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Original Paper

The U.S. Alkaline AA Battery Market: A Competitive Profile

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Abstract

This paper follows the footsteps of eleven studies that have tried to analyze the competitive profile of U.S. consumer markets: Men's Shaving Gel, Beer, Shampoo, Shredded/Grated Cheese, Refrigerated Orange Juice, Men's Razor-Blades, Women's Razor-Blades, Toothpaste, Canned Soup, Coffee, and Potato Chips.

Porter associates high market share with cost leadership strategy which is based on the idea of competing on a price that is lower than that of the competition. However, customer-perceived quality—not low cost—should be the underpinning of competitive strategy, because it is far more vital to long-term competitive position and profitability than any other factor. So, a superior alternative is to offer better quality vs. the competition.

In most consumer markets a business seeking market share leadership should try to serve the middle class by competing in the mid-price segment; and offering quality better than that of the competition: at a price somewhat higher to signify an image of quality, and to ensure that the strategy is both profitable and sustainable in the long run.

Quality, however, is a complex concept consumers generally find difficult to understand. So, they often use relative price, and a brand's reputation, as a symbol of quality.

For 2008 we chose the Alkaline AA Battery because its sales were $667 million vs. $283 million for AAA. By the same token, we have focused our analysis on AA 4-pack because it was the most popular size with 2008 sales of $190 million.

In 2008 the AA 4-pack Alkaline Battery market was quite competitive with 30 brands with sales over $25,000.

Using Hierarchical Cluster Analysis, we tested two hypotheses: (1) That the market leader is likely to compete in the mid-price segment, and that (2) Its unit price is likely to be higher than that of the nearest competition.

For 2008 the results supported Hypothesis I and II. Both the market leader Energizer, and the runner-up

Duracell, were members of the mid-price segment. Moreover, the unit price of Energizer was higher than that for Duracell, as we have hypothesized.

For 2007 the results did not support Hypothesis I, because Energizer found it to be a member of the premium segment, even though Duracell maintained its association with the mid-price segment.

We found that relative price was a strategic variable, as hypothesized.

We also discovered four strategic groups in the industry.

Keywords

U.S. Alkaline AA Battery Market, market segmentation, cost leadership strategy, price-quality segmentation, market-share leadership, relative price a strategic variable, strategic groups

1. Introduction

This paper follows the footsteps of *eleven* studies that have tried to analyze the competitive profile of U.S. consumer markets*:* Men's Shaving Gel, Beer, Shampoo, Shredded/Grated Cheese, Refrigerated Orange Juice, Men's Razor-Blades, Women's Razor-Blades, Toothpaste, Canned Soup, Coffee, and Potato Chips (Datta, 2012, 2017, 2018a, 2018b, 2018c, 2019a, 2019b, 2020a, 2020b, 2020c, and 2020d).

This endeavor relies on a broader, *integrated* framework of market segmentation which includes *both* the demand *and* supply sides of the competitive equation. This approach is based on the idea that *starting* with "*product*" characteristics is both an *easier* and more *actionable* way of segmenting markets than the traditional marketing approach that typically begins with the customer or "*people*" characteristics (Datta, 1996).

This research is based on the notion that the path to market share leadership does not lie in lower price founded in *cost leadership* strategy, as Porter (1980) suggests. Rather, it is based on the premise—according to the PIMS (Note 1) database research—that it is *customer*-perceived quality that is crucial to long-term competitive position and profitability. So, the answer to market share leadership for a business is to *differentiate* itself by offering quality *better* than that of the nearest competition (Datta, 2010a, 2010b, 2012, 2017, 2018a, 2018b, 2018c, 2019a, 2019b, 2020a, 2020b, 2020c, and 2020d).

To make this idea *operational* requires *two* steps. The first is to determine *which* price-quality segment to compete in? Most consumer markets can be divided in *three basic* price-quality segments: *premium*, *mid-price*, and *economy*. These can be extended to *five* by adding two more: *ultra-premium* and *ultra-economy* (Datta, 1996; also 2012, 2017, 2018a, 2018b, 2018c, 2019a, 2019b, 2020a, 2020b, 2020c, and 2020d). The answer lies in serving the *middle* class by competing in the *mid-price* segment. This is the socio-economic segment that represents about 40% of households in America (Datta, 2011). It is also the segment that Procter & Gamble (P&G), a leading global consumer products company, has successfully served in the past (Datta, 2010b, 2012, 2017, 2018a, 2018b, 2018c, 2019a, 2019b, 2020a, 2020b, 2020c, and 2020d).

