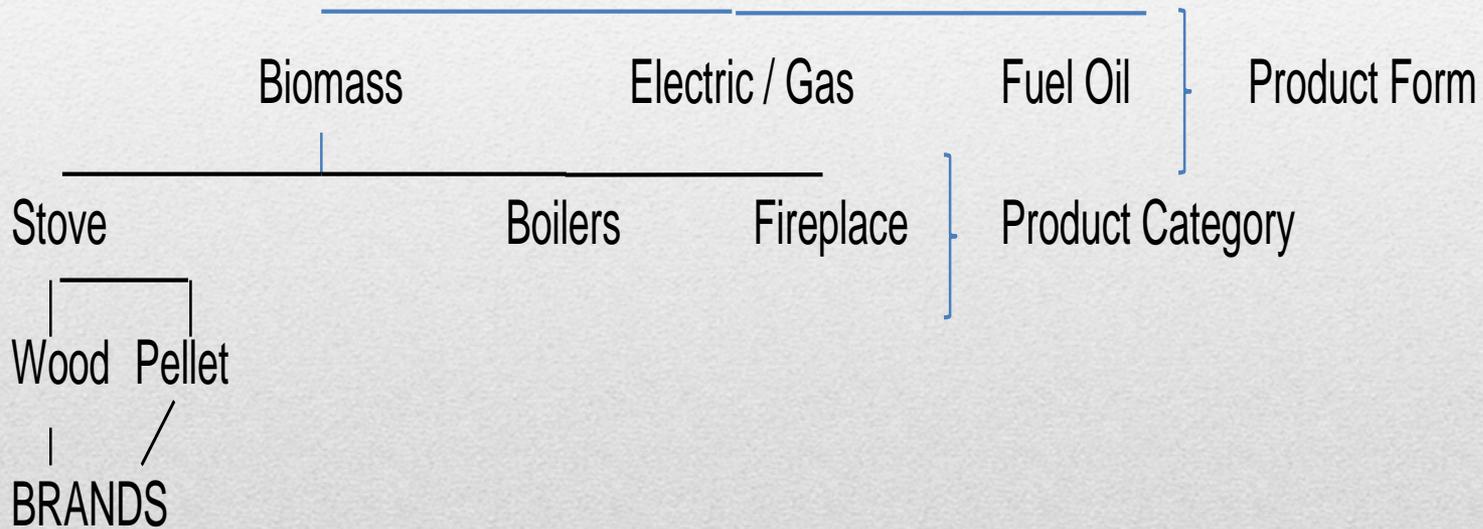


Customer Behavior Insights: Biomass Home-Heating Products

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Western Illinois University

Home-Heating (Product Class)



Biomass – Product Form and Category

- Research on biomass heating: Objective is to “segment” the residential biomass home-heating market;
- Partly funded by the FSMIP grant;
- Geographical Scope: the lower 48 states;
- Outcome would be a predictive model at the household level.

Background

Data	+ Analyses	= Value
<ul style="list-style-type: none">• Usage status• Personal and Impersonal factors	Purchase probabilities	Efficient targeting of Households

