This copyrighted document is intended solely for use in Raj Venkatesan's *Marketing Analytics* course on Coursera. Any other use is prohibited. For copies of the full, unabridged version of this case, please contact Darden Business Publishing at permissions@dardenbusinesspublishing.com.



UVA-M-0898 Oct. 28, 2015

Transformation of Marketing at the Ohio Art Company (A) and (B) (Abridged)

A Case

Ohio Art company history

Ohio Art's toy business, which included its flagship product Etch A Sketch (EAS®), had seen profits and losses through the 1990s and early part of the 21st century. Two developments had boosted Ohio Art's profits: product placement of EAS in the 1995 movie *Toy Story* and the 1998 introduction of a doll called Betty Spaghetty. The doll was an initial hit, but its sales had waned.

Wal-Mart, Toys"R"Us, and Target accounted for the overwhelming majority of toy sales.¹ In 2001, the need to compete in the mass-merchant channel forced Ohio Art to start making its toys in China, saving it 20% to 30%.² The shift magnified the already high risks of introducing products. Long shipping times and the seasonality of most toy sales meant that managing inventory and tooling were difficult. In 1999, the company was helped again when *Toy Story 2* featured EAS, generating a 20% increase in holiday sales. November and December typically accounted for 45% of the company's retail sales. Each of the other 10 months averaged close to 5.5%.

The Etch A Sketch experiment

EAS had been promoted initially with heavy television advertising though by late 2006 the budget was less than \$1 million. At that time, the company's advertising agency proposed a campaign to enhance the toy's popularity after Target asked to include EAS in a television spot. Management decided to test the effectiveness of television advertising via a field experiment that ran from November 27 to December 16, 2006—a period when 35% of retail toy sales occurred. Management intended to compare the test and control market sales of its largest retail customer (25% sales) which had retail stores in all control markets and POS systems that allowed accurate monitoring of sales. The expectation was that sales increases would accrue to all retailers.

Television commercials for EAS were aired only in Cincinnati, Ohio. The breakdown of the total advertising spend in the three weeks is provided in **Table 1**. The cost to develop the commercials was \$75,000.

¹ Wal-Mart had the highest market share at about 25%, followed by Toys"R"Us at 17%, and Target at 12%.

² Joseph Kahn, "Ruse in Toyland: Chinese Workers' Hidden Woe," New York Times, December 7, 2003.

This case was prepared by Dustin Moon (MBA '12) under the supervision of Rajkumar Venkatesan, Associate Professor of Business Administration, and Paul W. Farris, Landmark Communications Professor of Business Administration. It was written as a basis for class discussion rather than to illustrate effective or ineffective handling of an administrative situation. Copyright © 2015 by the University of Virginia Darden School Foundation, Charlottesville, VA. All rights reserved. To order copies, send an e-mail to sales@dardenbusinesspublishing.com. No part of this publication may be reproduced, stored in a retrieval system, used in a spreadsheet, or transmitted in any form or by any means—electronic, mechanical, photocopying, recording, or otherwise—without the permission of the Darden School Foundation.

This copyrighted document is intended solely for use in Raj Venkatesan's *Marketing Analytics* course on Coursera. Any other use is prohibited. For copies of the full, unabridged version of this case, please contact Darden Business Publishing at permissions@dardenbusinesspublishing.com.

Page 2 UVA-M-0898

The media spend called for more than 100 spots, each with an average rating of 2.7 to be broadcast over the three weeks.³ The \$30,150 media spend in Cincinnati would be equivalent to a \$5 million national budget. Total annual unit sales of EAS products were 3.1 million before the test.

Table 1. Media spend in Cincinnati.

		Total Rating	Number of
Dates	Total Cost	Points	TV Spots
Nov. 27–Dec. 1	\$ 9,350	91.8	39
Dec. 2–Dec. 8	\$10,200	106.3	44
Dec. 11-Dec. 16	\$10,600	112.1	46
Total	<i>\$30,150</i>	310.2	129

Data source: Ohio Art. Used with permission.

Table 2 includes sales data for EAS and another new Ohio Art product, Doodle Doug, in Cincinnati and the four control cities at selected stores of the major mass merchant.⁴ Doodle Doug was not advertised, but sales were tracked in the cities as an additional control.

Table 2. EAS and Doodle Doug weekly unit sales in test and control cities (1/1/05-2/2/07).

