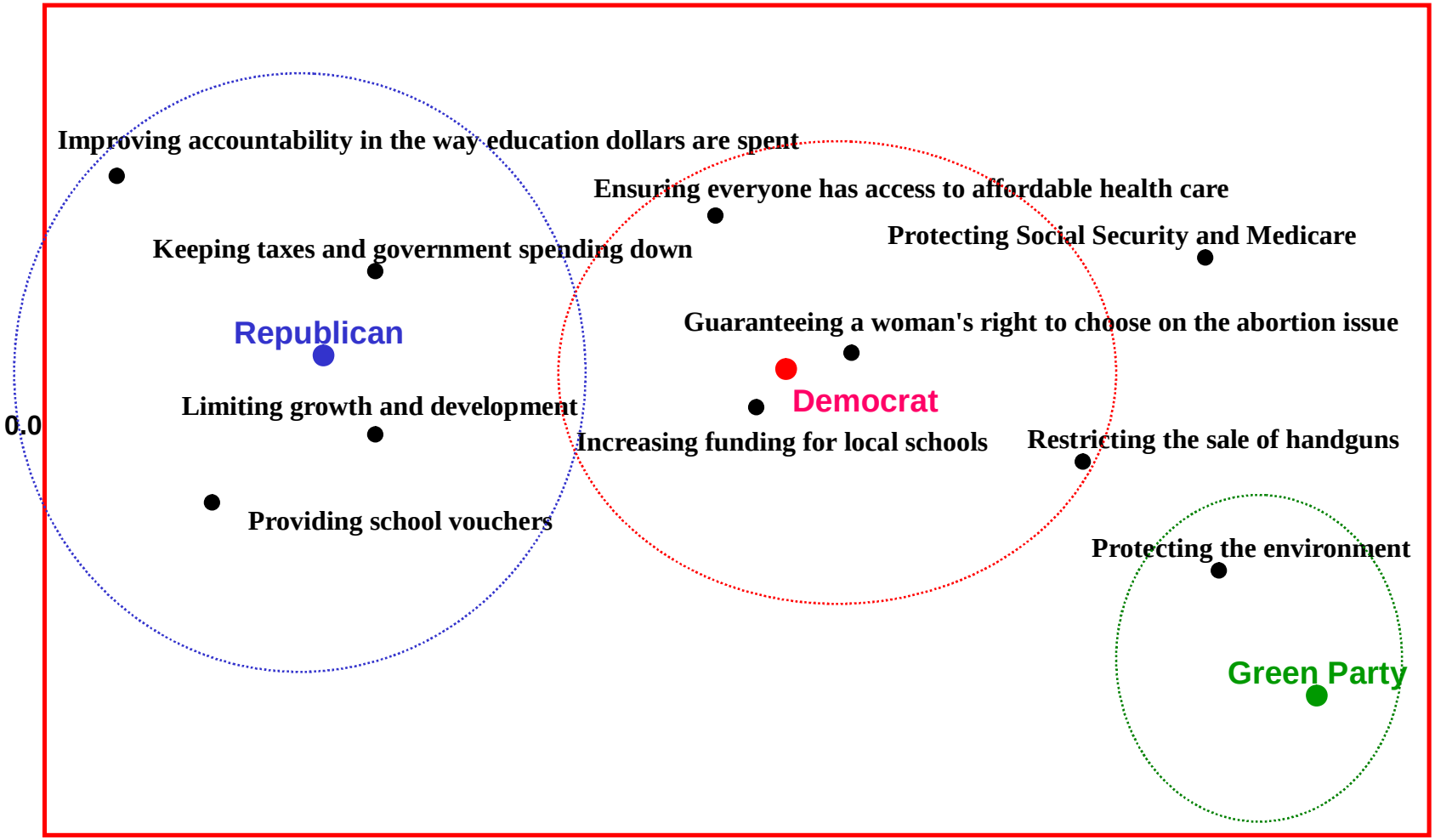
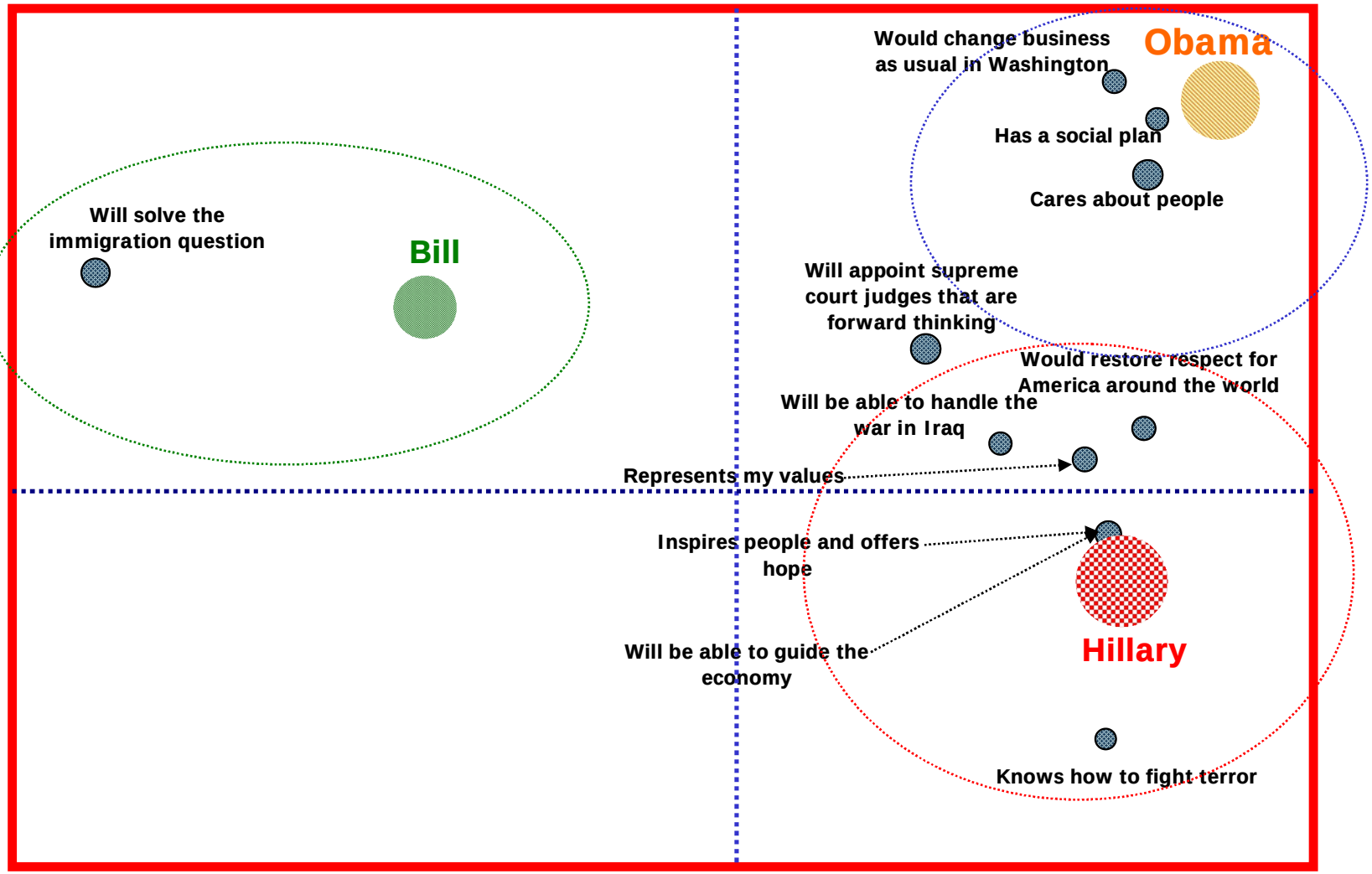
Correspondence Analysis for Political Positioning

