# Demonstrating Content Analysis: Market Orientation and Family Firms

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### What is Content Analysis?

- **Content Analysis** is a research methodology that uses a set or sets of procedures to classify and/or categorize communications.
- Content analysis is an unobtrusive method to gather attributions, cognitions, or other organizational projections.
- Commonly analyzed communications include shareholder letters and organizational mission statements.



## CATA: Computer-aided Text Analysis

- Computer-Aided Text Analysis (CATA) is a specific form of content analysis.
- CATA often proceeds with the assumption that word choices provide valuable information in the context of a particular organizational narrative.
- CATA is advantageous as it can allow for the processing of hundreds of documents quickly with extremely high reliabilities.
- Despite benefits, less than 25% of Content Analysis studies analyzed by Duriau, Reger, & Pfarrer (2007 ORM) used CATA.



# Beginning with Content Analysis

- Neuendorf (2002) suggests:
  - You may use standard dictionaries (e.g., those in Hart's program DICTION) or originally created dictionaries. When creating original dictionaries, be sure to first generate a frequency list from your text sample, and examine for key words and phrases. (p. 50)
- Management researchers using content analytic methods generally incorporate both **deductive** and **inductive** approaches when using content analysis (Doucet & Jehn, 1997; L. Doucet, B. Kabanoff, & T. Pollock, personal communications, December 14, 2008)



## Steps of Building a Wordlist

- 1. Identify or create a working definition of the construct of interest to guide word selection.
- 2. Build an exhaustive deductive word list consisting of words that match the construct of interest.
- 3. Using additional colleagues, review the list independently and select words to be eliminated.
- 4. Establish initial interrater reliability.
- 5. Refine and finalize word lists.



#### Market Orientation Definitions

Customer orientation Customer orientation is an adequate understanding of a customer's psyche as to provide "superior value" for said customer(s) in a continuous and sustainable manner (Narver & Slater, 1990).

Competitor orientation

Competitor orientation requires a firm to understand the short-term strengths and weaknesses as well as the long-term capabilities and strategies of both current and potential key competitors (Aaker, 1988; Day & Wensley, 1988; Porter, 1980, 1985)

Interfunctional coordination

Interfunctional coordination involves the coordination and utilization of a firm's resources, human or otherwise, to create "superior value" for the target buyer (Narver & Slater, 1990).

Long-term focus

For long-term survival in the presence of competition, a business cannot avoid a long-run perspective (Narver & Slater, 1990).

Profitability

Although profitability can be considered a product of market orientation (Kohli & Jaworski, 1990), it can also be assumed to be a business objective (Narver & Slater, 1990).

"Providing both our builder and retailer customers with consumer-desired products, as well as other value-added solutions such as consumer research aimed at converting shoppers into buyers, remains a top priority" (Masco Corporation Annual Report, 2005).

"We are contending with stronger and more aggressive competitors in several geographies, and we remain aware of the ongoing uncertainties surrounding various economies and currencies (Wm. Wrigley Jr. Company Annual Report, 2001).

"Thanks in large part to even better cross-team, cross-functional alignment, we started to gain ground in reducing our operating costs, in particular, distribution costs, from supply chain initiatives and improved transportation management" (Molson Coors Brewing Company, 2001).

"More importantly, we made a number of strategic moves designed to position our company for *long-term* growth and to build *enduring* shareholder value" (Meredith, 2001).

"As we look ahead, our plans are straightforward:Improve the *profitability* of our U.S. Group Income Protection business" (UnumProvident, 2003).



### Building the wordlist

- Build the initial list
  - Begin with words that are naturally related to the construct
    - Ex: For customer orientation, we began with the word customer
  - From the initial word(s), look for synonyms to expand the wordlist
    - We prefer to find synonyms using Rodale's (1978) The Synonym Finder
- Edit the initial list
  - Using the help of colleagues, review the list for words that do not sufficiently relate to the construct
    - We used three (3) authors; circulated a spreadsheet with all words and noted when words were appropriate or not



