Mind Genomics + Big Data = Big Mind

How a practical business application (Empathy & Experiment) has the promise to 'inform' social modeling

Howard R. Moskowitz

iNovum LLC

White Plains, NY, USA

mjihrm@sprynet.com
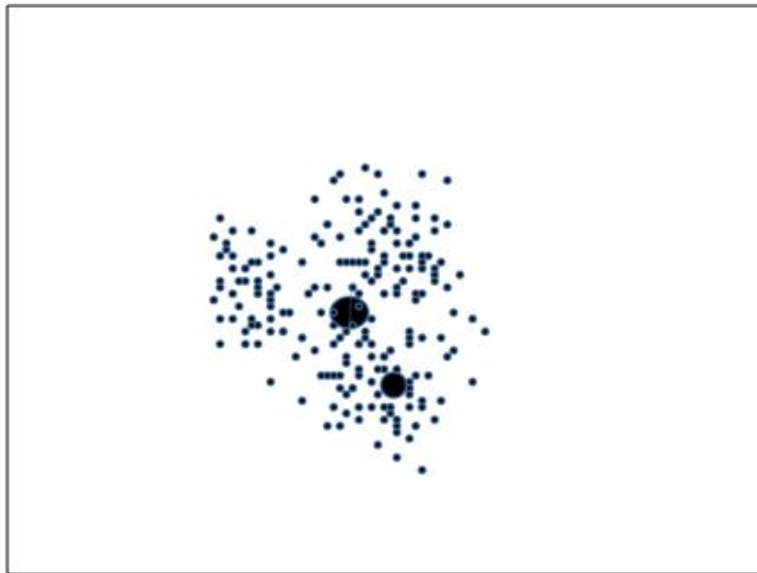

Batool Batalvi

SB&B Research

Toronto Canada, Lahore Pakistan

BatoolBatalvi@gmail.com

We are scientists and engineers – but the answer may come from marketing – yes, from business!!

L: A set of nodes whose behavior is known
R: Now we know the minds sets as well
How does behavior co-vary with mind-sets?

TOPIC	A	B	C	D	E	F	G	H	I	J	K	L
3	2	1	3	1	2	2	3	2	2	3	1	
	2	1	3	2	1	2	2	1	2	1	2	3

2	3	4	1	1	3	1	2	1	2	2	3
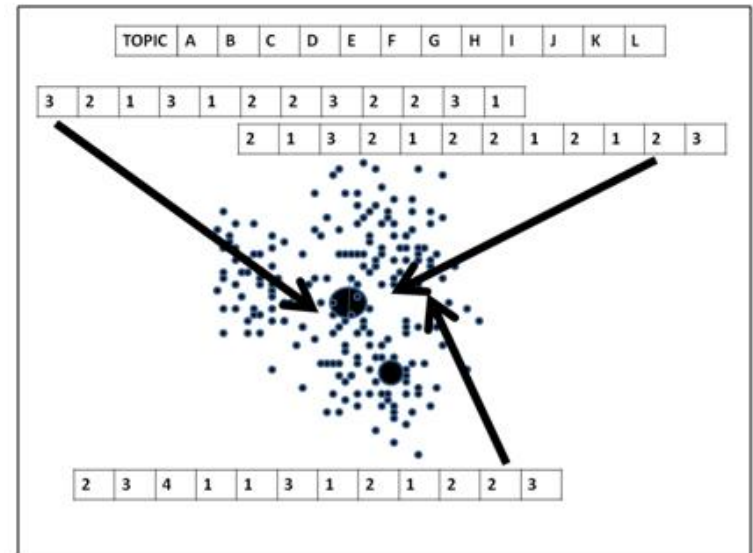
Big Mind from Big Data – Marketing provides a strategy using Mind Genomics

- Marketplace Failure
- Why Should Companies Care
- A New Way of Thinking

- A Worked Example
  - Getting there… creating a microscience
  - Pathways for driving consumer behavior
  - Getting there … typing a mind
  - Extensions to databases

The Marketing Concept

- Central tenets crystallized in the 1950s
- Corporate Goal: Be more effective than competitors in creating, delivering, and communicating customer value to its selected target customers
- The marketing concept rests on four pillars:
  - Target market
  - Customer needs
  - Integrated marketing
  - Profitability
- Prominently featured in business management text books

Yet billions of dollars are lost on new product introductions

- More than 65% of new products launched by established companies fail, says McCombs School of Business professor Rob Adams
  - Author of "If You Build It Will They Come?"

