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## Packaging and Retail Selling

Gaines Carden

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PACKAGING AND RETAIL SELLING

by

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This independent study by Gaines B. Carden in partial fulfillment of the requirements for the Master of Science degree from the University of North Dakota is hereby accepted by the committee under whom the work has been done.

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## ABSTRACT

The purpose of this study is to survey the more important considerations and points of view concerning the use of the package as a promotional device in retail selling. The objective is to provide the reader with helpful insights into the concepts, techniques and practices of modern packaging. The study attempts to determine why packaging is important, what an optimum package may be, and what factors generally apply to package design.

Research for this study was directed toward the achievement of the following goals:..

- A. An analysis of developments in retailing which have placed emphasis on packaging technique.
- B. A study of the effects of packaging on sales and successful promotion.
- C. The development of a theory of the better package with respect to its functions and characteristics.
- D. An evaluation of the effects of modern technology on packaging methods and related cost considerations.
- E. The identification of present trends in packaging which hold future implications in retail selling.

The conclusions reached in this study are twofold.

Primarily, the importance and potential value of creative

packaging is seen as an often neglected and much misunderstood aspect of marketing. Secondly, creative packaging offers to many firms a valuable method of enhancing their competitive positions through more effective marketing operations and increased sales.

## CHAPTER I

### INTRODUCTION

"Product packaging" is a broad term which includes all aspects of the relationship between a product and its container in the marketing of that product. This relationship can be studied, discussed, and presented from numerous and divergent points of view.

This paper is intended to be generally informative on recent developments, trends, and practices in the packaging industry. Significant product packaging considerations will be discussed. However, the basic purpose of the paper is to examine modern packaging theory as it applies to package design and development. This study attempts to determine why packaging is important, what an optimum product package is, and what, if any, generally accepted rules can be applied to package design.

While product packaging is usually a subject most closely identified with marketing and advertising, it can be of profound importance to production planning and product design. Packaging considerations are vitally important in the early planning stage of product development and virtues of early package planning cannot be overemphasized. Production managers must not wait until engineering staffs have created a new--or improved an old--product to consider how it will be



packaged, distributed, sold and consumed. To illustrate how packaging relates to product planning, consider the egg: The inside (yolk and white) representing the product and the shell serving as a cleverly designed package. This example from nature reveals the benefits to be gained from envisioning a marketable product as a packaged entity. Production management, then, should be vitally concerned with package considerations which will complement the product and help assure its eventual optimum consumer acceptance.

Every product presents its own unique packaging problems. Research for the report which follows was limited mainly to considerations of consumer goods, and in particular to those items which are highly competitive in nature. The narrative portions of the report apply to almost all products which rely on customer selection from store shelves for continued sales success.

## CHAPTER II

### THE RETAIL REVOLUTION

The developments in retail trade since the end of World War II have been so spectacular that leading observers of the American business scene often refer to them as the "retail revolution".<sup>1</sup> Three dominant causal factors might well be listed as (1) the great growth of passenger automobile transportation, (2) population shifts which gave rise to upper-middle-class suburbs, and (3) the introduction and acceptance of the supermarket. These three social changes were discernible trends before the war, but in the 1950's, they accelerated to a remarkable degree. In 1957, there were an estimated 55 million passenger automobiles in use, more than double the number in 1945.<sup>2</sup> The growth of suburbs in the great metropolitan areas of the country was little short of phenomenal. While metropolitan areas increased only 5 percent in population between 1950 and 1956, the suburbs increased 17 percent.<sup>3</sup> Simultaneously, the supermarket became the dominant institution in the retail food business. By 1956,

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<sup>1</sup>Robert J. Keith, "The Marketing Revolution," Marketing Insights, ed. R. Clifton Anderson and Philip R. Cateora (New York: Meredith Publishing Co., 1963), p. 4.

<sup>2</sup>U. S. Bureau of the Census, Statistical Abstract of the United States: 1965 (86th Edition), Washington, D.D., 1965, p. 568.

<sup>3</sup>Ibid., p. 15.