1.1 The Strategic Importance of Price Positioning

In a competitive market one would normally expect more than one major brand competing in the *mid-price* segment. So, the second step for a business seeking market share leadership is to position itself at a price that is *somewhat* higher than that of the nearest competition. This is in accord with P&G's practice based on the idea that although higher quality does deserve a "price premium", it should *not* be excessive (Datta, 2010b). A higher price offers two advantages: (1) it promotes an image of quality, and (2) it ensures that the strategy is both profitable and sustainable in the long run (*ibid*).

A classic example of price positioning is provided by General Motors (GM). In 1921 GM rationalized its product line by offering "a car for every purse and purpose"—from Chevrolet to Pontiac, to Oldsmobile, to Buick, to Cadillac. More importantly, GM positioned each car line at the *top* of its segment (Datta, 1996, 2010a, 2017, 2018a, 2018b, 2018c, 2019a, 2019b, 2020a, 2020b, 2020c, and 2020d).

A more recent and familiar example is the *economy* chain, Motel 6, which has positioned itself as "offering the *lowes*t price of any national chain". Another example is the Fairfield Inn. When Marriott introduced this chain, it targeted it at the *economy* segment. And then it positioned Fairfield at the *top* of that segment (Datta, 1996, 2017, 2018a, 2018b, 2018c, 2019a, 2019b, 2020a, 2020b, 2020c, and 2020d).

1.2 Close Link between Quality and Price

As mentioned above, *customer*-perceived quality is the most important factor contributing to the long-term success of a business. However, quality cannot really be separated from price (Datta, 1996). Quality, in general, is an intricate multi-dimensional concept that is difficult to comprehend. So, consumers often use *relative* price—and a brand's reputation—as a symbol of quality (Datta: 2010b, 2012, 2017, 2018a, 2018b, 2018c, 2019a, 2019b, 2020a, 2020b, 2020c, and 2020d).

2. A Short History of the U.S. Alkaline AA Battery Industry

According to Schlesinger (2010, p. vii), batteries "not only power our current technologically advanced and portable age, but are also largely responsible for virtually all of the early basic scientific research that made today's gadgets and gizmos possible."

Batteries provided the *primary* source of electricity *before* the development of electric generators and electrical grids around the end of the 19th century. Successive improvements in battery technology have led to major electrical advances, such as the rise of telegraphs and telephones, portable computers, mobile phones, electric cars, and many other electrical devices (Note 2).

In 1800 Volta invented the first working battery called voltaic pile: a thing of "stunning simplicity" (Schlesinger, pp. 46-47; Note 2).

The focus of this study is on *regular* (Note 3) AA *alkaline* batteries. The *first* alkaline battery was invented in 1959 by Lewis Frederick Urry who worked for Energizer Co. This battery had an estimated life span that was "*forty* times that of the zinc-carbon formulation" (Schlesinger, 2010, pp. 249-250; Note 4).

2.1 Energizer Holdings, Inc.

The foundation for Energizer Holdings was laid in 1905 by W.H. Lawrence and Conrad Hubert who used these batteries in the first *flashlight*. They named the firm as American Ever Ready Company which afterward became known as *Eveready*. In the 1980s, Eveready started selling batteries under the *Energizer* logo.

Later Ralston Purina acquired Eveready Co., and in 2000 Ralston put Energizer up as the name of a public company. Today, they are known as Energizer Holdings and are owners of Energizer Battery, Schick-Wilkinson Sword and Playtex (Note 5).

In January 2018, Energizer announced it was buying the global battery and lighting division from Spectrum Brands, which includes the Ray-O-Vac and Varta brands. This acquisition was finalized in January 2019 after a lengthy regulatory approval process (Note 6).

2.2 Duracell Battery Co.

According to the company Duracell is the "world's leading manufacturer of high performance alkaline batteries (Note 7).

The company owes its origin to two pioneers, Samuel Ruben and Philip Mallory, who founded a partnership in the 1920s: a union that lasted until Mallory's death in 1975 (Note 7).

The company's first batteries were marketed under the Mallory brand name. It introduced the Duracell brand name in 1965 with some stories claiming that the name came from a blend of "durable cell" (Note 8).