### Building the wordlists

- Calculate initial interrater reliability
  - Using the Holsti (1969) method; proportion of agreement observed
  - PAO = 3A/(nA + nB + nC) for 3 raters
    - where, A = number of agreed upon words by all raters AND nA, nB, and nC = number of sufficiently related words per rater
  - While no established rater threshold exists, reliabilities of .70 to .80 are common in the literature
    - We observed interrater reliabilities of .89 for customer orientation, .87 for competitor orientation, .88 for interfunctional coordination, .82 for long-term focus, and .92 for profitability
    - Indicates strong interrater reliability



#### Table I. Word List for Market Orientation Behavioral Components

Market	Orien	tation	Dimension
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#### Content Analysis Words With Expert Validation

#### Customer orientation

Attendee, buyer, buying, client, clientele, consume, consumer, customer, emptor, habitué, market, marketer, patron, patronage, patronize, patronized, purchase, purchased, purchaser, purchasing, shopper, spectator, subscribe, subscribed, subscriber, subscribing, user, vend, vended, vendee, visitor



## Running the Content Analysis

- Select the appropriate software
  - We used DICTION 5.0 (Hart, 2000)
- Upload the wordlists and narratives
- Run the analyses
  - DICTION 5.0 allows users to open results in both DICTION and Excel
- Assess the dimensionality of the results using a correlation matrix
  - Uncorrelated dimensions may be improperly assessed and/or lack sufficient convergent validity
  - The higher the correlation coefficient, the greater the unidimensionality of the construct



Table 4. Means, Standard Deviations, and Correlations Among Measures

Variables	Mean	SD	el.	2	3	4	5	6	7	8
I. Business size	10.02	1.38								
2. Family business status	.33	.47	09							
3. Customer orientation	7.63	4.61	.04	05						
4. Competitor orientation	6.67	3.51	.14*	15*	.55**					
5. Interfunctional coordination	11.69	5.04	.16*	07	.37**	.57**				
6. Long-term focus	12.19	4.81	.03	10	.28**	.46**	.50**			
7. Profitability	19.50	8.60	.07	I3*	.36**	.43**	.58**	.55**		
8. Market orientation	57.68	20.37	.11	14*	.63**	.73**	.79**	.74**	.85**	
9. Average ROA	.07	.05	.03	.07	01	04	.15*	.10	.11	.10

Note. ROA = return on assets.

<sup>\*</sup>p < .05. \*\*p < .01.



### Using the Results

- Results yield continuous values to be analyzed using various statistical methods
  - We used OLS stepwise regression and ANOVA tests
- Pair with other archival data
  - Independent variables
    - Family business status
  - Control variables
    - Firm size
    - Firm age
    - Industry affiliation
    - Board compensation
    - CEO compensation



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Dependent Variable: Return on Assets	Model I	Model 2
Assets	r lodel I	1 lodel 2
Step 1: Controls		
Mining	.05	.06
Manufacturing	.03	.04
Transportation, communications, and utilities	.04	.05
Retail trade	.05	.05
Finance, insurance, and real estate	.02	.03
Services	.06	.06
Public administration	01	00
Organization size	.00	.00
Organization age	.01	.01
Board composition	02	03
CEO options compensation	01	01
Step 2: Market orientation		
Market orientation		.16*
R <sup>2</sup>	.16	.18
$\Delta R^2$	.16**	.02*
Adjusted R <sup>2</sup>	.11	.13
F	3.46**	3.74**

<sup>\*</sup>p < .05. \*\*p < .01.



Table 6. Comparisons of Family Businesses With Nonfamily Businesses on Market Orientation Dimensions

	Family Businesses $(n = 75)$	Nonfamily Businesses $(n = 149)$	ANOVA Results  FValue	
	Mean	Mean		
Overall market orientation	53.84	59.61	4.06*	
Customer orientation	7.29	7.80	.60	
Competitor orientation	5.91	7.05	5.43*	
Interfunctional coordination	11.19	11.95	1.14	
Long-term focus	11.57	12.50	2.04	
Profitability	17.88	20.32	4.06*	

Note. The results of this table were based on computer-aided text analysis using the word lists for market orientation presented in Table 1. Evidence of rhetoric consistent with each of the elements on market orientation was identified and significant at the p < .01 level using a one-sample t test with a test value of 0.

<sup>\*</sup>p < .05.



# Questions?