Multivariate Solutions

Correspondence Analysis - Indicating Statements Closely Associated With Party's Positions



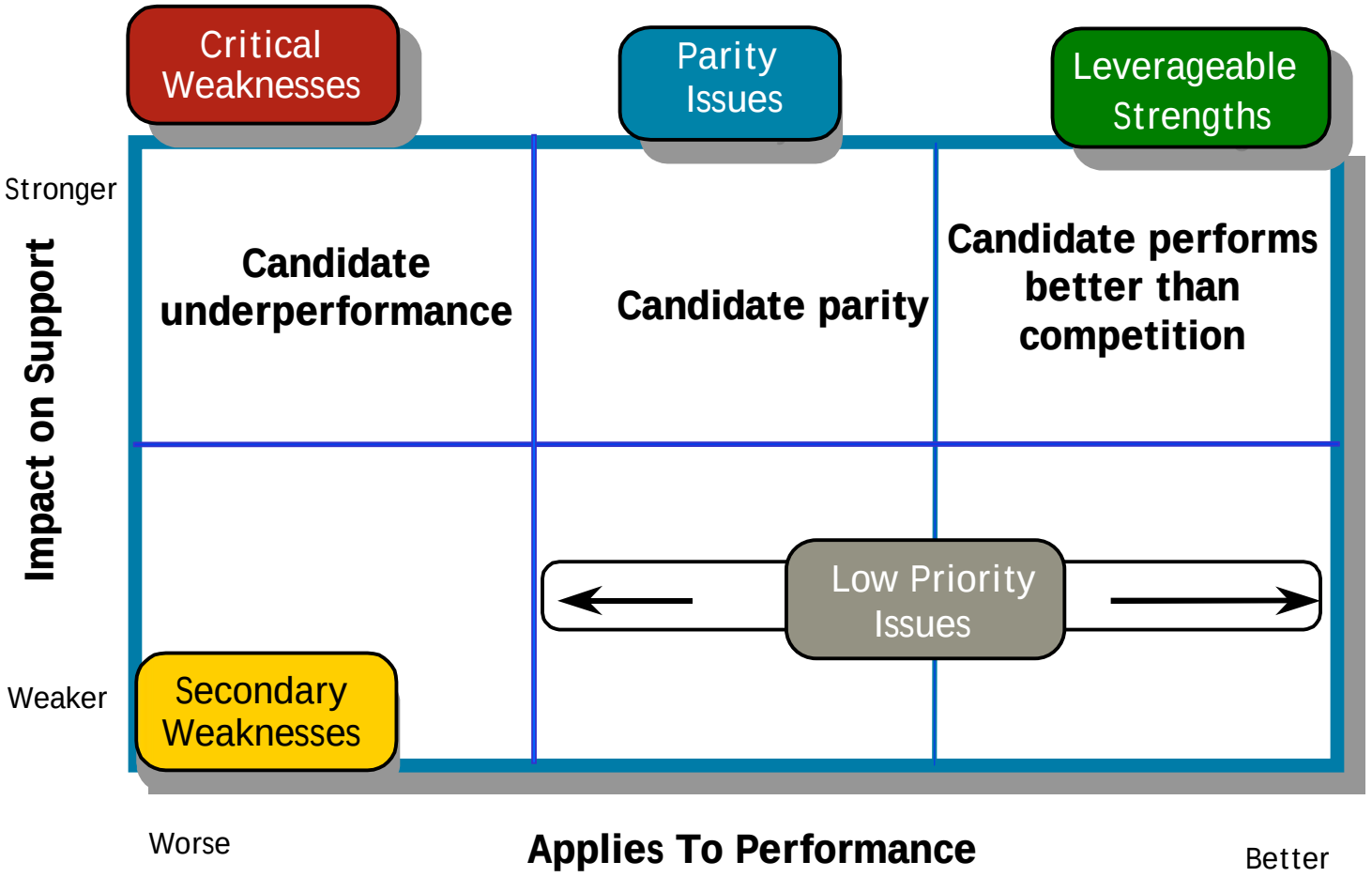
Correspondence Analysis – Bubble Chart



Issue Targeting

Multivariate Solutions

Competitive Issue Targeting

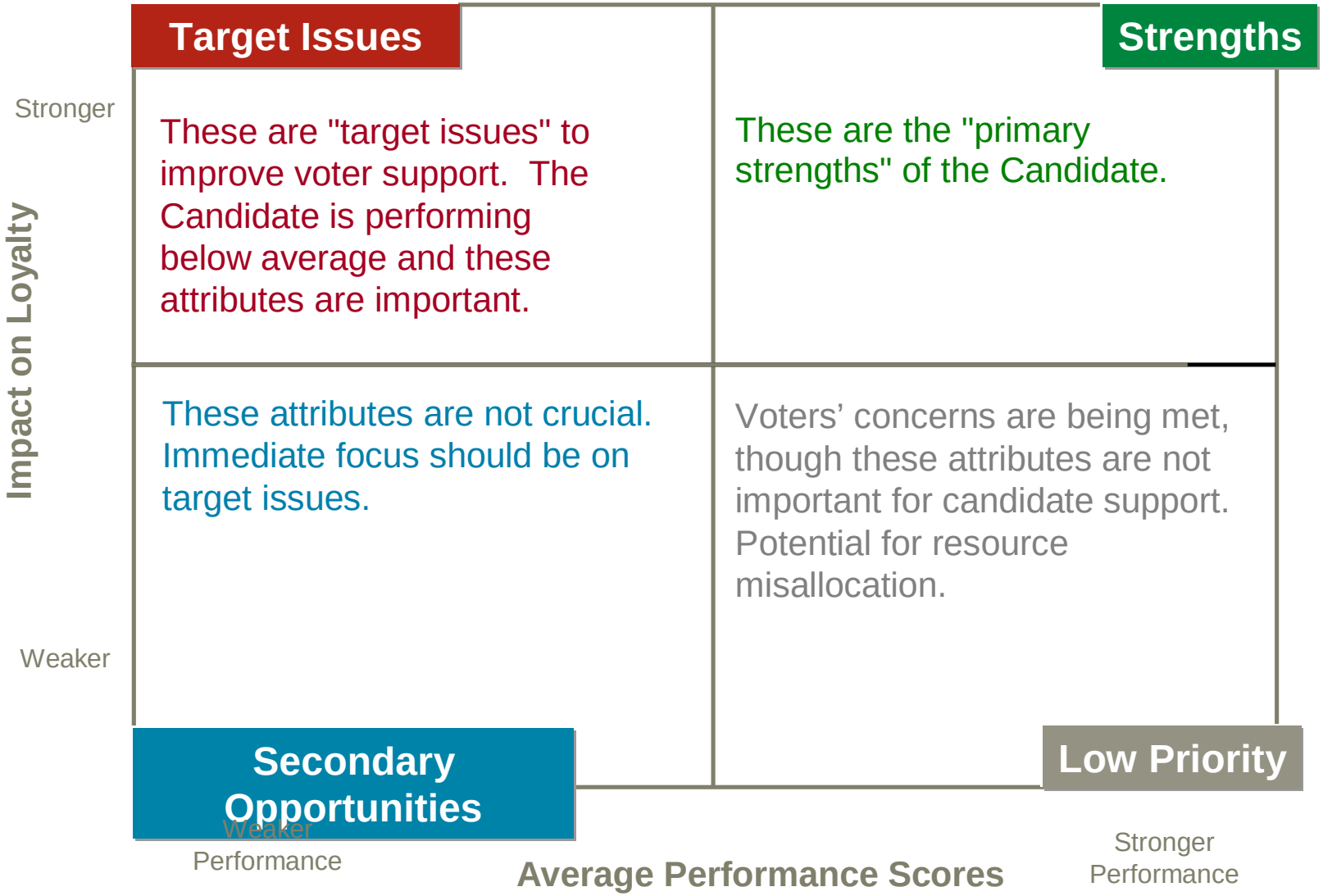


Competitive Issue Targeting

Hillary vs. Bill

Concept Intent Hillary vs. Bill								
Likely Voters								
Swing Voters In Maine			Correlation	Hillary	Bill	% Def Diff	STAT Diff	Impact Class	CIP Class
i	9	Will appoint supreme court judges that are forward thinking	0.223	59%	50%	9%	0.06	High	Strength
g	7	Represents my values	0.220	61%	71%	-10%	0.03	High	Weakness
j	10	Would change business as usual in Washington	0.200	58%	50%	8%	0.83	High	Parity
h	8	Will be able to guide the economy	0.191	64%	64%	0%	1.00	High	Parity
d	4	Knows how to fight terror	0.180	61%	51%	10%	0.04	High	Strength
c	3	Has a social plan	0.176	51%	58%	-7%	0.41	High	Parity
f	6	Will be able to handle the war in Iraq	0.139	63%	72%	-9%	0.54	High	Parity
a	1	Inspires people and offers hope	0.088	64%	59%	5%	0.19	Low	Low Priority-Right
e	5	Cares about people	-0.039	65%	43%	22%	0.00	Low	Low Priority-Left
b	2	Would restore respect for America around the world	-0.053	70%	77%	-7%	0.28	Low	Low Priority-Right
k	11	Will solve the immigration question	-0.080	88%	81%	7%	0.06	Low	Low Priority-Left

Candidate Issue Targeting