- "Three years after a launch, the product -- or service -- is no longer available. In the United States, companies spend about $260 billion annually on new products that fit this description."
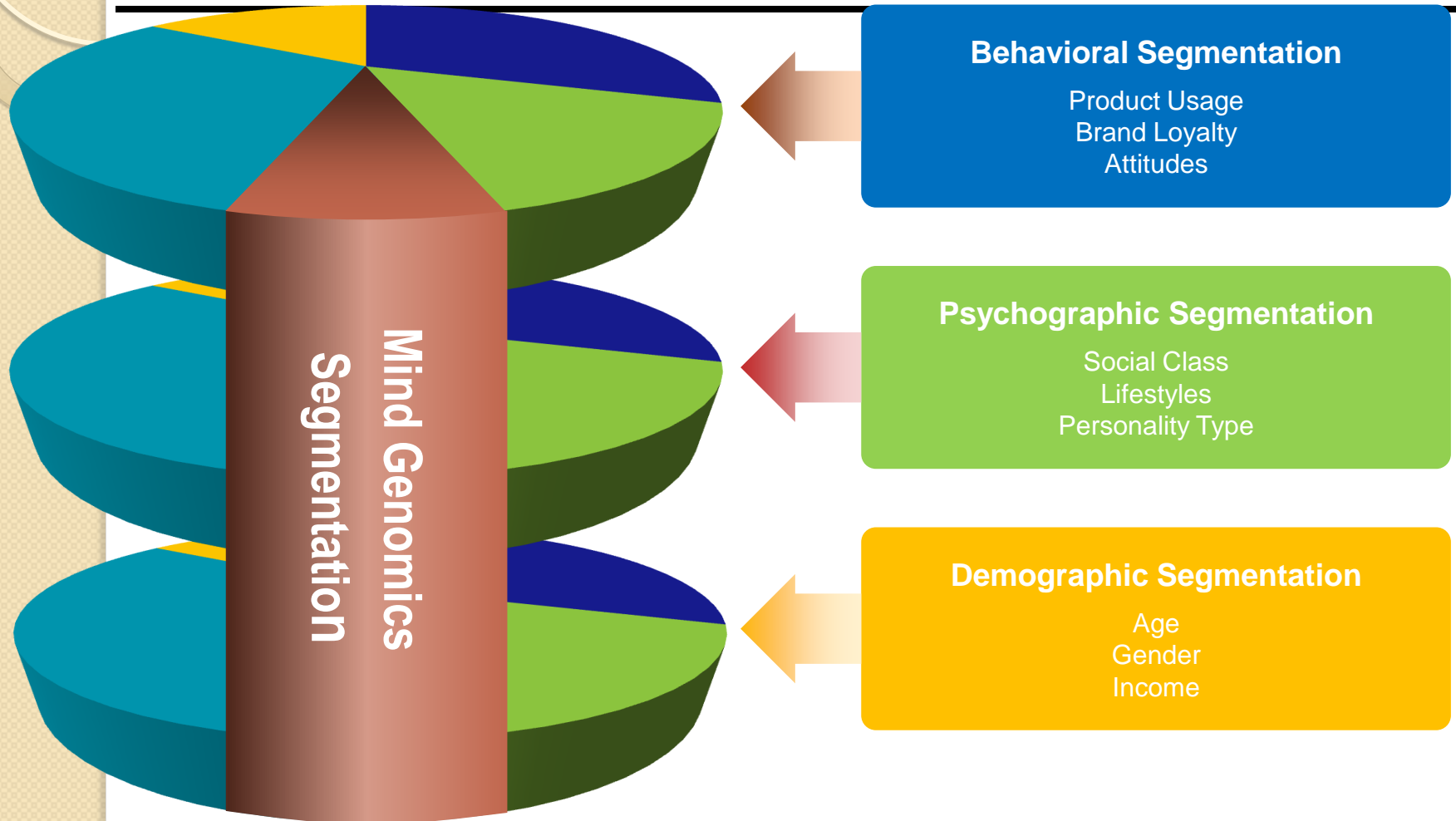
Harvard Business School professor Clayton Christensen reports "about 95% of new products fail"

- The problem is using an ineffective market segmentation mechanism."
- What doesn't work particularly well is segmentation based on dividing the market into:
  - Product categories, such as function or price
  - Target demographics, such as age, gender, education, or income level
- "The problem is that consumers usually don't go about their shopping by conforming to particular segments."
- "The fact that you're 18 to 35 years old with a college degree does not cause you to buy a product."