Outcome: The Predictive Model

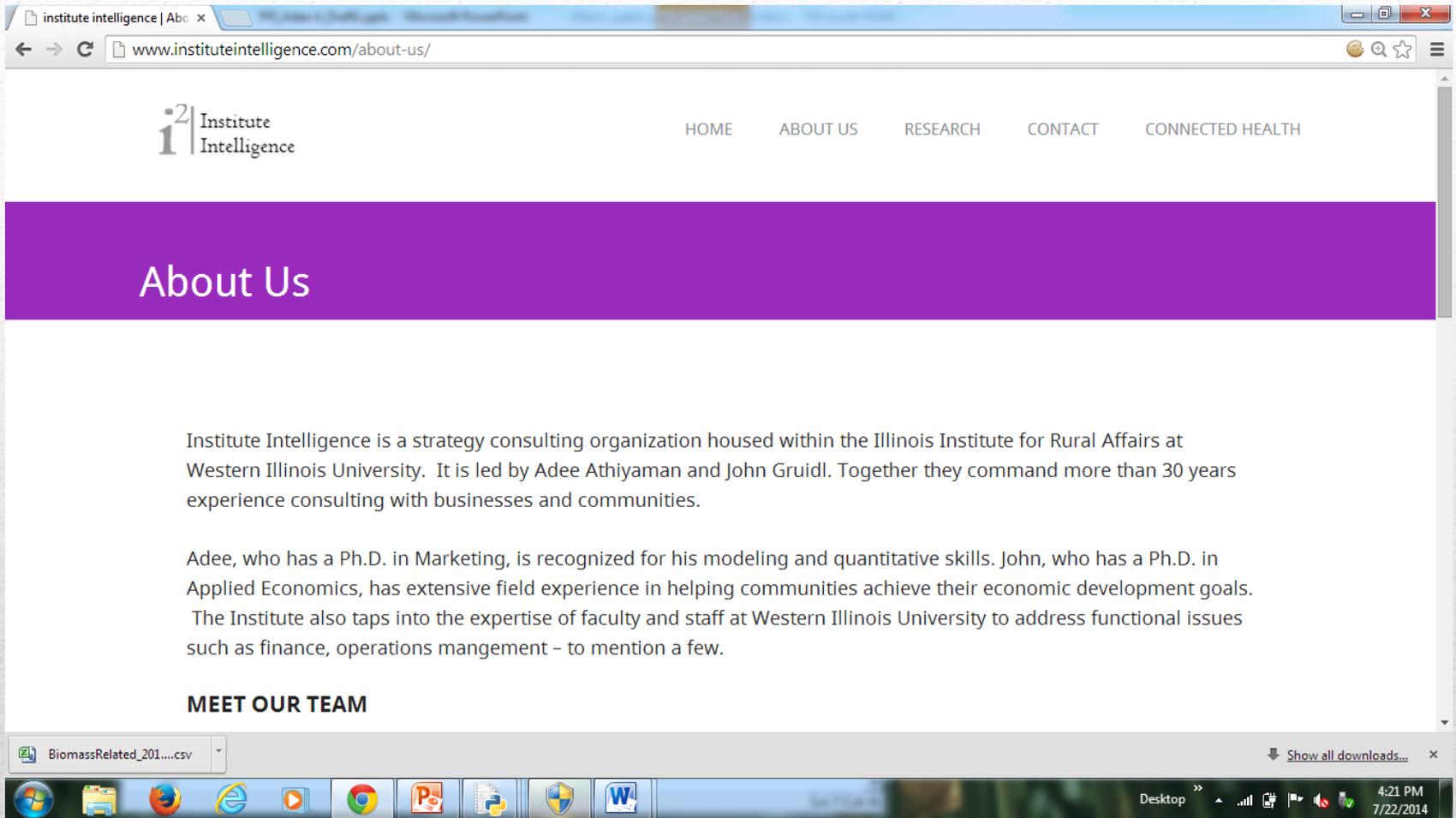
- Volume: Lots of data (2 Million +)
- Variety: from different sources (text, surveys, etc.)



Data for this presentation

- Optimal amount of discount needed to incentivize customers to come in and purchase pellets:
 - 10% discount is needed for every five-mile distance between the user and the store

Also, papers on topics such as ...