E. Elito and Boodic	2348	Tilly Gillie o	<u> </u>	t arre correr	01 010100 (1/1/03 4/
		Control	Total Chain-	Advertising	CINN	Control
Dates	CINN EAS	Cities EAS	Wide EAS	Spending	Doodle	Cities Doodle
Jan 1 - Sep 1 Average	11.2	79.1	1,396.6	No	101.3	440.4
Jan 1 - Sep 1 Std Dev	5.4	27.3	319.4	No	29.8	120.8
Sep 2-8	12	103	1,242	No	82	333
Sep 9-15	12	71	1,130	No	71	317
Sep 16-22	10	87	1,184	No	52	280
Sep 23-29	9	79	1,213	No	68	279
Sep 30-Oct 6	10	96	1,178	No	58	248
Oct 7-13	9	121	1,327	No	72	329
Oct 14-20	14	101	1,349	No	95	331
Oct 21-27	10	116	1,438	No	96	362
Oct 28-Nov 3	11	118	1,582	No	201	651
Nov 4-10	15	134	1,878	No	204	1,187
Nov 11-17	24	214	2,597	No	277	1,325
Nov 18-24	26	286	3,844	No	241	1,100
Subtotal for Period	162	1,526	19,962	No	1,517	6,742
Nov 25-Dec 1	61	370	4,604	Yes	217	926
Dec 2-8	70	488	6,959	Yes	249	1,211
Dec 9-15	109	740	9,867	Yes	347	1,643
Subtotal for Period	240	1,598	21,430	Yes	813	3,780
Dec 16-22	145	971	12,845	No	346	2,207
Dec 23-29	39	312	4,298	No	157	1,009
Dec 30-Jan 5	1	46	1,137	No	100	296
Jan 6-12	12	62	1,137	No	80	310
Jan 13-19	15	86	1,412	No	136	318
Jan 20-26	23	65	1,424	No	83	297
Jan 27-Feb 2	10	77	1,522	No	122	332
Subtotal for Period	245	1,619	23,775	No	1,024	4,769

Data source: Ohio Art. Used with permission.

³ One rating point was equal to 1% of the total population in a given area.

⁴ Unit sales figures are not provided in some weeks because EAS was not carried by the mass merchant in these weeks due to disagreements over price points.

This copyrighted document is intended solely for use in Raj Venkatesan's *Marketing Analytics* course on Coursera. Any other use is prohibited. For copies of the full, unabridged version of this case, please contact Darden Business Publishing at permissions@dardenbusinesspublishing.com.

Page 3 UVA-M-0898

The weighted average of all EAS products sold in the holiday time period was \$10, a price that was suggested in calculating the percentage increase required for a national campaign. The suggested retail price for Doodle Doug was \$14.99. The company's average gross margin for the EAS products was 58%, and the average retail margin was 36%.

The Betty Spaghetty experiment

In mid-2007, the company tried a field experiment to estimate consumer demand for a revamped Betty Spaghetty, to test whether advertising could increase sales, and to convince the mass-merchant chain that sales of Betty Spaghetty would justify shelf space. Television and radio commercials were aired in Arizona from June 17, 2007, to July 14, 2007. The company purchased 600 gross rating points (GRPs) for the television advertisements for \$31,500. Management purchased 64 GRPs for radio commercials for \$8,022. Each of the television and radio programs selected reached about 1.8% of the population in Phoenix. The cost of developing the commercial was \$150,000.

Management estimated that an equivalent ad budget for eight to ten weeks of preholiday advertising would be about \$3 million. The average retail selling price of Betty Spaghetty during the test was about \$15. Retailer and Ohio Art margins were 36% and 58%, respectively. Given that time would be required to read the test, obtain shelf space, and ship product to stores, management estimated that the four-week test market sales period represented about 10% of the remaining sales potential for the year.

Table 3 reports weekly sales in 23 Arizona stores (test) and in 24 stores of the same mass merchant in California (control) for two versions of Betty Spaghetty. The stores represented 50% of the retailer's Arizona sales and 10% of California sales. Arizona and California represented 2% and 12%, respectively, of the retailer's national sales, and that same retailer was expected to account for 25% of total Betty Spaghetty sales. Management intended to use the test to help estimate Betty Spaghetty sales with and without advertising.

Go-Go Glam Color Crazy Go-Go Glam Color Crazv Control (CA) Test (AZ) Test (AZ) Control (CA) Week 1 30 56 1 12 Week 2 28 59 5 18 Week 3 7 51 36 51 17 Week 4 54 40 46 206 30 112 Total 163 Total/store/week 1.8 2.2 0.3 1.2

Table 3. Weekly unit sales of Betty Spaghetty in test and control cities.

Data source: Ohio Art. Used with permission.

B Case

In March 2012, Ohio Art Company became the target of intense media attention when a campaign manager of presidential candidate Mitt Romney said, "You hit a reset button for the fall campaign. Everything changes. It's almost like an Etch A Sketch. You can kind of shake it up, and we start all over again." Ohio Art was concerned that investing resources to leverage the media attention might take away from the company's new nanoblock construction toys. For both nanoblock and the traditional EAS line, digital and social media and

⁵ Sam Stein, "Mitt Romney Platform Like an Etch A Sketch," Top Spokesman Says," *Huffington Post*, March 21, 2012, http://www.huffingtonpost.com/2012/03/21/mitt-romney-etch-a-sketch n 1369769.html (accessed Jul. 23, 2012).

This copyrighted document is intended solely for use in Raj Venkatesan's *Marketing Analytics* course on Coursera. Any other use is prohibited. For copies of the full, unabridged version of this case, please contact Darden Business Publishing at permissions@dardenbusinesspublishing.com.

