

.s (A):

A Segmentation Case

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Mary looked out of the window. She then looked inside. It was time to start.

# The Business Problem

It had been a rough year for Mary and her team. CreeqBoat, the boating company where she was Senior Manager in the Customer Insights department, had become a victim of the crisis in the boating industry. The management team was now exploring various growth options. Expanding further in some markets, in particular North America, was no longer something to consider for the distant future. It was becoming an immediate necessity.

The team believed that in order to develop a strategy for North America, they needed a better understanding of their current and potential customers in that market. They believed that they had to build more targeted boats for their most important segments there. To that purpose, Mary had been commissioned to make a segmentation project for that market. Being a data-friendly company, the decision was made to make the segmentation in a data-driven way – none of that soft hold-hands-and-discuss stuff.

## The Data

With the aid of a market research firm, Mary gathered various data about the boating market in the US through interviews with almost 3,000 boat owners and intenders. The data (see Appendix) consisted, among others, of 29 attitudes towards boating, which respondents indicated on a 5-point scale (Q. 1, 1-29 in the Appendix)

Other types of information had been collected, such as demographics (Q. 11-15 in the Appendix). Finally, Mary had compiled information about the boats, such as the length of the boat they owned, how they used their boats, and the price of the boats (Q. 2-10 in the Appendix). Segmentation of the market would be done using all this data.

# The Real Work

# Part I. Data Preparation

Based on past experience, the decision was made to develop a segmentation that was mostly driven by attitudes that consumer held regarding boating – the attitudinal data from the 29 questions in Q.1. As a first step, Mary decided to simplify the data by grouping the 29 questions into a few meaningful sets/factors. This could be done using a standard method: factor analysis. She needed to answer the following questions:

- How many factors should she select? Why? Why not more or less?
- 2. How should she associate each of the original 29 variables to the factors selected?
- 3. How could she interpret the main factors selected? How should she name each factor by looking at the items that were most correlated with it (i.e., had the highest factor loadings).



# **Part II: Segmentation**

Based on the factor analysis she would select certain attitudes that she could use in the segmentation algorithm. Potentially using some of the other available data as well (e.g. demographics, boat preferences), Mary could then move on to the actual segmentation of the market. In particular, she would need to:

- 1. Perform a (possibly two-step) cluster analysis of customers and prospects to discover segments in the market.
- 2. Decide on the appropriate number of clusters, based on various outputs and tables. How many clusters should she choose? What would be the advantages and disadvantages of different cluster solutions?
- 3. Using whatever data from Q1-15, create high-level profiles of the segments that would be meaningful for the company. How could she best describe the segments?

e process tooking ou dirty it she wanted to eve all the control of Mary knew that this would be a long, iterative process. Looking out of the window was not an option any more. She had to get her hands dirty if she wanted to ever understand the best way

2



# **Appendix**

# Data Description

			ata Descripin	011				
Attitudes / Needs / Motivations								
					may or may not have			
		scale provided	d, please indicat	e how much y	ou agree or disagree with			
each stateme	ent.				11/2 11/2			
	Strongly	Disagree	Neither	Agree	Strongly			
	Disagree		Agree or	7.g. 00	Agree			
			Disagree		3' 0'			
	1	2	3	4	1,55 94			
When buying a boat, I do a lot of shopping around and visit multiple dealers								
2. When buying a boat, getting the lowest price is more important than the boat brand								
3. The brand of boat I buy says a lot about who I am								
4. I onl	y consider buyi	ng a boat from	a reputable b <u>r</u> a	ind				
5. I am	willing to pay a	premium for a	a brand with a re	eputation for hi	igh quality			
		•	ing mysoll for m	/ </td <td>,(13)</td>	,(13)			

- 5. I am willing to pay a premium for a brand with a reputation for high
- 6. Owning a boat is a way of rewarding myself for my hard work
- 7. Owning a boat gives me a sense of achievement
- 8. When buying a boat, functionality is more important than style
- 9. I see my boat as a status symbol
- 10. When buying a boat, I rely more on expert opinion than my own
- 11. I tend to perform minor boat repairs and maintenance on my own
- 12. When it comes to boating, I tend to prefer a basic boat with little to no frills
- 13. When buying a boat, I tend to buy the latest and greatest
- 14. When buying accessories for my boat, I tend to buy the latest and greatest
- 15. I am serious about the technology on my boat
- 16. People tend to come to me for advice about boating
- 17. I consider myself more knowledgeable about boating than the rest of my boating peers
- 18. Boating gives me a feeling of adventure
- 19. Boating allows me to experience nature
- 20. When not on my boat, loften find myself doing boating related activities
- 1. Boating helps me escape from everyday life and relax
- 22. Boating helps me stay active
- 23. Boating allows me to excel in the sports that I am passionate about
- Boating gives me an outlet to socialize with family and/or friends
- 25. Being in charge of my boat is very important to me
- 26. Having a powerful boat is what is most important to me
- 27. Boating is the number one thing I do with my spare time
- 28. Boating is my true passion in life
- Boating is one of many things I do in my spare time



### **Purchase Process and Behaviour**

- / What is the length of your post? What is the length of your post?