In 1969, Duracell became the first battery on the moon as part of the Apollo 11 mission (Note 7).

Duracell batteries were the *first* to be advertised on TV with a catchy phrase "No other battery looks like it. No other battery lasts like it" (Note 7).

In 1973 the company created the "Drumming Bunny" TV commercial which over time became an icon (Note 7).

Through a number of corporate mergers and acquisitions, Duracell became a part of the Procter & Gamble Co (P&G). In 2014, P&G sold Duracell to Berkshire Hathaway (Note 9).

2.3 Private Brands

It is important to clarify what *private* brands are. These are brands made exclusively for individual *retailers*, e.g., a supermarket, or a drug store. Usually, such brands are targeted at the *economy* segment, and, as such, are generally sold at prices *lower* than those of major name brands. One reason retailers *like* private brands is because private brands tend to be more profitable than name brands (Datta, 2018b, 2018c, 2020b, 2020c, 2020d).

In 2008 Private Brands had 10.7% share of the overall U.S. AA 4-pack Battery market (Table 1).

3. The U.S. Alkaline AA Battery Market 4-packs—Price-Quality Segmentation Profile

This study is based on U.S. retail sales for 2008 and 2007 (Note 10). The data includes total dollar and unit sales, no-promotion dollar and unit sales, and promotion dollar and unit sales (Note 11).

For 2008 the total U.S. retail sales of AA Batteries were $667 million (Table 1). The pack sizes varied

from 2 to 48, with the *4-pack* size being the *most* popular with a 28 % share and with sales of $190 million. So, we have focused cluster analysis on this size.

Table 1. Hierarchical Cluster Analysis: The U.S. Alkaline AA 4-Pack Battery Market, 2008

Price-Quality	Brands--AA Batteries 4 Count 2008 (30)	Upr.	Cluster	4-Pack	4-packs	Brand
Segment		**2008**	**Center**	**MSh%**	**$M**	**Total $M**
Super-Premium	RAYOVAC HYBRID AA 4 COUNT	$10.11	**$10.11**	0.7%	$1.3	$1.3
Premium	SONY AA 4 COUNT	$7.48	**$6.87**	0.1%	$0.2	$0.3
	INTERMATIC MALIBU AA 4 COUNT	$6.67		0.1%	$0.1	$0.1
	ENERGIZER E2 AA 4 COUNT	$6.47		6.3%	$11.9	$18.1
Mid-Price I	**ENERGIZER AA 4 COUNT (market leader)**	**$5.61**	**$5.41**	**36.2%**	**$68.7**	$233.5
	DURACELL POWER PIX AA 4 COUNT	$5.56		3.9%	$7.3	$9.4
	WESTINGHOUSE AA 4 COUNT	$5.28		0.0%	$0.1	$0.1
	DURACELL ULTRA AA 4 COUNT	$5.20		7.2%	$13.7	$26.4
Mid-Price II	**DURACELL AA 4 COUNT (runner-up)**	**$4.57**	**$3.95**	**27.4%**	**$52.0**	$235.8
	KODAK AA 4 COUNT	$3.91		0.2%	$0.4	$0.5
	KODAK MAX AA 4 COUNT	$3.87		0.2%	$0.3	$0.4
	NBL-NO COMPANY LISTED AA 4 COUNT	$3.44		0.0%	$0.0	$0.1
Economy	ULTRALAST AA 4 COUNT	$2.85	**$1.66**	0.0%	$0.1	$0.1
	DO IT BEST AA 4 COUNT	$2.72		0.0%	$0.0	$0.0
	PRIVATE BRANDS BR ALK AA 4 COUNT	$2.50		10.7%	$20.4	$94.7
	EVEREADY GOLD AA 4 COUNT	$2.46		0.3%	$0.6	$3.2
	PREMIER VALUE AA 4 COUNT	$2.41		0.1%	$0.1	$0.3
	FUJI AA 4 COUNT	$2.28		0.1%	$0.1	$0.1
	PANASONIC AA 4 COUNT	$1.81		1.1%	$2.1	$4.1
	SELECT BRAND AA 4 COUNT	$1.52		0.1%	$0.1	$0.2
	KODAK XTRALIFE AA 4 COUNT	$1.36		0.8%	$1.6	$2.7
	DORCY AA 4 COUNT	$1.33		0.0%	$0.1	$0.1
	MAGNAVOX AA 4 COUNT	$1.32		0.0%	$0.0	$0.0
	AC DELCO AA 4 COUNT	$1.16		0.0%	$0.1	$0.2
	EVEREADY AA 4 COUNT	$1.14		0.6%	$1.2	$1.2
	POLAROID AA 4 COUNT	$1.12		0.4%	$0.8	$0.9
	RAYOVAC AA 4 COUNT	$1.06		3.0%	$5.7	$25.6
	PRIVATE BRANDS CB Z EX HD AA 4 COUNT	$1.02		0.0%	$0.0	$0.1
	POWERMAX AA 4 COUNT	$1.01		0.1%	$0.1	$0.1
	REBATT ENERGIZER AA 4 COUNT	$0.80		0.1%	$0.2	$0.2
	BATTERIES AA 4 Count Sales >$25,000 (30)	**$3.91**		**99.9%**	**$189.6**	**$659.9**
	Total Sales AA All Brands, All Packs ** **(86)**			**100.0%**	**$189.8**	**$666.7****