The Puzzle of Delivering Products and Services Consumers Want

- The leading tenets of the Marketing Concept is widely taught

- The new product failure rate is huge **(would you accept this level of failure when you want to wash a load of laundry?)**

- A leading academic authority says the segmentation of consumers is not working

- So what is to be done????

Mind Genomics mind-set segmentation cuts across traditional segmentation

Mind Genomics Segmentation

Behavioral Segmentation

Product Usage
Brand Loyalty
Attitudes

Psychographic Segmentation

Social Class
Lifestyles
Personality Type

Demographic Segmentation

Age
Gender
Income

The Science of Mind Genomics

- When people make a simple, every day decision, what are their criteria?

- How do we find out what's really important
  - Ask them…But that answer may be 'edited' … what is 'appropriate' to say
  - Observe them…watch a person choosing from among alternatives … we might learn what drives the choice

The Science of Mind Genomics

- The value of the experiment
  - Let's create the alternatives and measure which is chosen
  - We get a general percent preference
  - But we don't know the 'rules'
  - So..we have to do an experiment … so the rules emerge
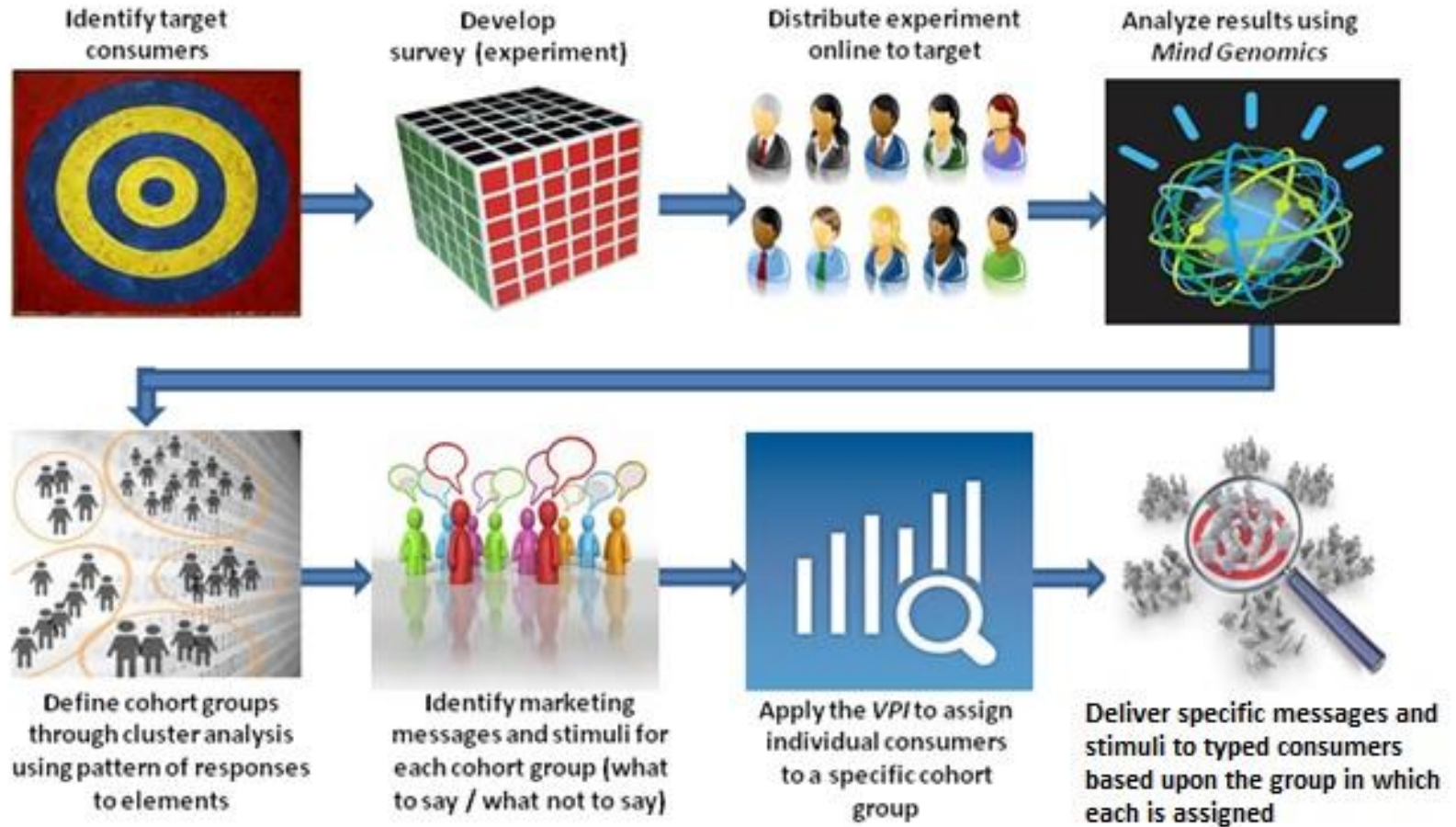
So far..where are we