27,000 supermarkets, representing only 13.8% of all retail food stores, claimed 62% of the total retail food sales.<sup>4</sup>

The effects of these developments upon the business of retailing were spectacular. Stores began to follow the customers, and the result was the suburban shopping center away from the downtown area and its parking problems. The desire of the customer to shop quickly, conveniently, and informally, in an area offering ample parking space became more pronounced. Not only were new stores in decentralized locations necessary, but new methods of in-store selling were emphasized. Open displays, functional fixtures, brand promotion, and varying degrees of simplified selling and self-service became increasingly important.

The increased dependence upon self-service retailing by store owners stemmed partly from the impact of supermarkets.<sup>5</sup> These huge stores rely on high volume, low overhead operation to offer attractive prices to consumers. There are no sales people to assist the customer, nor are the supermarkets content to limit their sales to food items. They began to stock a wide range of household goods, personal articles, and other items which proved to have a rapid turnover.

Those trends affecting retail trade, so discernible in the 50's, became even more important in the 60's. The huge discount houses, retailing almost every possible item, have

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<sup>4</sup>Malcolm P. McNair, "Significant Trends and Developments in the Postwar Period," Readings in Marketing, ed. Parker Holmes, Ralph Brownlee and Robert Bartels (Columbus, Ohio: Merrill Books, Inc., 1963), p. 461.

<sup>5</sup>Ibid., p. 462.

moved into national prominence. They reflect the modern trend toward larger retail stores operated almost exclusively on a self-service basis. A steady rise in prices and wages since 1950 has further tended to remove the salesclerk from retail stores.

Self-service retailing then, is one of the important outgrowths of the retailing revolution of the last two decades. In a related development, trade studies made during recent years have strongly indicated that the average consumer has today less predictable buying habits than was true twenty or thirty years ago.<sup>6</sup> This is to say that customer allegiance to certain products or brands have weakened, and the desire of consumers to try something new is more pronounced. Self-service retailing has undoubtedly influenced shifts in consumer buying habits, but there are other factors. These would include more years of schooling, more scientific courses in public schools, greater knowledge of products gained through the advertising of producers with less dependence upon the advice of local retail dealers, improvements in products which lessen the importance of dealer service, and, of course, a greater proportion of discretionary income available to the consumer.<sup>7</sup>

During the 1950's, it became clear that American industry could produce far more than it could sell. This excess of

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<sup>6</sup>Ibid., p. 465.

<sup>7</sup>Ibid.

production over demand led to the development of the celebrated "marketing concept" in American business.<sup>8</sup> This concept advanced the theory that production must be supported by markets, that markets are made up of not-always-predictable people and that planning and ingenuity are required to compete successfully in these markets.

As the 50's progressed, increasing disposable income, expanding production, and growing competition combined to give the consumer a range of purchasing discretion never before known. The consumer became the acknowledged "king", or most important factor, in the marketing of all manufactured products. The attention of management shifted from problems of production to problems of marketing. Companies turned from products they were making to products the consumer wanted them to make. The entire business world became more marketing oriented.

In such an economy, it became reasonable to expect that selling would become increasingly complex and that flexibility and creative methods would best insure competitive success. This has proved to be particularly true in all promotional aspects, and has led to increased emphasis upon marketing strategies and renewed interest in marketing research to determine consumer motivation and purchasing patterns.

The social and economic changes in retailing since the postwar period, then, have indeed been far reaching. They have directly affected the application of the more important

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<sup>8</sup>Charles Phillips and Delbert Duncan, Marketing--Principles and Methods (Homewood, Illinois: Irwin Publishing Co., 1964), p. 37.



selling devices--brand names and trademarks, sales campaigns and advertising, premiums and trading stamps, and endless other sales promotion methods. And, most important to this discussion, these changes have had spectacular effects upon the somewhat neglected art of product packaging.

CHAPTER III  
THE IMPORTANCE OF PACKAGING

Product packaging as it is known today, represents a relatively new technology in the manufacture and merchandising of foods, clothing, drugs, instruments and innumerable other items that flow from production lines.