Candidate Issue Targeting

Joe Biden

First Vote for Joe Biden

CANDIDATE ATTRIBUTES—Importance

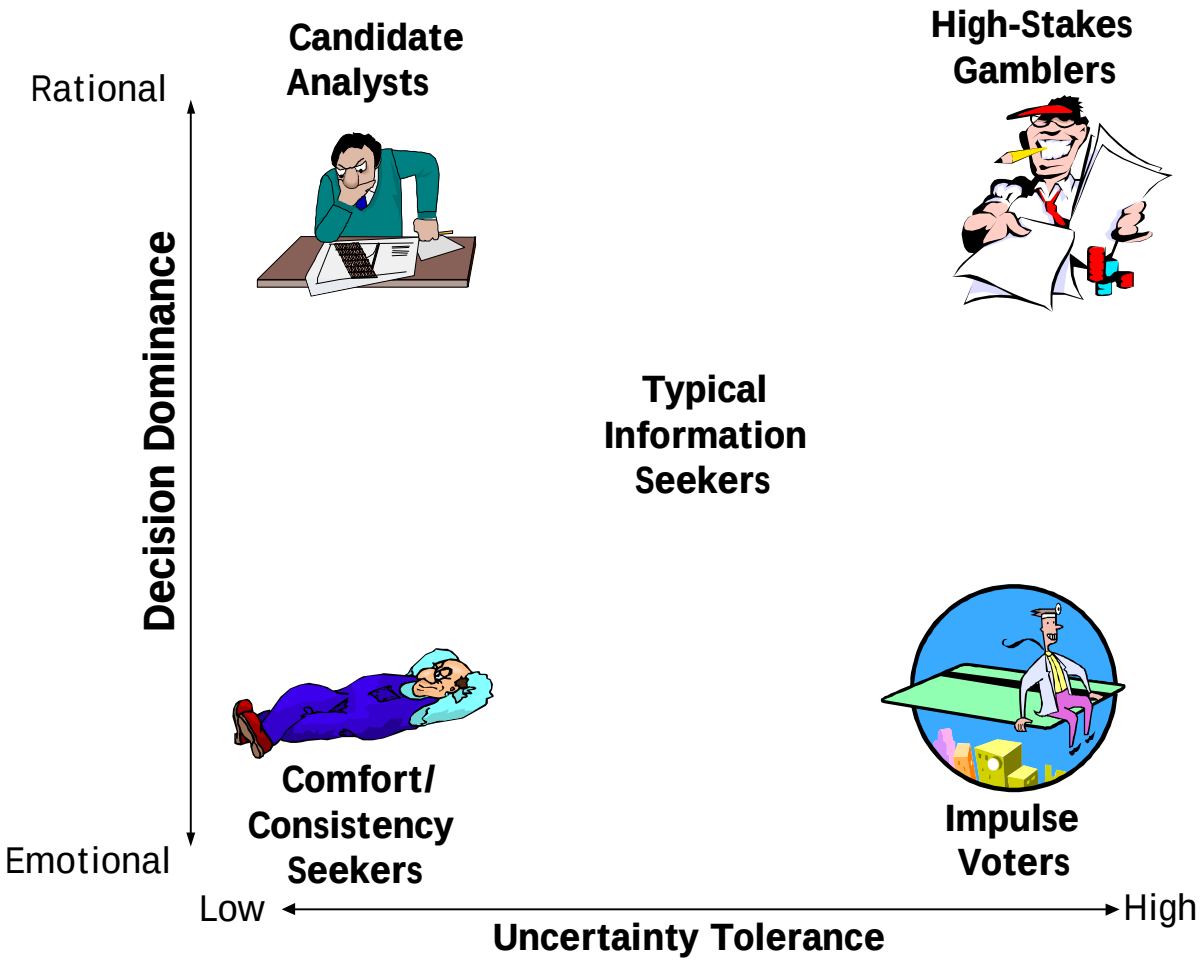
			Correlation	Percentages	Impact Class (Correlation)	Importance Class (Percentage)	Issue Driver Class	Issue Driver Index	Rank	IMP Rank
i	9	Inspires people and offers hope	0.546	55.0%	High	Worse	Target Issue	0.300	1	1
k	11	Would stand up for the middle class	0.452	40.0%	High	Worse	Target Issue	0.181	5	2
a	1	Cares about people like you	0.373	56.0%	High	Worse	Target Issue	0.209	2	3
j	10	Would restore respect for America around the world	0.361	55.0%	High	Worse	Target Issue	0.199	3	4
g	7	Is a straight-talker, doesnt just say what people want to hear	0.336	59.0%	High	Better	Strength	0.198	4	5
b	2	Is a strong leader	0.282	53.0%	High	Worse	Target Issue	0.149	6	6
d	4	Has the right kind of experience to be President	0.153	64.0%	Low	Better	Low Priority	0.098	7	7
h	8	Would unite the country	0.149	58.0%	Low	Better	Low Priority	0.086	8	8
e	5	Has new ideas and a fresh approach to problems	0.107	62.0%	Low	Better	Low Priority	0.066	10	9
c	3	Shares your values	0.101	69.0%	Low	Better	Low Priority	0.070	9	10
l	12	Would change business as usual in Washington	0.087	43.0%	Low	Worse	Secondary	0.037	11	11
m	13	Represents the future	0.000	60.0%	Low	Better	Low Priority	0.000	12	12
f	6	Would be steady in a crisis	-0.042	55.0%	Low	Worse	Secondary	-0.023	13	13