- We want to understand a personal 'reality' from the subjective point of view

- How ..by seeing the pattern of reactions to communications about a small piece of reality

- How…by doing an experiment

Illustrating by a case history

- Selling retirement products
- The company wants to convince a buyer to invest with them
- What should the company say?
- And to whom?
  - One concept for the many
  - Target concepts to the prospects where the messages will change behavior
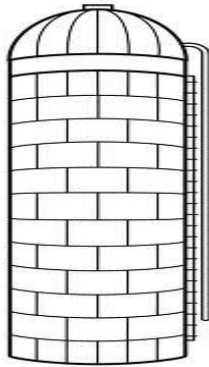
Mind Genomics and the ViewPoint Identifier

The process behind *Mind Genomics* and how it can be applied using the *ViewPoint Identifier (VPI)*
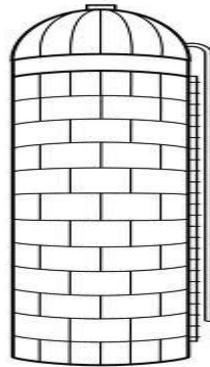
Identify target consumers

Develop survey (experiment)

Distribute experiment online to target

Analyze results using Mind Genomics

Define cohort groups through cluster analysis using pattern of responses to elements

Identify marketing messages and stimuli for each cohort group (what to say / what not to say)

Apply the VPI to assign individual consumers to a specific cohort group

Deliver specific messages and stimuli to typed consumers based upon the group in which each is assigned

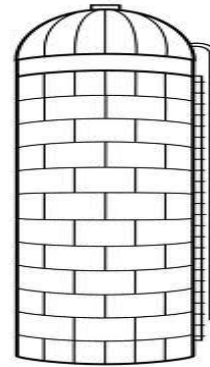# The 4X9 survey matrix – creating four category silos (A-D)
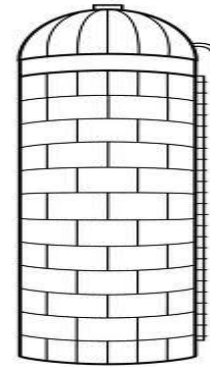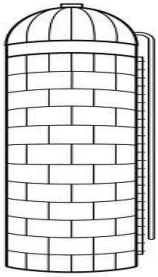
Silo A   Silo B   Silo C   Silo D

The 4X9 survey matrix – populating each silo with nine statements. Each statement is a stand alone idea.

Silo A

	Silo A - 4 of 9 potions
A1	Wells Fargo…It is never too late to plan for your retirement
A3	JP Morgan Chase…It is never too late to plan for your retirement
A4	Merrill Lynch…It is never too late to plan for your retirement
A5	Tell us when you want to retire and we will develop an action plan to get you there
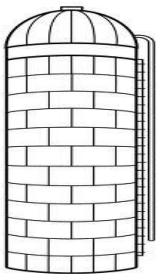
Silo B

	Silo B - 4 of 9 Options
B1	Convenient 24/7 online access to your account and our experts...ask questions…monitor your progress…all online!
B2	We have not forgotten that we are in the relationship business…our retirement planning experts are never more than a phone call away
B7	We offer a "no surprise" fee structure…one flat monthly fee to establish and monitor your personalized retirement plan
B9	We offer a combination fee structure…a low monthly fee plus discounted prices for each transaction

The 4X9 survey matrix – populating each silo with nine statements. Each statement is a stand alone idea.
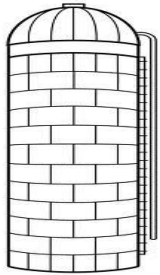
Silo C