Approximately 150 years ago the first "canned" foods were supplied to Napoleon's soldiers and later became civilian items.<sup>9</sup> The tin can came much later. Through the 1800's there was little choice of packaging materials; wood, natural fibers, glass, and tinned steel cans, were all that were available. The making of wooden barrels was a major American industry for over 50 years. Most of the items carried by the general store of the 1850's, from food items to building materials, were packed, shipped and sold in barrels. Marketing of consumer products as it is now known, with a multitude of consumer items competing for the shopper's attention did not exist; and there was no need for packages designed with customer appeal in mind.<sup>10</sup>

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<sup>9</sup>W. H. Enzie, "Planning Your Package," Readings in Marketing, ed. Parker Holmes, Ralph Brownlee and Robert Bartels (Columbus, Ohio: Merrill Books, Inc., 1963), p. 331.

<sup>10</sup>Ibid.



By 1910, the volume of paper cartons and containers produced at reasonable cost began to nudge barrels and bins out of the food stores. Bulk displays of flour, sugar, crackers and other consumer items eventually gave way to the more sanitary and convenient cartons available today.

In the 1930's, consumer goods experts learned that a bright modern package could more readily sell safety pins, monkey wrenches, soda crackers or flashlight batteries. In the 1960's, packages are proving that, by being functional as well as attractive, they can spell the difference between success or failure for various highly competitive products.

In today's competitive markets, there is often little difference in quality among brand name products.<sup>11</sup> This is particularly true with respect to items classified by marketing authorities as "convenience" goods. Examples are: cigarettes, toothpaste, razor blades, shoe polish, soap, beer and liquor, gasolines, cosmetics, stationery, soft drinks, chewing gum, aspirin and scores of other products for which the consumer will readily accept substitutes in brands.

The packaging of these products has far reaching effects upon the level of consumer acceptance attained. As prices are usually standard, competition is not based upon price. Brand name product differentiation becomes all important to successful selling.

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<sup>11</sup>"The Power of Proper Packaging," Business Week, February 20, 1965, p. 37.

A classic illustration of the impact that a package can have upon the marketing of a product is lipstick.<sup>12</sup> There is very little difference between one brand of lipstick and another as they all contain practically the same ingredients. Yet, lipsticks vary in price from a quarter to ten dollars or more. The reason is differences in containers. Many women do not realize that they are paying extra for a jeweled case and not for a better lipstick.

In modern retailing, clothes do make the man--or product in the case of packages. Last year Calvert began its promotion of soft whiskey, or Calvert Extra, and increased sales 35%.<sup>13</sup> No small reason for this success was the new bottle and label. A test marketing experiment gave Calvert advance information on how important the new package would be. Persons interviewed who indicated they liked the package said less about the package and more about the "high quality of the product." Other marketing research studies have shown that groups of individuals who find the package attractive tend to have a much higher regard for the product.

As the American housewife shops in the average supermarket, she is confronted with an array of 7,000 or more different items.<sup>14</sup> Marketing experts figure that a shopper scans

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<sup>12</sup>Ibid., p. 39

<sup>13</sup>Ibid.

<sup>14</sup>"That Critical One-fifth of a Second," Dun's Review and Modern Industry, December 1964, p. 102.

a store shelf in about one-fifth of a second.<sup>15</sup> If, in this extremely short time, a package fails to promote sales, many dollars spent on promotion have been wasted.

An elementary function of the package then, is to introduce the product to the public in a distinctive and memorable way. It should serve as the focal point in product promotion. The package must bear out the "new" claim, and yet retain reminders that are "old", "familiar" and "believable" to the consumer.

Often, in the mind of the consumer, the package "at the point of purchase is the product."<sup>16</sup> This is because the consumer, before the product is actually used, relies on the claims of the manufacturer. At the point of purchase, the package must appeal to the consumer, or measure up psychologically to the advertising claims made for the product. Should the package fail in this, the product becomes unappealing, and the consumer's will to buy is destroyed.

As people have different tastes, there are no infallible or even very reliable methods of judging the esthetic values which contribute to a successful package. The use of graphic designs and color schemes in packaging is a recognized art.<sup>17</sup>

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<sup>15</sup>Ibid., p. 103.

<sup>16</sup>Walter P. Margulies, "Focal Point for Communications?" New Products Marketing, by the editors of Printer's Ink (New York: Printer's Ink Publishing Corp., 1964), p. 175.

<sup>17</sup>"Packaging in 1967: Design and Structure," Printer's Ink, April 14, 1967, p. 16.



The results, however, of ineffective package design become quite clear in terms of marketing results.