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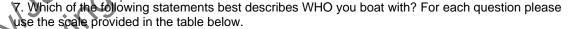
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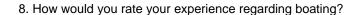


20 feeti) ∇. Which o	f the follow	ricill	s best describes		•	idering buying? (e.g
Mo OS	Never	Rarely	Sometimes	Often	Most of the time	
	1	2	3	4	5	

- 1. I normally boat alone
- 2. I boat with my spouse or significant other
- 3. I boat with my family, including kids
- I boat with my friends

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# PRE-RELEASE VERSION



- 1. Beginner
- 2. Intermediate

	1. Beginner				
2	<ol><li>Intermediate</li></ol>				
3	3. Advanced				$\sim$ $\sim$
4	4. Expert				
	•				
Below	is a list of act	ivities that ma	y or may not do	while boating	. Using the scale provided, please
			h of these activit		No. of A
ioato	now onton you	ongago in oac	11 01 111000 4011		11 110 0
Г	Never	Rarely	Sometimes	Often	Most of the
	140701	rearciy	Comcunics	Onton	time
-	1	2	3	4	5 0
L	I I		3	4	
					45 44
1	1. Fishing				
2	2. Swimming				
3	3. Cruising				CO 'Oo XI'.
1		ts (e.a., skiind	, tubing, wakebo	parding)	
		g/socializing	,,	20.1 ug)	
,	J. Lintertailing	g/30cializing		_ (	(O) X '
					<b>20 10</b>
Durir	ng your boating	season, how	many days out o	of the year do	you typically use your boat?

# **Demographics**

Male	J	 	
Female		 	2

11. What is your gender?	(b) (c)	
	Male	
	Female	2
<ol> <li>We would like to get a better esting before taxes.</li> </ol>	nate of your total HOUSEHOLD income in the past 12 months	
	Less than \$5,000	1
	\$5,000 to \$7,499	
	\$7,500 to \$9,999	3
	\$10,000 to \$12,499	4
	\$12,500 to \$14,999	5
150	\$15,000 to \$19,999	
	\$20,000 to \$24,999	7
	\$25,000 to \$29,999	
(0) ( 4)	\$30,000 to \$34,999	
	\$35,000 to \$39,999	10
0 0, 1,10	\$40,000 to \$49,999	11
	\$50,000 to \$59,999	12
.60 1/ ::(1	\$60,000 to \$74,999	13
	\$75,000 to \$84,999	14
0, 0,	\$85,000 to \$99,999	15
	\$100,000 to \$124,999	
10, 10, 00,	\$125,000 to \$149,999	17
VO 1/2 1/1/2	\$150,000 to \$174,999	
K 31. 11.	\$175,000 or more	19
, 1,0,0		
13. Are you now married, widowed, di	ivorced, separated, never married, or living with a partner?	
	Married	1
	Widowed	

Married	1
Widowed	2
Divorced	3
Separated	4
Never married	5
Living with partner	6



# PRE-RELEASE VERSION

14. Which statement best describes your current employment status?

Norking – as a paid employee	1
Norking – self-employed	2
Not working – on temporary layoff	
rom a	
ob	
Not working – looking for work	J4
Not working – retired	5
Not working – disabled	6
Not working – other	7

15. What is your age?

# **Boats: Brand Equity**

16. Below are various statements that could describe brand's PRODUCTS, IMAGE or REPUTATION. Please indicate how much you agree or disagree with the statements for the **following brand** that you are familiar with: INSERT BRAND THAT NEEDS TO BE RATED (e.g. Alumacraft, Bayliner, etc.)

ongly agree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
1	2	3	4	5

### Origin/ Heritage

1. Is a brand that has been around for a long time

### **Brand reputation**

- Has best in-class customer service
- 3. Has a strong dealer network

## Brand leadership

- 4. Is a leader in cutting edge technology
- 5. Is a leader in safety
- 6. Is known for its innovative products

### Users of the brand

- 7. Is a brand for people who are serious about boating
- 8. Is a good brand for people that are new to boating
- Is a brand I see in the water all the time

### Boating Experience

- 10. Offers boats that provide a fast and powerful boating experience
- Offers the best boats for socializing
- 12. Offers the best boats for water sports (e.g., tubing, ski, wakeboard)

### **Aesthetics**

- 13. Offers boats with superior interior style
- 14. Offers boats with superior exterior style
- 15. Offers boats that stand out from the crowd
- 16. Offers boats that look cool

### Product Quality/ Reliability/ Innovation

- 17. Offers boats that can handle rough weather or choppy water
- 18. Offers boats that can handle frequent and heavy usage
- 19. Offers a wide breadth of product offerings and accessories

### **Product Safety**

20. Offers boats that I can move around safely



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