Note. The market leader and runner-up ranking is based on sales data for on Alkaline AA 4-pack which is the subject of this cluster analysis. However, if we look at the entire AA line sales for the two brands are almost identical.

3.1 Hierarchical Clustering as the Primary Instrument of Statistical Analysis

We have used cluster analysis as the *primary* statistical tool in this study. As suggested by Ketchen and Shook (1996), we have taken several steps to make this effort as *objective* as possible:

- First, this study is *not* ad-hoc, but is grounded in a theoretical framework, as laid out below.
- Second, we are fortunate that we were able to get *national* sales data for our study for *two* years. Thus, this data provided a robust vehicle for subjecting cluster consistency and reliability to an *additional* test.
- Third, we wanted to use two different techniques—KMeans and Hierarchical—to add another layer of cluster consistency and reliability. However, we found Hierarchical cluster analysis to be *superior* in meeting that test. So, we did *not* consider it necessary to use the KMeans technique.

3.2 Theoretical Foundation for Determining Number of Clusters—and Their Meaning

As already stated, a major purpose of this paper is to identify the market share leader and determine the price-quality segment—based on unit *price*—it is competing in.

An important question in performing cluster analysis is to figure out the *number* of clusters based on an *a priori* theory. Most consumer markets can be divided in three *basic* price-quality segments: *premium*, *mid-price*, and *economy*. These three basic segments can be extended to *five*: with the addition of *super-premium* and *ultra-economy* segments (Datta, 1996).

Therefore, *three* represents the *minimum* and *five* the *maximum* number of clusters (Datta, 2012, 2017, 2018a, 2018b, 2018c, 2019a, 2019b, 2020a, 2020b, 2020c, and 2020d).

An equally crucial issue is to find out what each cluster (e.g., *economy, mid-price, and premium*) really *means*.

Perhaps a good way to understand what each price-quality segment stands for in real life is to look at a socio-economic *lifestyle* profile of America. It reveals *six* classes (Note 12). Each class is associated with a price-quality segment typified by the retail stores where they generally shop: each a symbol of their *lifestyle* (Datta, 2011).

3.3 Guidelines for Cluster Consistency and Reliability

In addition to laying a theoretical foundation for the *number* of clusters, we set up the following guidelines to *enhance* cluster consistency and reliability (Datta, 2012, 2017, 2018a, 2018b, 2018c, 2019a, 2019b, 2020a, 2020b, 2020c, and 2020d):

- In general, there should be a *clean break* between *contiguous* clusters.
- The *anchor* clusters—the top and the bottom—should be *robust*. In a cluster-analysis project limited to a range of three to five clusters, a robust cluster is one whose membership remains constant from three- to four-, *or* four- to five-cluster solutions.
- Finally, we followed a step-by-step procedure to determine the optimal solution. First, we start with *three* clusters. Thus, the bottom cluster obviously becomes the *economy* segment and the top cluster the *premium* segment. Next, we go to *four* clusters, and *tentatively* call them: *economy*, *mid-price*, *premium*, and *super-premium*. Then we go to *five* clusters. If the membership of the *bottom* cluster remains

unchanged from what it was in the four-cluster result, it clearly implies that the *ultra-economy* segment does *not* exist. Then, if the membership of the *top* cluster also remains the same from a four- to a five-cluster solution, then the *top* cluster becomes the *super-premium* segment. This signifies that even in a five-cluster solution we have only *four* price-quality segments: *economy*, *mid-price*, *premium*, and *super-premium*. It means that either the *premium* or the *mid-price* segment consist of two *sub*-segments (see Table 1).