A trademark wrongly conceived, a name poorly chosen, colors haphazardly selected, a design that "wins awards" but does not sell are examples of fatal mistakes in package planning.<sup>18</sup> To avoid these errors maximum use must be made of marketing disciplines in every phase of package development.

Market research, relying heavily on the various social and behavioral sciences, is becoming increasingly important to packaging as it is to other aspects of marketing. It is shedding more light on consumer buying habits. This is true for consumers not only as individuals, but as members of readily identifiable groups.

In food packaging, for example, it was generally agreed for years that the use of the color black--or any dark color--was a "quick invitation to low sale or no sale."<sup>19</sup> Food products were commonly packaged in color schemes of red, white and blue, which, it was felt, depicted safety, reliability and responsibility. Now, research shows, the consumer takes these points largely for granted, and, in an era of increased sophistication and prosperity, is looking for elegance, lushness, and respectability, as well as reliability. As a result, packagers are turning to deep, dark colors and mood photography.

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<sup>18</sup>Margulies, p. 175.

<sup>19</sup>Dun's Review, December 1964, p. 104.

Studies also show that conservative New Englanders prefer goods wrapped in sober colors, while less inhibited Californians lean to more garish packages.<sup>20</sup> Similarly, magnolias on a box of mints are not likely to appeal to customers in the mid-west, but below the Mason-Dixon line they seemingly exert a powerful subconscious pull.

Such insights suggest that the package no less than its contents should be oriented to appeal to consumers in some specific segment of the market. This approach will achieve maximum sales success from the package.

The importance of effective packaging is revealed in a recent successful effort by the Sylvania Company.<sup>21</sup> Sylvania came up with a packaging idea for light bulbs which boosted sales in its old markets and helped the company crack new markets. In an effort to sell more light bulbs to consumers the company decided to concentrate on selling to retailers.

Sylvania designed a new shipping carton for its light bulbs which easily converted into an attractive display. This was not just a bin but a departmentalized self-service selling rack. The new display system cut the time that a retailer had to spend in setting up a light bulb display from a half hour to five minutes. The design employed colored trays, each holding 24 light bulbs and arranged in vertical columns. Individual bulb cartons became color-coded

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<sup>20</sup>Business Week, p. 41.

<sup>21</sup>Ibid., p. 43.



according to wattage so they could be more easily found in stockrooms.

The new display rack also made bulb selection more convenient for customers. A study by the Packaging Institute had shown that women had two big complaints about buying light bulbs. The first complaint was that it took too much time to find the right size, and the second was that the bulb appeared insecure in its flimsy looking package. In view of these findings, color coding was extended to individual packages, and the packages were made more substantial in appearance.

Sylvania's repackaging program paid handsome dividends in terms of sales. It is a valuable example of packaging technique that directs attention to intermediate levels of marketing distribution, in this case, the retailer.

The design of most new packages now begins in retail stores. Surveys are made of competitive packaging and display considerations within the stores. A package that is distinctive and easily identified, that sets itself off from competitive packages, is the ultimate goal.

Product-line identification is the one important approach to the problem of capturing the eye of the shopper.<sup>22</sup> This so-called "umbrella" effect in merchandising goods occurs when a company uses the same brand name, package design, symbols, and color scheme on a wide range of products.

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<sup>22</sup>Dun's Review, December 1964, p. 103.

General Foods Corporation is the best known firm using product-line identification in packaging.<sup>23</sup> Company management insists that one product can help advertise another through uniform packaging. It also points to less costly promotion programs required to gain customer recognition for an individual product.

With competition among all products at ever increasing tempos, the quest for new and original ideas in packaging has increased. Today's watchword is "be different". Packagers are finding more and more change in customer attitudes which in turn causes reconsideration of all previously accepted theories of package color and design.

The key to finding the right package design for a product is elusive. But when a company comes up with the right package, sales surpass all expectations.

The Hudson Paper Corporation achieved a marketing breakthrough with a novel packaging idea for its facial tissues.<sup>24</sup> Hudson competes with Kleenex and several other giants in the selling of tissues, and yet, Hudson has recently doubled its share of the market.