	Silo C - 4 of 9 Options
C1	With you in charge of your retirement plan…you know if your objectives are being met
C3	If you don't plan for your retirement…nobody else will…make sure you get to where you want to be
C7	You will feel more secure knowing that every step of your financial future is being managed
C9	By drafting a retirement plan you will be securing your own financial future
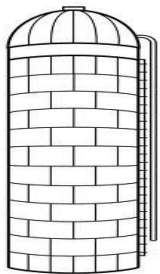
Silo D

	Silo D - 4 of 9 Options
D2	You can't underestimate the value of your retirement planning expert knowing you, your family, your community
D4	A special class of service is available to those who attain Platinum status
D6	For a limited time only, meet with one of our retirement planning experts for a free initial consultation
D8	Planning for your retirement has never been more convenient

THE EXPERIMENTAL DESIGN – SPECIFIED COMBINATIONS

The experimental design is a recipe book

- Tells the computer what to combine
- Each element appears 5x against different combinations of other elements
- Each combination or vignette (test concept) comprises 2-4 elements
- Every respondent sees a different set of combinations

Some combinations

	Silo A	Silo B	Silo C	Silo D
V1	A1	B1	C1	D1
V2	Absent	Absent	C3	D2
V3	A3	Absent	C2	D7
V4	A6	B3	Absent	D3
V5	A9	B7	C4	D1

Example of a test vignette

We will work with you every step of the way to develop and monitor your retirement investments to ensure that they will meet your objectives

We offer a "no surprise" fee structure…one flat monthly fee to establish and monitor your personalized retirement plan

You will feel more secure knowing that every step of your financial future is being managed

Becoming a member of our Platinum Club says to others that you have "arrived"

How interested are you

1	2	3	4	5	6	7	8	9
○	○	○	○	○	○	○	○	○

1=Not at all interested … 9=Very interested

RUNNING THE ACTUAL STUDY WITH PEOPLE

A choreographed sequence

- Orientation slide – telling people what they will see and what they must do
- 60 vignettes, with elements arrayed according to an experimental design
- Self profiling classification … to tell us who these people are, what they do

Running the study

- Typically by web
- Respondents invited to participate by email
- Click on a link
- Go the web
- Do the study
- Around 15-20 minutes
  - Respondents test 60 concepts
- Best to use a panel, so respondents get 'rewards'

The advantage of modeled data

- The model summarizes the relation between elements and responses
- Each element is an independent driver of the response
- So the model objectively tells us which elements are working
- All elements are on the same basis – how does the element do in terms of 'absolute ability to drive response'

LET'S LOOK AT SOME DATA

We created individual respondent models

- Now let's aggregate them
- By total panel
- By key groups
- And determine what's going on in the inside of the respondent's mind
- Not by direct question … but by seeing 'what wins' in an experiment
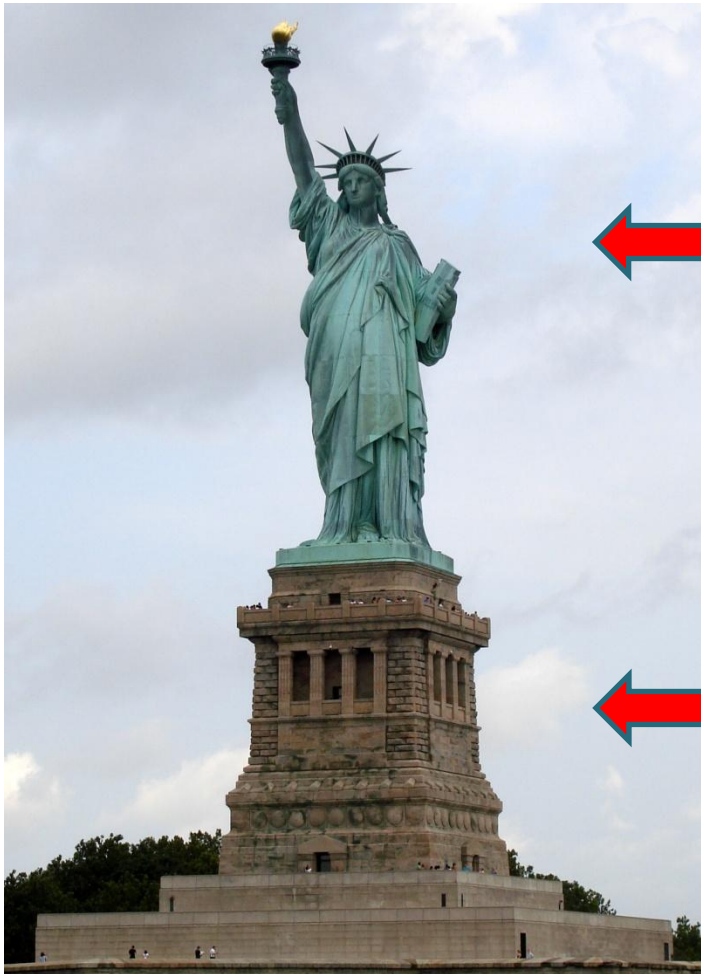
LOOKING AT SOME INITIAL RESULTS

What to look for

- The different groups
- The additive constant – basic interest in buying the product – is it high or low
- Winning elements – what each element contributes
- What are the high elements?