3.3.1 External Evidence to Validate Results of Cluster Analysis

Whenever possible, we have tried to seek *external* evidence to validate the results of cluster analysis. For example, many companies identify on their websites a certain brand(s) as a *premium* or luxury brand. A case in point is that of P&G which says that its plan is to compete in all "price points": *super-premium, premium*, and *mid-price: except* the *economy* segment (Datta, 2010b).

3.4 Testing Hypotheses

- I—That the market-share leader would be a member of the *mid-price* segment.
- II—That the market-share leader would carry a price tag that is *higher* than that of the nearest competition.

3.5 Results of Hierarchical Cluster Analysis

In Table 1 we present the cluster analysis results for 2008 that involved 30 *four-pack* Alkaline AA Battery brands with sales over $25,000. The results support *both* Hypothesis I and II. The market *leader* Energizer had sales of $69 million, while the runner-up Duracell had sales of $52 million: and *both* were members of the *mid-price* segment.

However, the results for 2007 did *not* support Hypothesis I because the market leader Energizer was a member of the *premium* segment.

The question is why the results for 2008 turned out to be different from those for 2007?

In 2008 Duracell *raised* its price to $4.57 from $4.24 for 2007. On the other hand, Energizer's unit price for 2008 was $5.61, a little *less* than its 2007 unit price of $5.64.

It seems that Duracell's management is very likely to have realized that it needed to *raise* Duracell's unit price to keep it much *closer* to that for the market leader Energizer, as we have hypothesized.

To sum up: Although technically the results did not support Hypothesis I for 2007, we believe that—based on the above discussion—the *overall* results of this study *did* support the basic *premise* of Hypothesis I.

3.6 Relative Price a Strategic Variable

Finally, we performed one more test to determine the consistency and reliability of the results of cluster analysis in this study. So, we *ranked* the unit price of each brand for 2008 and 2007 for AA 4-pack Battery. All *three* measures of *bivariate* correlation—Pearson, and non-parametric measures Kendall's tau_b, and Spearman's rho—were found to be *significant* at an amazing 0.01 level!

We believe these surprising results became possible only because management in the AA 4-pack Battery industry must have been treating *relative* price as a strategic variable, as we have suggested.

3.7 The Role of Promotion

For 2008 promotional sales of AA 4-pack Batteries averaged 41% of total retail sales (Table 2). We performed *bivariate* correlation between total retail sales vs. promotional (PROMO) sales. The results were significant for *all* three measures—Pearson, Kendall, and Spearman—at the 0.01 level.

Table 2. Percentage of Promotional Sales to Total Sales: U.S Alkaline AA 4-pack Battery

AA 4 Count (11) with Sales over $1M	**PQSegment**	**Promo**	**%Promo**	**Msh%**	**Sales $M**
		Intensity	**AA4-Pack**	**AA4-Pack**	**AA4-Pack**
KODAK XTRALIFE AA 4 COUNT	*Economy*	**Very Heavy**	83.0%	0.8%	$1.6
PRIVATE BRANDS ALK AA 4 COUNT	*Economy*	**Heavy**	55.2%	10.7%	$20.4
PANASONIC AA 4 COUNT	*Economy*		52.8%	1.1%	$2.1
ENERGIZER AA 4 COUNT	***Mid-Price***	**Moderate**	**42.6%**	**36.2%**	**$68.7**
DURACELL AA 4 COUNT	***Mid-Price***		**42.3%**	**27.4%**	**$52.0**
ENERGIZER E2 AA 4 COUNT	*Premium*	**Low-Moderate**	36.3%	6.3%	$11.9
DURACELL POWER PIX AA 4 COUNT	*Mid-Price*		33.1%	3.9%	$7.3
RAYOVAC AA 4 COUNT	*Economy*		29.9%	3.0%	$5.7
EVEREADY AA 4 COUNT	*Economy*		25.6%	0.6%	$1.2
DURACELL ULTRA AA 4 COUNT	*Mid-Price*		22.4%	7.2%	$13.7
RAYOVAC HYBRID AA 4 COUNT	*Super-Premium*	**Low**	2.8%	0.7%	$1.3
AA 4 Count (68)			**41%**		**$189.8**
AA 2,3,5,6 Count (47)			**29%**		**$50.2**
AA 8 Count (24)			**63%**		**$194.9**