Mean	0.223	56.1%
Min	-0.042	40.0%
Max	0.546	69.0%

VOTE Segments

Multivariate Solutions

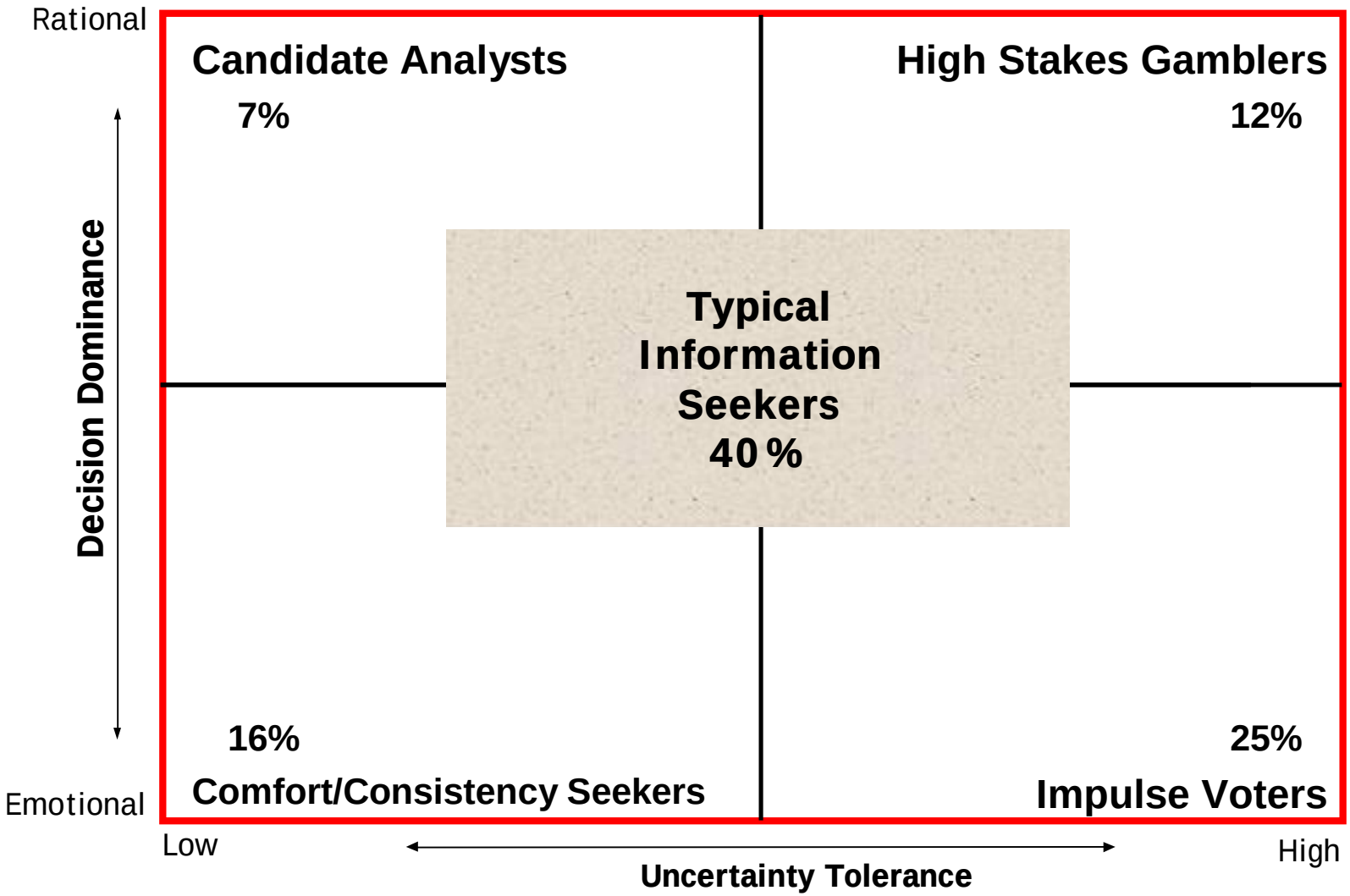
VOTE Overview



VOTE Overview
Constructing the Segments

- ***On a scale of 1-to-5, how much do you agree with the following statements?***
  - ***I may not know a lot about a candidate before I vote for him, but that is okay.***
  - ***It would really bother me if I didn't understand what the candidate stood for.***
  - ***I vote for the candidate who is most in line with my core issues.***
  - ***Image always determines who I vote for.***
  - ***I don't have a problem changing my opinion about who to vote for.***

VOTE Overview



Candidate Assessment Penalty Analysis

Multivariate Solutions

VOTE Overview
Constructing the Segments

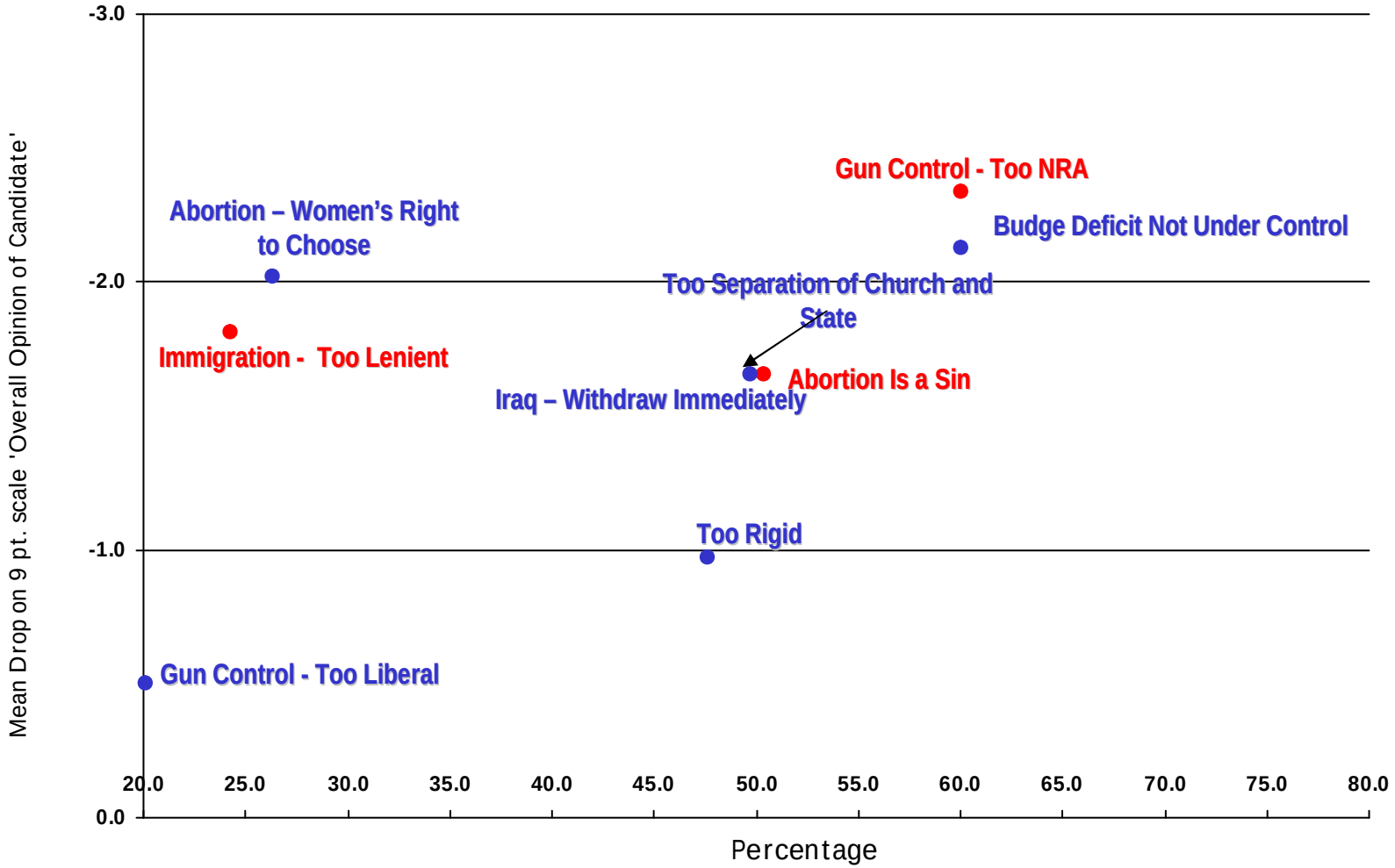
- ***On a scale of 1-to-5, how would you rate the Candidate on the issue of gun control***
  - ***Candidate does not allow the rights of Americans to bear arms.***
  - ***Candidate is a bit too liberal on the issue of gun control.***
  - ***Candidate is just right on the issue of gun control.***
  - ***Candidate allows too many exceptions to gun laws.***
  - ***Candidate is in the pocket of the NRA.***