Looking at the statue as analogy

Elements

Additive constant

Subgroup, base size, constant
Look at under 40 vs 40+

	Total Sample	Male	Female	Under 40	40+	Low Income	High Income
Base size	241	44	197	107	134	199	42
Additive constant	35	28	36	29	40	34	37

Now to look at the top performers

- Based upon the coefficient (impact value)
- From the binary transform (INT Model)
- The additive constant = conditional probability of interest in absence of elements
- The element = incremental probability of interest when element is incorporated into the vignette

	Total Sample	Male	Female	Under 40	40+	Low Income	High Income
Base size	241	44	197	107	134	199	42
Additive constant	35	28	36	29	40	34	37
Tell us when you want to retire and we will develop an action plan to get you there	7	**9**	6	9	6	**7**	6
Assess your financial health with our retirement planning worksheet…answer some basic questions about your financial present and your goals for the future…then we will recommend some strategies to get you there	6	6	6	9	4	**8**	0
Convenient 24/7 online access to your account and our experts...ask questions…monitor your progress…all online!	6	**8**	5	8	5	7	0
We will work with you every step of the way to develop and monitor your retirement investments to ensure that they will meet your objectives	5	**8**	4	6	4	5	3
Planning for your retirement now means you won't get caught short since you still have time to do something about it	3	**8**	2	2	5	3	4
It is never too early to start planning for your financial future…the steps you take today will significantly affect the quality of your life 10,20 even 40 years from now	3	**8**	2	5	2	2	**9**

Uncovering mind-set segments

- Look at groups of respondents with similar patterns of element values

- Use clustering technique

- The clusters are built by combining people with similar mind views not based on demographics or purchase behavior

- **The segments represent different pathways to the "call to action"**

Uncovering response based mind-set segments

Following the approach

- We find three different mind-set segments
  - V1 – Easy retirement
  - V2 – You know me and can help
  - V3 – Up to date full service retirement planning
    - V3 is our target … clearest, strongest response to the elements

	Total	V3	V1 + v2	V2	V1
Base size	241	70	171	100	71
Additive constant	35	32	38	33	40
Tell us when you want to retire and we will develop an action plan to get you there	7	**17**	3	0	8
It is never too early to start planning for your financial future…the steps you take today will significantly affect the quality of your life 10,20 even 40 years from now	3	**12**	0	2	-3
Your plan will be reviewed annually not just by YOUR consultant but with our entire staff of retirement planning experts…working in collaboration to ensure that your needs are being met	4	**11**	1	0	3
Convenient 24/7 online access to your account and our experts...ask questions…monitor your progress…all online!	6	**11**	4	3	6
During your peak earning years we will help you to manage the changes in your life to the advantage of your longer term retirement plan	1	**11**	-2	0	-5
We offer a "no surprise" fee structure…one flat monthly fee to establish and monitor your personalized retirement plan	1	**11**	-3	3	**-13**

OPPORTUNITY MAXIMIZATION: THE ASSIGNING OF A NEW PERSON TO A MIND-SET SEGMENT

You 'meet' a person

- To what segment does that person belong?
- Sales implication – if you know the segment you can send the right message or deliver the right product

Scenario 1 – you meet the person

- Identify what elements in the study differentiate the segments
- Here are the 3 best differentiators

Element	F Ratio
Becoming a member of our Platinum Club says to others that you have "arrived"	62.98
It is never too early to start planning for your financial future…the steps you take today will significantly affect the quality of your life 10,20 even 40 years from now	14.13
Convenient 24/7 online access to your account and our experts...ask questions…monitor your progress…all online!	10.43

Now use statistics (DFA) to create a scoring tool

- Once you know the key elements and the scoring tool, create a simple questionnaire
- The pattern of responses shows you the segment to which a person belongs
- DFA = discriminant function analysis

First screen – the introduction

On the following screens, we're going to give you 3 simple questions to ask YOUR customers.