Hudson designed a new tissue box with a removable outer paper sleeve. The sleeve carries all the lettering and the box itself is free of any printing or commercial symbols. Instead, the decorative and colorful design permits the box

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<sup>23</sup>Ibid.

<sup>24</sup>Business Week, p. 35.

to be left out in the open in the home. Apparently this idea appealed to an overwhelming majority of women, and Hudson hit a sales jackpot.

Since merchandising is so highly competitive, the value of a superior package does not remain constant. A successful package will soon be copied or imitated, or more likely, improved upon by competing firms. However, so quickly can a more appealing package capture a wider market, that the effects can be long lasting.

A package can sell an individual consumer only one time. After that initial sale, the product inside must convince the customer to come back for more. But the initial sales are for some products the most critical in establishing that item in the market.<sup>25</sup> A product never tried will never gain the consumer acceptance required to stay in competition.

As with every other aspect of business, cost is a most important consideration in packaging. Greater packaging automation and the resulting trend toward more in-plant packaging mean more machinery. With rapid changes in packaging materials and methods, larger expenditures must be faced more frequently than ever before. Packaging costs then are of greater consequence than ever before, and, in some instances, can actually result in the failure of a product.

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<sup>25</sup>Walter J. Talley, Jr., The Profitable Product, (Englewood, New Jersey: Prentice Hall, Inc., 1965), p. 71.



The Continental Can Company has estimated that packaging activity has increased by 500% in the last 20 years.<sup>26</sup> Today, some \$13 billion is spent on packages and packaging materials each year.<sup>27</sup> Conversion to finished packages doubles this figure by the time the packages leave the producers' hands.

Important though costs are, studies have shown that a superior package, even though substantially more costly to the producer, will result in increased sales.<sup>28</sup> This is true even where the increased costs must be passed along to consumers. The average consumer has been shown to display a ready willingness to pay an increased price for actual or even imaginary benefits of a new package. An illustration of the readiness of most consumers to pay more, especially for a functionally convenient package, is the increased sales of items now packaged in aerosol cans.<sup>29</sup>

This development is receiving more and more attention from packagers. The philosophy of the Board Chairman of American Can Company, William C. Stolk, who has 48 years of experience in packaging is: (1) Major improvements in packaging cost more; (2) Increased costs are usually resisted by companies for fear of lost sales; (3) These fears are usually unjustified.<sup>30</sup>

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<sup>26</sup>Dun's Review, December 1964, p. 51.

<sup>27</sup>Ibid., p. 42.

<sup>28</sup>Business Week, p. 47.

<sup>29</sup>Ibid., p. 48.

<sup>30</sup>Ibid.

Whatever novel forms packaging design may assume, the guiding concept should be toward closer integration with overall marketing planning. As the package becomes the ultimate sales tool in the ever expanding self-service retail business, many companies are realizing that luck is no longer the answer in packaging. The successful package designer must base his creation on effective planning as dictated by the marketing problems and circumstances which affect his product.



## CHAPTER IV

## A THEORY OF THE BETTER PACKAGE

All too often, a product package is designed and put into production with little or no consideration given to marketing problems and opportunities. Thousands of products, both old and new, are competing for a position on store shelves. There is not room for all of them.

Most packages are plainly an asset or a liability to the product they contain. The basic characteristics of a good package are unfortunately not thoroughly understood by many business firms.

The discussion which follows is an attempt to formulate a general concept of package development. It is important to again stress that ideas presented will pertain to product packages in general, rather than specific types.

The success of package planning depends upon identifying the important criteria that enter into marketing considerations of a particular product. This in turn means that the individual package features expected by potential customers must be identified and incorporated into the package.

The important judgments to be made in the choice of a package concern the combination or "mix" of package attributes. These are the features considered best able to perform

the particular functions of the package as they relate to sales. These ideas form the basis of a general but valuable insight into packaging and suggest a method for developing a superior package.

An interesting theory of the role of the package in today's modern economy has been advanced by William R. Mason, an executive of the Nashua Corporation. He states: "The major purpose of any package is to influence or control the location of product storage within the marketing channel of distribution."<sup>31</sup> "Storage" as used by Mr. Mason means the holding of goods for future use at any level along the marketing channel--including the level of the ultimate consumer. He points out that even at the level of the ultimate consumer, a product may be stored in varied locations, Salt, for example, may be stored in the home in large sacks in a basement, small packages on a kitchen shelf, or in a shaker on the dining table. The idea is for the packager to be conscientiously striving to get the bulk of his product stored as closely as possible to the point of ultimate use.