MeanDrop/Penalty Analysis

- MeanDrop/Penalty analysis takes two measures.
  - First, the difference in mean ‘Overall Opinion of the Candidate' between those who feel a flavor has too liberal (blue labels) or too conservative (red labels) of an attribute and those who feel that attribute is just right.
    - The value is calculated JAR minus too conservative/too liberal. These are placed on the y (vertical) axis.
  - Next the percentages of those too conservative/too liberal respondents are mapped on the x (horizontal) axis.
- Interpret the map like this:
  - High vertical, big difference in ' Overall Opinion of the Candidate ' mean between this attribute too too conservative/too liberal and ‘just right’.
  - High x-value, a lot of people thought this candidate errs on an issue.
  - It is worthwhile to see which attributes have either a high y or x mapping.
  - Trouble spots. Upper right hand corner. This indicates that a candidate has both a lot of people who think it is too conservative/too liberal, and their ' Overall Opinion of the Candidate ' drops accordingly.

MeanDrop/Penalty Analysis

Bill Richardson



State Voters Political Vote

Discriminant Analysis

Multivariate Solutions

Discriminant Analysis

- Discriminant analysis is used in situations where the object is to build a descriptive model of group membership based on observed characteristics of predictor variables.
- The procedure generates a discriminant function based on linear combinations of the predictor variables that provide the best explanation of Group membership.

Discriminant Analysis

- First Step: The first step is to determine a Group whose characteristics are explored. For the State Voters Database, the Group is defined by those who voted for the Political Party and those who did not.
- Interpretation: Standardized Coefficients can be used as weights when exploring which variables best contribute to membership in the Group. For example, if ‘Voted in Primary’ has a standardized coefficient of .8, and ‘ Age’ has a standardized coefficient of .4, it can be said that ‘Voted in Primary’ has twice the discriminating power of Age in determining likelihood groups of Party Voters.
- Standardized coefficients near zero can be said to have little impact on the discriminating process.

Variables Present in the
Discriminant Analysis

The Group
Voted for the Party (47%)/Did Not Vote for the Party

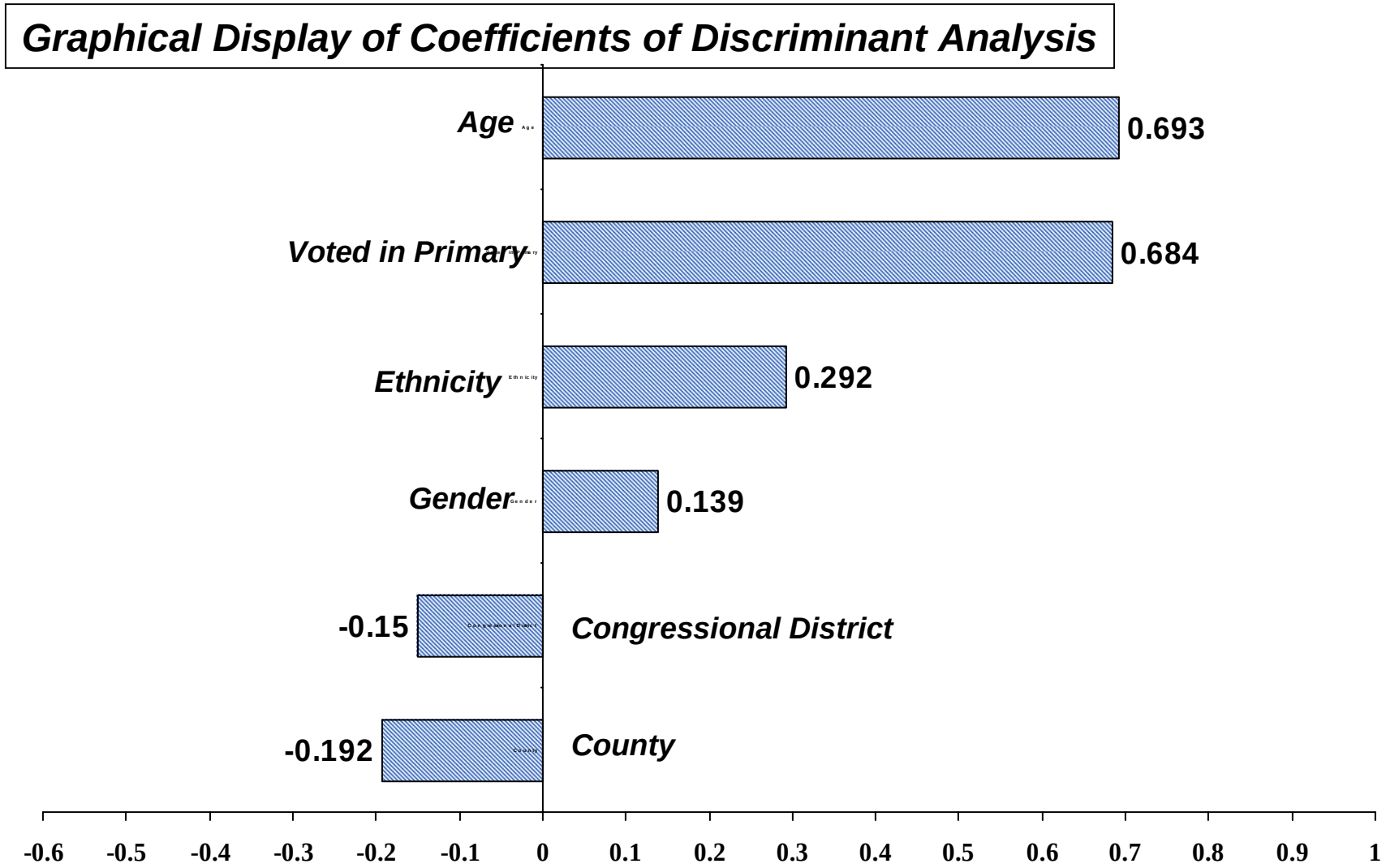
Variables Present in Model Equation
Age
Voted in Primary
Ethnicity
Gender
Congressional District
County

Standardized Coefficients

Discriminant Analysis

Variables Present in Full Model Equation for Party Votership	Standardized Canonical Discriminant Function Coefficients
Age	0.693
Voted in Primary	0.684
Ethnicity	0.292
Gender	0.139
Congressional District	-0.150
County	-0.192

Age (From Youngest to Oldest) and Primary Voter Record are the Key Discriminators for Party Voters



State Voters Political Vote

Conjoint Analysis

Multivariate Solutions

Why Use Conjoint?