Ask each question, type in the answer...that's all you have to do.

Then... the CUSTOMER ENHANCEMENT TOOL will suggest what you should FOCUS ON..and of course..what you should AVOID!

>>

Looking for mind-set segments

Overall, how interested are you in this retirement plan if…
Our Retirement Resource Center has the tools, information and experts to help you make smart retirement planning decisions

| Not at all | Not sure | Definitely |

Overall, how interested are you in this retirement plan if…
Becoming a member of our Platinum Club says to others that you have "arrived"

| Not at all | Not sure | Definitely |

Overall, how interested are you in this retirement plan if…
We offer a "no surprise" fee structure… one flat monthly fee to establish and monitor your personalized retirement plan?

| Not at all | Not sure | Definitely |

Note that we have converted the scale to 3 points

When DFA assigns the person to Segment V3 (our target group)

Up to date full service retirement planning

Things to say

- Tell us when you want to retire and we will develop an action plan to get you there
- It is never too early to start planning for your financial future... the steps you take today will significantly affect the quality of your life 10,20 even 40 years from now
- We offer a "no surprise" fee structure...one flat monthly fee to establish and monitor your personalized retirement plan
- During your peak earning years we will help you to manage the changes in your life to the advantage of your longer term retirement plan

Things to avoid

- We offer a combination fee structure... a low monthly fee plus discounted prices for each transaction
- Available exclusively to our VIP customers, a complimentary consultation with someone from the Wills and Trusts department...ask the questions you have been meaning to ask
- A special class of service is available to those who attain Platinum status
- Becoming a member of our Platinum Club says to others that you have "arrived"

The next big steps (around the corner)

- DATABASE VPI: Migrate to recognizing segments in a database, so that the entire database can be scored for segment membership the one topic area. Use purchasable data

- MACRO KNOWLEDGE:Create a macro-knowledge base, not of one topic area, but of 300 topic areas (e.g.,300 separate Mind Genomics studies, VPI, and database scoring systems)

- WORLD SCORING: Scoring each person in the 'world' through the database… millions or even billions of people .. In terms of their mind set membership in EACH of the 300 (or more) topic areas

- MERGE WITH SOCIAL MEDIA, NETWORKS: Now that we know the mind-type of each person on 100-200-300 topic areas, how do mind-types behave,and interact in social media?

L: A set of nodes whose behavior is known
R: Now we know the minds sets as well
How does behavior co-vary with mind-sets?
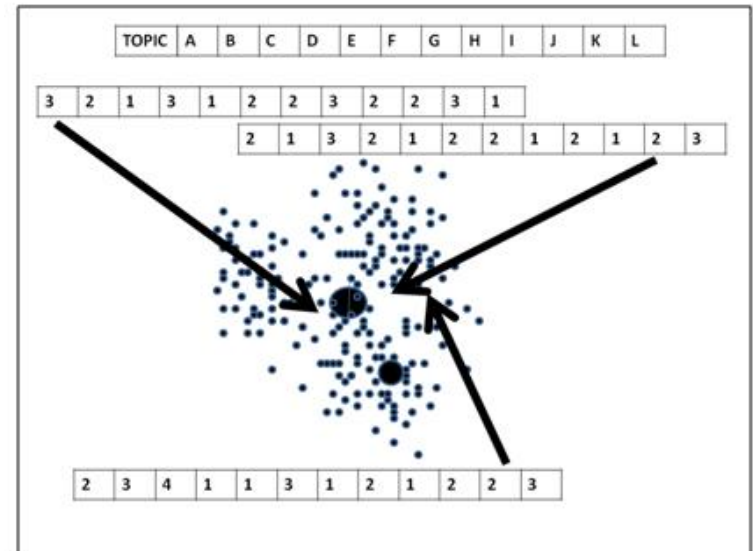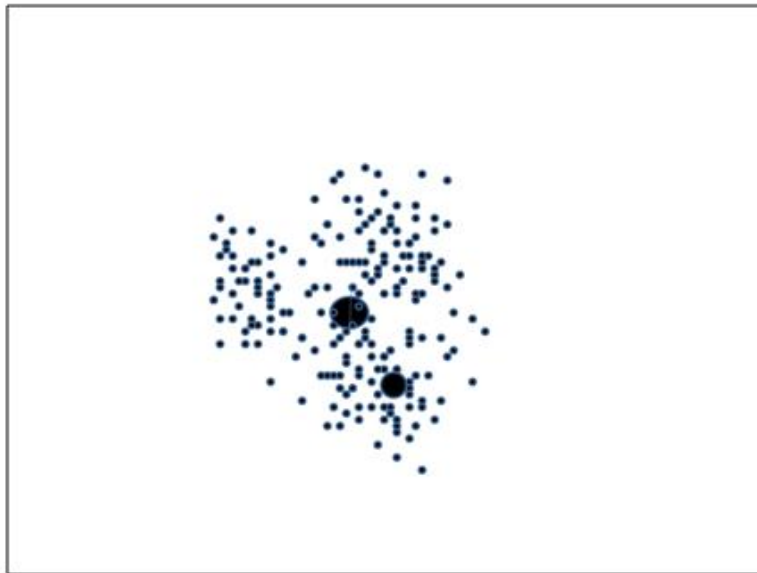
The foregoing approach