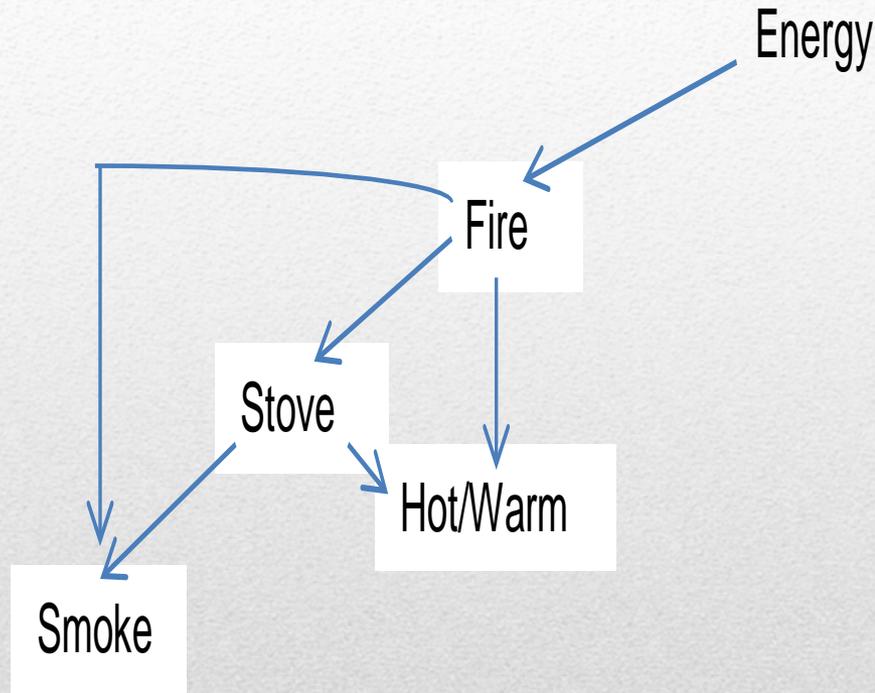


Source for papers

- If consumers are to buy a product, they must know its *meaning*, and *evaluate* it as serving their *needs* better than alternative products.

Customer Behavior Analysis:
Guiding Principle

If a consumer is shown a picture of a stove and asked what it is, she could answer by giving any of the words below.



Meaning of Pellet Stove: Examples of Salient Associations

- Consumer evaluates biomass heating products as better or worse on these choice criteria: “safety”, “cost”, and “ease of use”.

(i) We have people and friends come out to our house for seminars on alternative energy; we educate them on ways that they can cut energy cost and help the environment.

(ii) In my family, we re-use stuff.

(iii) Be helpful to others.

(iv) Environmentally friendly things.

(v) Show people how easy and safe it is to operate a biomass heating appliance.

Intellectual (reflective);

Logical (rational);

Independent (self-

reliant);

Helpful (working for the welfare of others)

Cost;

Safety;

Operational difficulty;

Economic benefits;

Eco-friendly

Evaluative Criteria

- http://www.consumerreports.org/cro/appliances/heating-cooling-and-air/wood-stoves/buyers-guide-to-pellet-and-wood-burning-stoves-1-07/overview/0701_pellet-stove.htm
- The article profiled firms such as Harman Stove Company, Lopi Stoves and so on.
- These companies ads were content analyzed

Industry (marketing)
Communications

Mean number of cues	2
Ads with ≥ 1 cue	8
Ads with ≥ 2 cues	10
Ads with ≥ 3 cues	2

Attribute	Frequency	Attribute	Frequency
Price	10	Availability	7
Quality	14	Special offers	10
Safety	6	Warranties	4

Industry Advertising - Stats

- The ads do not emphasize the “ease of use” of the product, which is a major concern for the consumers.

Gap



QWERTY Keyboard

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Tab ↔	"	<	>	P	Y	F	G	C	R	L	?	+		
⋮ Caps Lock	A	O	E	U	I	D	H	T	N	S	-	=	↵ Enter	
↑ Shift	:	Q	J	K	X	B	M	W	V	Z	↓ Shift			
Ctrl	Win Key	Alt							Alt Gr	Win Key	Menu	Ctrl		

Dvorak Keyboard

- Empirical generalizations (well established findings) suggest that “value perceptions”
 - “behavioral intention” correlation is 0.42
- “ease of use” of the product needs to be communicated.

Conclusion