- In a real purchase situation consumers do not make choices based on a single attribute. Consumers examine a range of features or attributes and then make judgments or trade-offs to determine their final purchase choice.

- Conjoint analysis examines these trade-offs to determine the combination of attributes that will be most satisfying to the consumer.
- By using conjoint analysis, the marketer can determine the optimal features for his product or service.

- In addition, conjoint analysis can be used to identify the best advertising message by revealing the features that are most important in product choice.

Political Conjoint

- This is as true with the ‘choice’ made in political situations, such as assessing the viability of a candidate, determining the underlying ‘roots’ of issue support—such as gun control, housing reform, or budgetary management—or choosing a tactical strategy when pushing legislation.

- This analysis, when used properly, can provide insight to the candidate when he sets policy priorities, assesses main concerns dominating the voters’ mind as the election nears, or gauge the strength of a position ‘soup’ a given campaign will stir when it goes to press.

Target Groups

3 State Campaign Issues

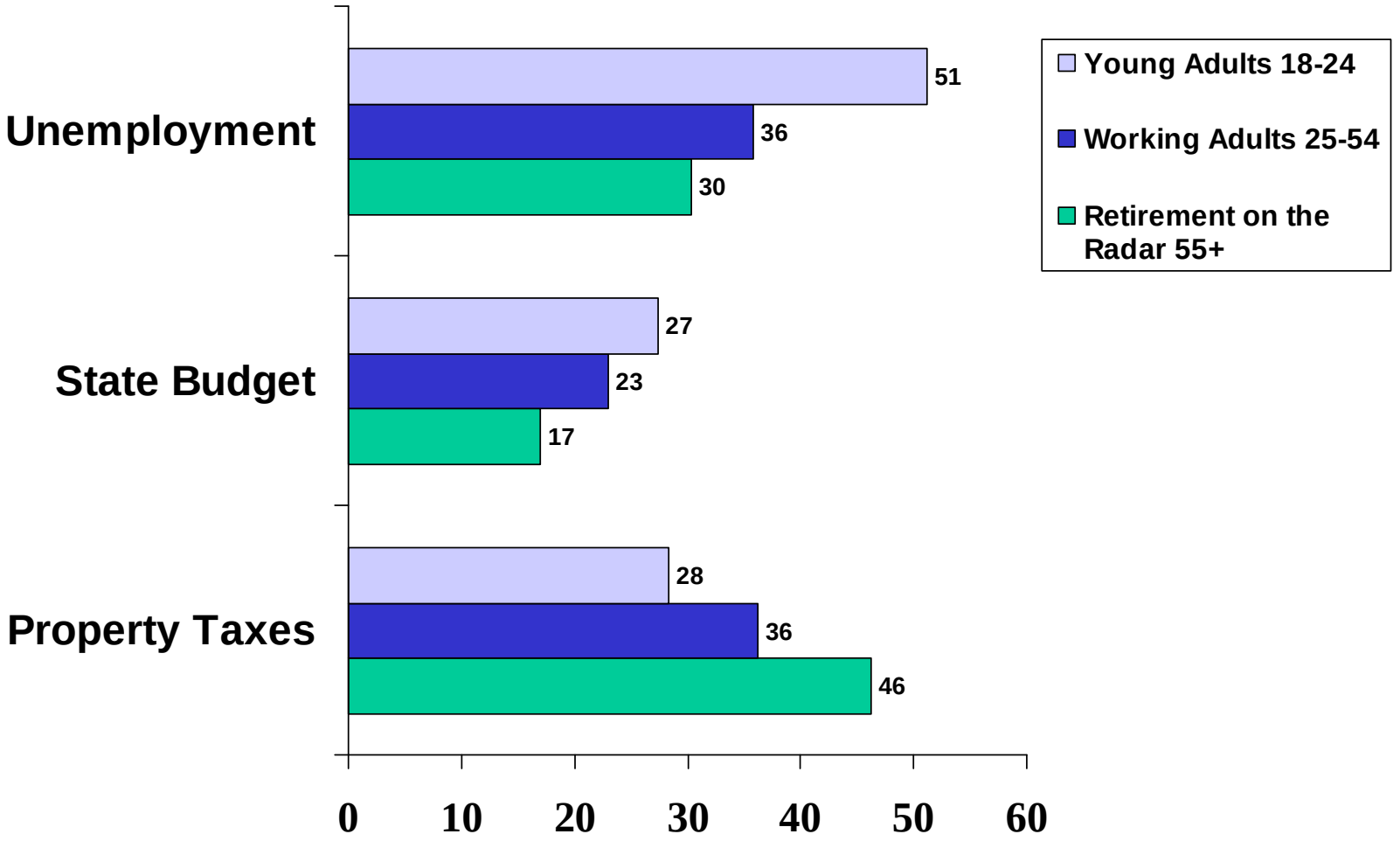
- **Unemployment**
  - 2%
  - 4%
  - 6%
- **Property Taxes**
  - Low
  - Medium
  - High
- **Utopia State Budget**
  - Balanced Budget
  - State Budget Deficit of $5 Billion
  - State Budget Deficit of $10 Billion

Government Legislative Issues

Varying Levels

- A sample question would look like this.
  - "On a 1-to-10 scale, how would you rate the Utopia State government under Governor Bob Smith if unemployment is at 2%, property taxes are high, and the budget deficit is at $5 billion?"
  - "On a 1-to-10 scale, how would you rate the Utopia State government under Governor Bob Smith if unemployment is at 6%, property taxes are medium, and the budget is balanced?