Table 2 presents a measure of the promotional intensity of 22 brands for 2008. The following are the *highlights* of the results:

- Both the market leader Energizer and the runner-up Duracell are in the *Moderate* group with a score of 43% and 42%, respectively: a score that is almost *equal* to the overall average.
- The Private Brands fall in the *Heavy* group with a score of 55%. One would expect that since the Private Brands are competing in the *economy* segment, they would not have to rely on a heavy discount as well. Yet, it seems that the brand has found it necessary to employ the dual weapons of low price as well as a heavy discount to protect its market share of 10.7%.

3.8 Heavy Discount for Large Packs

It is interesting to see the variation in promotional discount for different size groups. The small-size group (2, 3, 5, 6) has the *smallest* discount rate of 29%. This is followed by 41% for the most *popular* 4-packs with sales of $190 million, and a rate of 63% for the 8-packs with sales of $195 million.

This pattern is remarkably *similar* to the promotional discounts employed by major sellers of L*ager Beer*, such as, Bud Light and Miller Light. In 2008 the average discount for the two leading competitors were 10% for the 6-packs, 39% for the most *popular* 12-packs, and 69% for the

18-24-30-packs (Datta, 2017).

3.*9 Promotion History of Non-Food vs. Food Groups*

As mentioned earlier, this is the *twelfth* study to analyze the competitive profile of individual U.S. consumer markets.

These studies fall into *two* groups: Non-Food and Food. In the *Non-Food* group the promotional intensity scores are: 11% (Men's Blades), 15% (Women's Blades), 30% (Men's Shaving Gel), 32% (Shampoo), 37% (Toothpaste), and 41% for Alkaline AA Battery—the highest in the group.

The numbers in the *Food* group are: 36% (Canned Soup), 44% (Coffee), 46% (Refrigerated Orange Juice), 46% (Shredded/Grated Cheese), and 48% (Lager Beer).

The question is why discount intensity in the *non-food* group is much *lower* than that of the food group. We believe one reason is that all the products in the non-food group--except AA Batteries--serve *personal care* needs for which most customers are willing to pay higher prices than those for most products in the food group. That is why the discount for Alkaline AA 4-pack Battery is closer to that for the latter than the former.

Second, while most of the products in the *food* group have many substitutes. That is generally *not* the case for the *non-food* group. Third, consumers have to go to the supermarkets frequently to buy food. So, manufacturers offer *higher* discounts for food products to entice them to spend more money and to shop even *more* often.

4. Pattern Emerging in Price-Quality Segmentation Analysis

As mentioned earlier, this is the *twelfth* study that encompasses analysis of competitive profile of U.S. consumer markets. All these studies involved a testing of two hypotheses. The *primary* hypothesis is that the market leader would be a member of the *mid-price* segment.

4.1 Results in Nine Markets Support Hypothesis I

In *nine* of the twelve studies—that *exclude* Men's and Women's Razor-Blades, and Ground Coffee—the market leader was found to be a member of the *mid-price* segment, as we have hypothesized. Those market leaders are:

(1) Edge Men's Shaving Gel, (2) Bud Light Lager Beer, (3) Pantene Shampoo, (4) Kraft Grated/Shredded Cheese, (5) Tropicana Refrigerated Orange Juice, (6) Crest Toothpaste, (7) Campbell Chicken Broth, and Campbell Chicken Noodle Soup, (8) Lay's Potato Chips, and (9) Energizer Alkaline AA 4-pack Battery.

5. Strategic Groups in the U.S. AA Alkaline 4-pack Battery Market, 2008

We found *four* strategic groups in this market. Their market shares (Note 13) are as follows:

1. *Energizer Holdings, Inc.--Market leader*
    - Energizer: 36.2%
    - Energizer E2: 6.3%

- Rayovac: 3.7%

2. Berkshire Hathaway—*Runner-up*
    - Duracell: 27.4%
    - Duracell Ultra: 7.2%
3. Private Brands: 10.7%
4. Minor Players: 8.5%

5.1 Energizer Holdings, Inc.

The company is a diversified, global household products enterprise that makes batteries, lights, and auto care products. Energizer's total sales for the fiscal year 2020 were $2.7 Billion (Note 14).