Page 4 UVA-M-0898

online retailers offered opportunities Ohio Art had yet to explore. The percentage of time consumers spent using media versus percentage of advertising spend in 2011 suggested there was significant room for growth in Internet and mobile advertising—to the tune of \$20 billion. In addition to the Internet search and display ads, there were emerging opportunities to promote through Amazon.com and social media. Social media was intriguing because management thought that outlet might offer new revenue models for the EAS brand.

Channels

The traditional line of products (EAS and Doodle Sketch) was stocked by Wal-Mart, Target, Toys"R"Us, as well as other retailers. For the new line of licensed products, including nanoblock, the company shifted to specialty toy stores, plus Toys"R"Us and bookstores, such as Barnes & Noble and Amazon.com. Management thought distributing the new products through mass merchandisers would reduce the enthusiasm of the specialty channels (including Toys"R"Us) to promote these items. Broadening the distribution channels would make the company less vulnerable to sudden changes in stocking, merchandising, and promotion decisions by individual retail chains. By mid-2012, about 1,100 accounts stocked at least some of the nanoblock line—most were specialty toy retailers or accounts, such as Urban Outfitters, which also sold hobbies and toys. Toys"R"Us and Amazon were expected to account for 65% of nanoblock units sold in 2012.

Pricing, discounts, and margins

One reason for moving to new channels was to escape the price pressure, "unauthorized deductions," and promotional allowances required by large retailers. Specialty toy retailers tended to price products to earn 50% margins. These independent toy retailers were serviced by manufacturer representatives who earned commissions of 10% for sales to specialty stores. Mass retailer margins were lower. For a heavily promoted item, they were 35% or so, and for Ohio Art products, they were closer to 45%. Manufacturer representative commissions to this channel were 4% to 5%.

In late 2011, a survey revealed that almost 90% of nanoblock purchasers were between 25 and 54 years of age. With this information, Ohio Art could make informed decisions about marketing dollars for nanoblock. Specifically, Amazon aimed to use data, technology, and expertise to put the most appropriate products in front of likely buyers.

A study of online shopping behavior reported that Amazon.com was the source used most frequently for product reviews and ratings. Amazon was used by 58% of respondents, compared with 45% for other retailers, 41% for search engines, 32% for manufacturers' websites, 25% for review sites, 11% for Facebook, and 7% for Twitter.⁷

The company had not promoted new products on Amazon until the debut of nanoblock. Amazon used algorithms and collaborative filtering to determine search results' relevance. *Collaborative filtering* was a process used to generate product recommendations by matching the purchase histories of many different users. Without a minimum purchase volume, these recommendation algorithms did not have enough history to generate relevant recommendations for nanoblock.

⁷ "The 2011 Social Shopping Study," *Power Reviews*, June 2011, 14, http://www.powerreviews.com/assets/download/Social Shopping 2011 Brief1.pdf (accessed Jul. 24, 2012).

⁶ Christopher Tan is a self-proclaimed "nanoblock enthusiast" from Malaysia. He wrote a blog specifically dedicated to the product. See his post "Why nanoblock is Cool!" September 21, 2011, http://www.inanoblock.com/2011/09/why-nanoblock-is-cool.html (accessed Jul. 30, 2012) to understand more about the product and what types of consumers were interested in it.

This copyrighted document is intended solely for use in Raj Venkatesan's *Marketing Analytics* course on Coursera. Any other use is prohibited. For copies of the full, unabridged version of this case, please contact Darden Business Publishing at permissions@dardenbusinesspublishing.com.

Page 5 UVA-M-0898

The company was able to increase the potential for relevant recommendations through Amazon's "Gold Box" promotion, where items were offered at reduced prices for an hour or two on a given day. Ohio Art funded a promotion for its Eiffel Tower nanoblock set in the "Lightning Deals" section of Gold Box on March 4, 2012. Companies paid Amazon to promote their products. Fees were determined by the number of units companies made available for the deal multiplied by the discount. So companies were challenged to forecast properly; an overestimation would result in higher costs while an underestimation would result in foregone sales. These "Lightning Deals" increased the number of user clicks on the nanoblock product, thereby increasing the relevance of Ohio Art and nanoblock. That, in turn, increased the number of appearances for Ohio Art's products even after the promotion ended. Ohio Art sold all 300 Eiffel Tower sets it offered at \$12.99 in the Lightning Deal. The rest of March volume was sold at the regular \$19.99 price. Amazon charged suppliers a 10% cooperative advertising fee.

Opportunities

EAS sales were stagnant, but nanoblock sales were growing. The targeted-audience data about nanoblock's customers coupled with Amazon's variable pricing motivated management to consider engaging in other new media. Ohio Art utilized its Facebook.com/EAS page primarily for polls and factoids and earned more than 7,000 fans by mid-2012. For the nanoblock Facebook page, Ohio Art produced targeted poster ads, special offers, and announcements about fun events. With nanoblock in particular, the company created a forum for fans to ask questions and share creations garnering it 3,000 fans by mid-2012.

Management at Ohio Art was convinced that finding marketing investments that produced trackable, positive returns was the key to its future success. It was no longer acceptable to take the risks associated with expensive national television ad campaigns and the associated inventory and receivables risk required to support broad retail distribution.