Relative Importance of Issues



Government Legislative Issues

Varying Levels

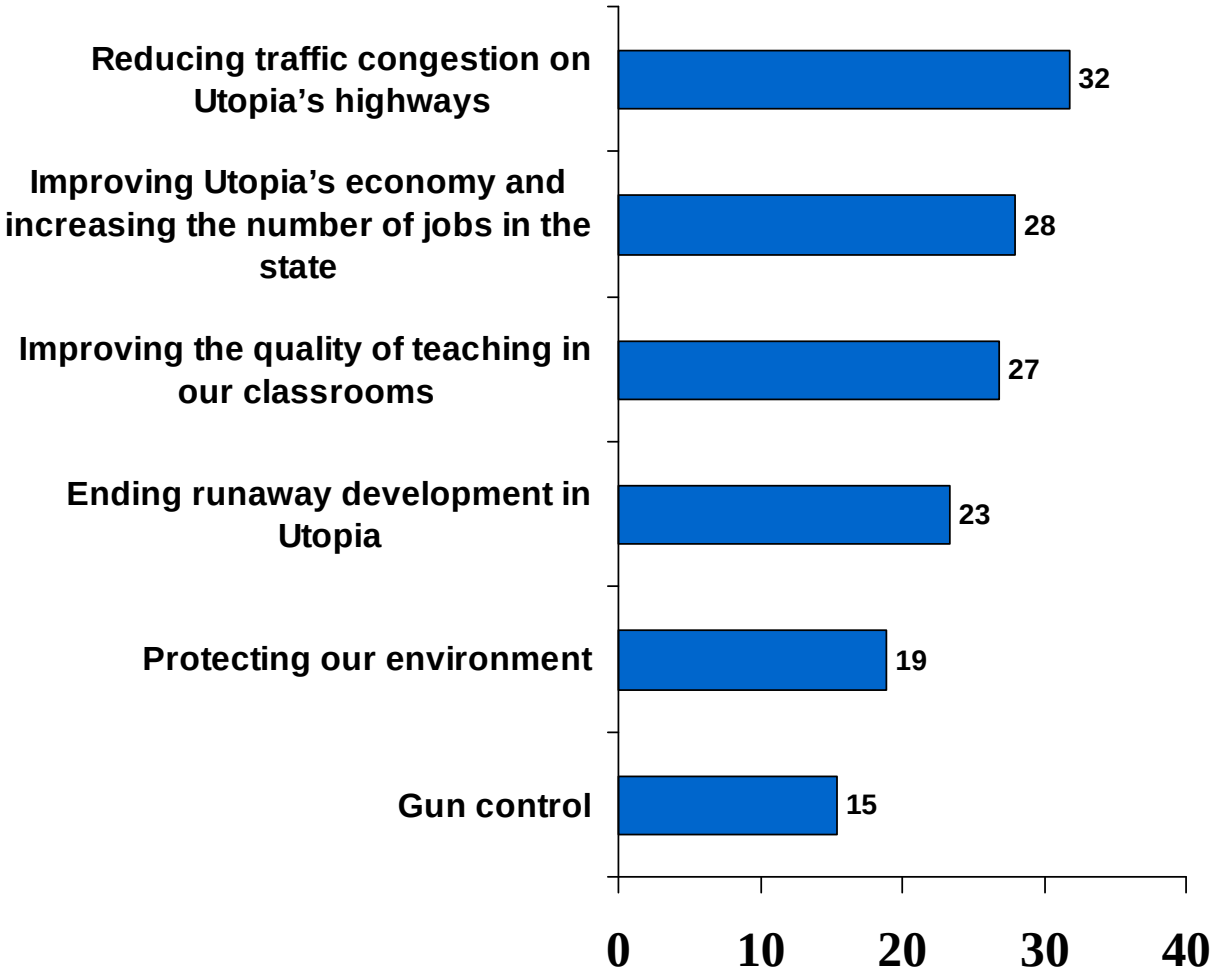
- Below is a list of 6 issues that might appear in a gubernatorial/senate race or State of the State address:
  - *Ending runaway development in Utopia*
  - *Reducing traffic congestion on Utopia's highways*
  - *Improving the quality of teaching in our classrooms*
  - *Gun control*
  - *Protecting our environment*
  - *Improving Utopia's economy and increasing the number of jobs in the state.*

Government Legislative Issues

Varying Levels

- A sample question would look like this.
  - *An example question might be,*
    - *'If a candidate's main platform were gun control and protecting the environment, how likely are you to vote for him?'*
    - *Or, 'In his State of the State address, Governor Smith plans to emphasize; 1) Ending runaway development in Utopia; 2) Improving the quality of teaching in our classrooms; and 3) Protecting our environment. How important would it be for you to hear his speech?'*

Relative Importance of Issues



Finding the Issues that Drive Voter Switch

Regression Analysis

Multivariate Solutions

Basics of Linear Regression Analysis

- Linear regression analysis uses ratings of independent variables to form a linear equation that predicts the dependent variable.
- The resulting equation yields beta scores that show the order of association of each dependent variable to the dependent
- It ranks the importance of each attribute to the dependent
- Significance
  - P-value (P-value of .04 means 96% chance of not being zero)
  - Use P-value of .10 or less
  - For example, if ‘Is A Brand I Trust’ has a p-value of .05, it is significant and has a (1-.05) or 95% chance of making an impact on the independent variable

Regression - Converting The Waste Incinerator Plant Into A Natural Gas Powered Energy Production Facility

- Client wants to promote Converting The Waste Incinerator Plant Into A Natural Gas Powered Energy Production Facility
  - Regression dependent variable – Support for Converting The Waste Incinerator Plant Into A Natural Gas Powered Energy Production Facility
- Three Regressions – Key Stages to Support
  - Original Drivers of Support
  - Drivers of Support AFTER Reasons Given
  - Drivers of Switch – The Why
    - Which attributes drove respondents to **change** their opinion
    - Regression dependent variable – Change of support Converting The Waste Incinerator Plant Into A Natural Gas Powered Energy Production Facility

Regression - Converting The Waste Incinerator Plant Into A Natural Gas Powered Energy Production Facility

Original Drivers of Support

Incinerator Statement Concepts Before List of Advantages

Favor Converting The Waste Incinerator Plant Into A Natural Gas Powered Energy Production Facility And Shipping All Of Your City's Garbage To A Regional Landfill In Washington County?	***Standardized Coefficients***	
Total Sample	***Beta***	***Significance***
The regional landfill in Your County has enough capacity to last over 100 years, while the current waste incinerator plant is only designed to last another 10 years	**0.21**	**0.01**
The cost of disposal of garbage would be reduced from $59 a ton to $40 a ton	**0.18**	**0.05**
In reality, the cost of long-haul and disposal of garbage at a safe, secure landfill, is substantially less than incineration	**0.16**	**0.05**
Due to the age of the incinerator plant and population growth, by next year more than half of the waste in the county will have to be shipped to a regional landfill	**0.13**	**0.09**
The converted incinerator would be capable of producing 110 megawatts of electricity, instead of the 20	**0.11**	**0.18**
The long range profits of the converted facility will help keep down the price of electricity and taxes in Your City County	**0.06**	**0.55**
Due to the dry climate and local soil conditions, the regional landfill in Your County is considered the safest landfil in the United States	**-0.05**	**0.51**
The incinerator plant is not expected to meet stricter air pollution standards	**-0.06**	**0.31**
It would eliminate the discharge of dioxins and other pollutants now emitted by the waste incinerator plant	**-0.08**	**0.27**

Initial Key Drivers

**Shaded Area Indicates That Brand Attribute Beta is significant and influences Vote*

Regression - Converting The Waste Incinerator Plant Into A Natural Gas Powered Energy Production Facility