5.2 Berkshire Hathaway

Berkshire Hathaway is an American multinational conglomerate holding company headquartered in Omaha, Nebraska, United States (Note 15). The company's sales for 2018 were $57.4 Billion (Note 16).

6. Conclusion

The path to market share leadership does *not* lie in lower price grounded in *cost leadership* strategy. Rather, a business in pursuit of market-share leadership should try to serve the *middle* class by competing in the *mid-price* segment; and offering quality *superior* to that of competition: at a somewhat *higher* price to connote an image of quality, and to ensure that the strategy is both profitable and sustainable in the long run. The *middle* class is the socio-economic segment that represents about 40% of households in America.

Quality, however, is a complex concept that consumers generally find difficult to understand. So, they often employ *relative* price and a brand's reputation as a symbol of quality.

This study is based on U.S. retail sales for 2008 and 2007. For 2008 the total U.S. retail sales of Alkaline AA Batteries were $667 million. The pack sizes varied from 2 to 48, with the *4-pack* size being the *most* popular with a 28 % share and with sales of $190 million. So, we have focused cluster analysis on this size.

We tested two hypotheses. (I) That the market-share leader would be a member of the *mid-price* segment, and (II) That the market-share leader would carry a price tag that is *higher* than that of the nearest competition.

For 2008 the results supported *both* Hypothesis I and II.

Although technically the results did not support Hypothesis I for 2007, we believe the *overall* results of this study *did* support the basic *premise* of Hypothesis I.

We also found that *relative* price was a strategic variable, as we have hypothesized.

We discovered *four* strategic groups in the industry.

This is the *twelfth* study that involves analysis of competitive profile of U.S. consumer markets. In *nine* of these studies the market leader was found to be a member of the *mid-price* segment, as we have hypothesized.

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Notes

Note 1. Profit Impact of Market Strategies.

Note 2. https://www.en.wikipedia.org/wiki/History_of_the_battery#:~:text=A%20battery%20of%20linked%20glass%20capacitors%20%28%20Leyden,of%20glass%20coated%20with%20metal%20on%20each%20surface

Note 3. Batteries that are not rechargeable.

Note 4. https://www.whoinventedit.net/who-invented-the-alkaline-battery.html

Note 5. https://www.batteryguide.net/energizer/#:~:text=Two%20men%20put%20the%20Energizer%20Company%20together%3A%20W.H.,flashlight.%20The%20two%20men%20joined%20forces%20in%201905

Note 6. https://www.en.wikipedia.org/wiki/Energizer#:~:text=In%20January%202018%2C%20Energizer%20announced%20it%20was%20purchasing,January%202019%20after%20a%20lengthy%20regulatory%20approval%20process

Note 7. https://www.duracell-me.com/about-us/

Note 8. https://www.stories.swns.com/news/the-story-of-duracell-batteries-99766/

Note 9. https://www.en.wikipedia.org/wiki/Duracell#:~:text=Origins.%20In%201964%2C%20the%20term%20%22Duracell%22%20was%20introduced,Inc.%20had%20a%20trademark%20on%20the%20name%20Durable

Note 10. This data is from food stores with sales of over $2 million, and drug stores over $ 1 million; it also includes discount stores, such as Target and K-Mart, but *excludes* Wal-Mart as well as warehouse clubs, e.g., Sam's Club, Costco, and BJ's. It also does not include the "dollar" stores, such as Dollar General, and others.

Note 11. For those stores for which, during a week, there were feature ads, coupon ads, display, or temporary price decrease of at least 5%.

Note 12. The six classes are: "The Poor", "The Near Poor", "Traditional Middle Class", "The Upper-Middle Class", "The Very Rich/The Rich", and "The Mega Rich—Masters of the Universe".

Note 13. This market share data comes from Table 1.

Note 14. file:///C:/Users/ydatt/Downloads/2020%20EHI%20Annual%20Report%20and%20Proxy.pdf

Note 15. https://www.en.wikipedia.org/wiki/Berkshire_Hathaway

Note 16. https://www.berkshirehathaway.com/2018ar/2018ar.pdf