- Available in refereed journals
- Available in published books
- Presenter has written *18 new books* called Mind Genomics. Topics are:
  - Government, People, Jobs (1 book each)
  - Food (6 books)
  - Experience (3 books
  - Law*, Aesthetics, Correlation with Neuromarketing* (1 book each)
  - Sociology* – fraying of America (1 book)
  - Health supplements, health experience* (2 books)

Three books detailing Mind Genomics
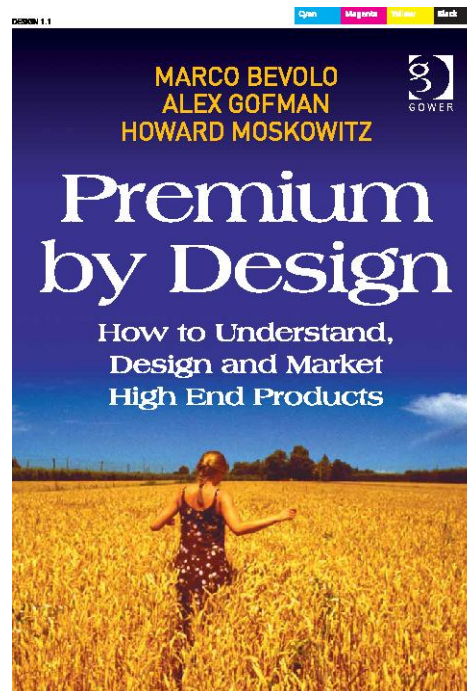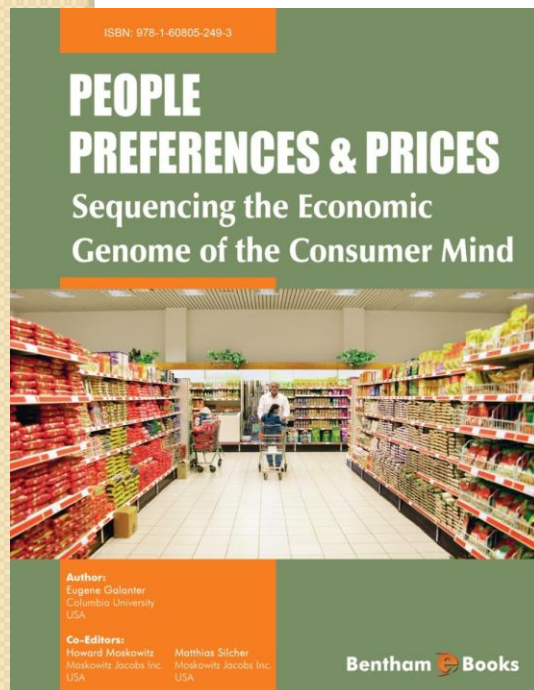
Applications - business

- Selling products – cars – 20% → 40%
- Selling health – compliance in congestive heart failure 17% readmission → 5% readmission
- School enrollment – 35% increase online university
- Increase in donation to university – 18% (Cornell)
- Catalog sales – in test
- Typing for happier experience with veterinary – in test

Applications – society and education

- Teaching students mathematics the way they want
- The teenager and the hospital – a better experience
- Making a university interesting to students
- Retaining students during the school year to reduce drop outs, and increase graduation
- Helping reduce obesity by proper food messages

Dr. Howard Moskowitz
914-572-1673
iNovum
mjihrm@sprynet.com

Bert Krieger
914-645-1750
iNovum
bkrieger@inovum.com

Luke Heffron
SG360
262-443-2060
lukeh@sg360.com