Drivers of Support after Case is Made

Incinerator Statement Concepts After List of Advantages

Now, After Everything You Have Heard, Would You Favor A Proposal That Converted The Your City Waste Incinerator Plant Into A Natural Gas Powered Energy Production Facility And Shipping All Of Your City's Garbage To A Regional Landfill In Washington County?	***Standardized Coefficients***	
Total Sample	***Beta***	***Significance***
The regional landfill in Your County has enough capacity to last over 100 years, while the current waste incinerator plant is only designed to last another 10 years	**0.26**	**0.00**
The converted incinerator would be capable of producing 110 megawatts of electricity, instead of the 20	**0.21**	**0.00**
The long range profits of the converted facility will help keep down the price of electricity and taxes in Your City County	**0.18**	**0.01**
Due to the age of the incinerator plant and population growth, by next year more than half of the waste in the county will have to be shipped to a regional landfill	**0.16**	**0.01**
In reality, the cost of long-haul and disposal of garbage at a safe, secure landfill, is substantially less than incineration	**0.11**	**0.03**
It would eliminate the discharge of dioxins and other pollutants now emitted by the waste incinerator plant	**0.04**	**0.53**
The incinerator plant is not expected to meet stricter air pollution standards	**0.02**	**0.69**
The cost of disposal of garbage would be reduced from $59 a ton to $40 a ton	**-0.03**	**0.69**
Due to the dry climate and local soil conditions, the regional landfill in Your County is considered the safest landfilin the United States	**-0.04**	**0.53**

After Drivers – Foundation of the Strategic Communication Strategy

**Shaded Area Indicates That Brand Attribute Beta is significant and influences Vote*

Regression - Converting The Waste Incinerator Plant Into A Natural Gas Powered Energy Production Facility

Drivers of Change to Support

Switchers From Negative to Positive Response

Switchers: Not Favorable to Favorable	***Standardized Coefficients***	
Total Sample	***Beta***	***Significance***
The regional landfill in Your County has enough capacity to last over 100 years, while the current waste incinerator plant is only designed to last another 10 years	**0.29**	**0.00**
It would eliminate the discharge of dioxins and other pollutants now emitted by the waste incinerator plant	**0.17**	**0.05**
The converted incinerator would be capable of producing 110 megawatts of electricity, instead of the 20	**0.14**	**0.08**
The long range profits of the converted facility will help keep down the price of electricity and taxes in Your City County	**0.09**	**0.29**
The incinerator plant is not expected to meet stricter air pollution standards	**0.06**	**0.37**
In reality, the cost of long-haul and disposal of garbage at a safe, secure landfill, is substantially less than incineration	**0.04**	**0.55**
The cost of disposal of garbage would be reduced from $59 a ton to $40 a ton	**0.00**	**0.99**
Due to the age of the incinerator plant and population growth, by next year more than half of the waste in the county will have to be shipped to a regional landfill	**-0.03**	**0.65**
Due to the dry climate and local soil conditions, the regional landfill in Your County is considered the safest landfilin the western United States	**-0.07**	**0.33**

Switching Drivers – Keys to Moving Fence-Sitters to Supporters

**Shaded Area Indicates That Brand Attribute Beta is significant and influences Vote*

State Voters Political Donations

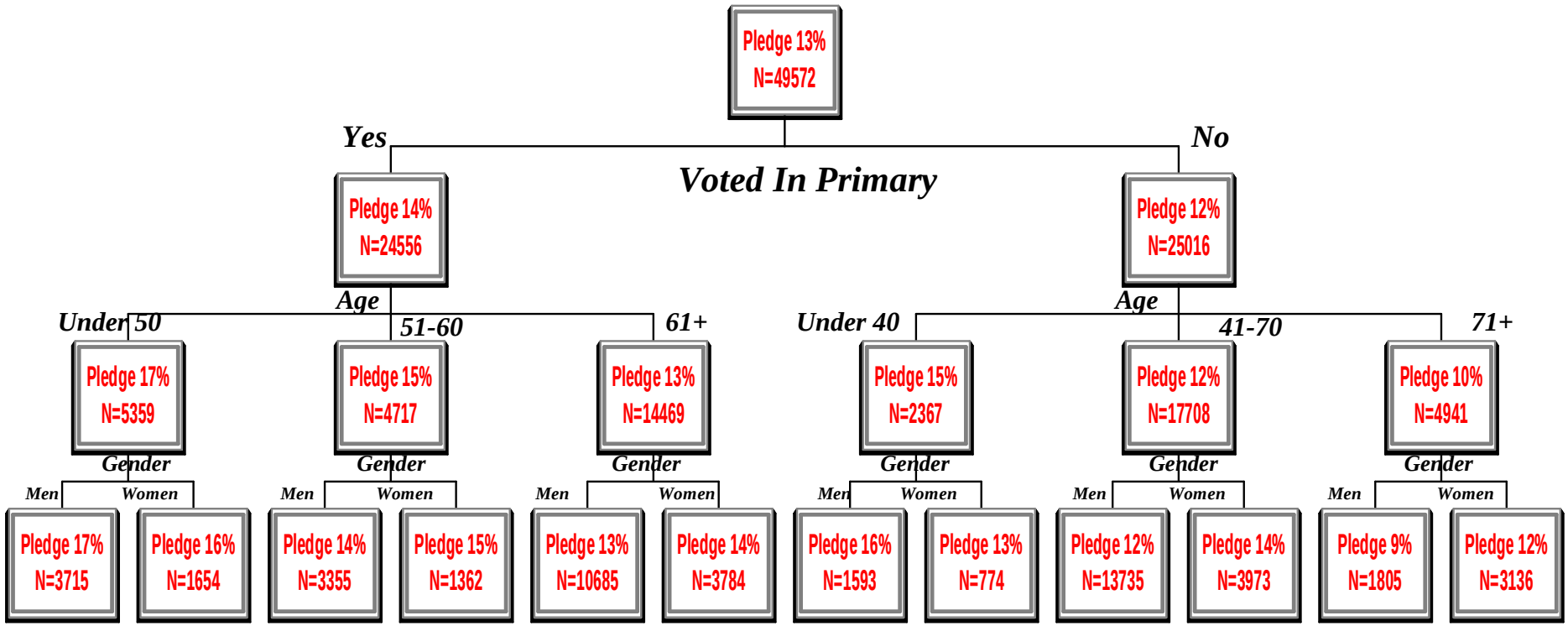
CHAID Analysis Tree Exploration

Multivariate Solutions

CHAID Analysis

- *CHAID, for Chi-square Automatic Interaction Detector is an exploratory method used to study the relationship between a dependent variable and a series of predictor variables.*
- *CHAID analyzes a single attribute of a population (the dependent variable) based on other attributes -(predictor variables). CHAID iterativelv subdivides the population into classes having significantly different values for the dependent variable.*
- *The developed model is a classification tree (or data partitioning tree) that shows how major "types" formed from the independent (predictor or splitter) variables differentially predict a criterion or dependent variable.*

Chi-Square Decision Tree
Made Pledge to the State Political Party



CHAID
Interpreting the Map

- *In the CHAID tree, each box contains a percentage of dependent variable (Pledged money) and a sample size. The Top Box has a Pledge=13% with a sample size N=49572. This is read as, There are 49,572 people in the sample (top box is the entire sample), 13% of them made pledges.*
- *CHAID then finds the predictor with the best breaks in percentages among the top box. For example, Voted In Primary, is the top predictor. The left box indicates that people who voted in the primary had a pledge rate of 14%, while those who did not (right box) had a pledge rate of 12%.*
- *CHAID then examines the sub-boxes and looks for differences in the predictor variable. For example, the far left, third level box is read, 'People Who Voted in the Primary Under the Age of 50' had a pledge rate of 17%. The next box, 'People Who Voted in the Primary Age 51-60 had a pledge rate of 15%. So on.*

CHAID Key Findings

- *Primary voters have a significantly higher rate of pledging than do non-primary voters. This is the top break.*
- *Younger voters have a higher percentage of pledging than do older voters. Almost one-fifth (17%) of primary voters under the age of 50 gave money.*