The six functions of a product's package as identified by Mr. Mason are:

- 1) To protect the product
- 2) To adapt to production line speeds
- 3) To promote the product

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<sup>31</sup>William R. Mason, "A Theory of Packaging in the Marketing Mix," Marketing Insights, ed. R. Clifton Anderson and Phillip R. Cateora (New York: Meredith Publishing Co., 1963), p. 238.

- 4) To increase product density
- 5) To facilitate the use of the product
- 6) To provide re-use value for the consumer

The first requirement is to deliver the product to store shelves and consumer households in good condition and to protect the product until it is finally consumed. The type and degree of protection depends upon the individual product. However, some of the more important and often encountered considerations are as follows:

a) Strength.--The physical strength of a package must be sufficient to withstand damage from shock, impact and crushing in storage and shipment. Climatic conditions and standard use cycles should also be considered. There are various laboratory testing methods to use in developing a package with desired strength requirements.

b) Contamination.--In packaging items as foods, drugs and cosmetics, full consideration must be given to safety. The purity of the product is usually under close governmental control. There is no room for error in package design which allows unsanitary or unsafe conditions to develop in items for human consumption.

c) Water Vapor Protection.--There are two categories of products which require water vapor protection: Dry products such as cereals, crackers and dehydrated foods which require a barrier to keep water vapor out; and moist products such as bread or tobacco which require a barrier to prevent loss of water vapor.



d) Effect of Light.--Many products require special protection against light. Their protective packaging must be specified by carefully controlled laboratory testing.

e) Odor.--Products subject to odor loss or pickup should be afforded protection by materials with low rates of gas transmission.

f) Greaseproofness.--The degree of grease protection required is usually determined by laboratory testing of the packaging materials.

g) Infestation.--Products subject to insect infestation must be protected through the use of proper packaging materials and the structural design of the package.

h) Pilferage.--Shoplifting has increased in self-service retail outlets to an alarming degree and is a nationwide headache for business. This problem is most serious in the case of physically small items which have a relatively high dollar value. For these items the package may be designed in size and shape to discourage theft.

Automation is becoming a major factor in the packaging industry. High speed production lines demand packaging equipment that will insert products into containers as quickly as they arrive at the packaging station.

Glass jars serve as a notable example of packaging speed. The filling speeds for baby food containers have gone up to 800 jars per minute, and 1,000 jars per minute is within sight.<sup>32</sup>

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<sup>32</sup>"The Machinery Revolution," Dun's Review and Modern Industry, December 1965, p. 96.

In breweries, line speeds are at 900 bottles per minute.<sup>33</sup> Soft drink bottling has reached 600 bottles per minute and jars are filled with coffee at a rate of about 400 per minute.<sup>34</sup>

Cans are also reaching spectacular packaging speeds. The Jackson Brewing Company has in New Orleans probably the fastest beer canning line in operation. A new lid fastening technique has made possible speeds up to 1,300 cans per minute.<sup>35</sup>

A good package is one designed to keep pace as nearly as possible with maximum production rates. A package design or change which cannot achieve this goal presents a problem to company management. A decision must then be made to either accept lower production line speeds or invest in additional packaging equipment.

As has already been indicated, the most important job demanded of today's package is that of promoting the product. Previous comments have been made concerning the vital function performed by the package in selling. However, the relationship between the package and advertising should be mentioned.

The package must come first in the development of the promotion plan. It must serve as the focal point of other

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<sup>33</sup>Ibid.

<sup>34</sup>Ibid.

<sup>35</sup>Ibid.

advertising efforts. Advertising must be built around the package, because advertising has by comparison a shorter life.<sup>36</sup>

The package is under constant view and observation by the consumer--both in stores and at home. In both the long and short runs, the package will bear the burden of identifying the product. It should therefore serve as the basis for all advertising campaigns.

