150 independent variables used



2009

Over 500 independent variables used



Conclusions

- Successful data mining and modeling relies upon good data, which can be improved over time
- Start simple, expand the variety and complexity of projects over time; improve future models
- Good data analysts find new and creative ways to exploit available data and advocate for the use and purchase of external data and/or models
- Data mining and modeling – implemented effectively - can be a catalyst for driving fundraiser performance, program development, resource allocations and improved fundraising results

Summary and Questions

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White Papers:

<http://www.blackbaud.com/company/resources/whitepapers/whitepapers.aspx>