Many advertising techniques tend to subordinate the package in the presentation of the sponsor's message. This happens when the advertising is not keyed to the package, or when displays and sales promotion methods fail to feature the package. It occurs when the beautiful girl on television commercials completely overshadows the package she is selling. The audience usually remembers the girl, not the package, and sales are lost. The package then, should serve as the basic cornerstone upon which a sound advertising program is built.

Increasing product density means increasing the ratio of product volume to package volume. The goal is less package, but more product. The big gain is usually a lighter package which requires less space and lower handling costs. Product density increases are usually the aim of new "streamlined" packages which employ changes in shape or design. These changes are most often made possible through improved materials or production methods.

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<sup>36</sup>"Is Your Package Out of Date?" Business Management, November 1964, p. 56.



Any feature of a packaged item which facilitates the use of a product makes that product easier to sell. A good example is the razor blade dispenser. This device keeps the blades from being damaged, keeps them neatly in place, helps them retain their lightly oiled surfaces, protects the user from their sharp edges, provides new blades conveniently, and contains a receptacle for used blades.<sup>37</sup> Some other features which packages may employ to facilitate product use include tear tapes, pour spouts, easy-opening lids, squeeze bottles, aerosol cans, and food containers useful for cooking their contents. Any package which is more convenient to use will obviously improve the package's performance in promoting the product.

Premiums, such as the toy in Cracker Jack boxes, appeal to what has been described as "a powerful instinct for getting something for nothing."<sup>38</sup> This helps explain their long popularity with both producers and consumers. A more recent variation of this familiar theme in merchandising is the container which can be reused once the contents are consumed.<sup>39</sup> The Borden Company is packing pickles in attractive apothecary jars. General Foods markets Log Cabin Syrup in large reusable glass pitchers. Sanka Coffee is offered in eight-ounce decorated carafes.

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<sup>37</sup>Business Week, p. 38.

<sup>38</sup>"Manna for Marketing Men," Dun's Review and Modern Industry, December 1964, p. 95.

<sup>39</sup>Ibid.

Now that Mr. Mason's package attributes have been reviewed, his theories can be better explained. He claims the best possible design for a package is one which employs the optimum combination of these attributes. This optimum combination is one which will most assist the package in its job of selling the product. Management must decide what this optimum combination is, based upon considerations of the product and the indicated desires of its users. Further, the selling job of the package will be accomplished to the degree that product inventory is maximized at as close to the point of use as possible.

This theory helps explain some of the recent trends in package design previously explored. Changes involving the package size or unit count are an excellent example. The "giant economy" size packages are designed to encourage the consumer to maintain inventories of a product far in excess of his needs between shopping trips. This has the effect of advancing the storage function from the retailer to the consumer, and so closer to the point of ultimate use.

When package size has been decreased, the change is to encourage the consumer to store a quantity of the product even closer to the point of use. An example is the small package of facial tissues which can be easily carried in women's purses.

Package changes which involve new or improved packaging materials or changes from rigid to flexible materials should be intended to save on storage space or result in easier

handling. This feature appeals to the retailer and results in faster acceptance of products by store owners. More products stored in retail outlets results in their being moved closer to the consumer and ultimate use. The description of Sylvania's Light Bulb promotion presented earlier is a case in point.

A package change which makes a product easier to use will also have the effect of advancing a product closer to its point of consumption. The flip-top cigarette package was, when introduced, a means of obtaining good high traffic positions in stores for those brands which pioneered this packaging change. The flip-top package was something new and distinctive which could be promoted in its marketing channel. It assisted certain brands in capturing more shelf space than they had held before.

In summary, a better package is one which most completely fulfills the requirements of two basic concepts: First, that there are distinctive packaging features, or attributes; and second, that these features can be employed in varying degrees to one another. A better package will employ an optimum mix of these features.



CHAPTER V  
THE EFFECTS OF TECHNOLOGY

The packaging industry has been, is now, and will continue to be characterized as in a constant state of flux.<sup>40</sup> This is due to the increasingly rapid strides made by the developers of new, flexible materials for packaging use. New ideas and methods flow endlessly from research laboratories, and the industry is quick to adapt to them. The introduction of many new food products, or foods in new forms, has required the improvement of older type packaging materials, the use of new materials, and, in many cases, the fusion of several different materials. The development of modern materials has become a complex science with experts from many fields contributing to the total effort.

The basic materials for a majority of the industry remain paper, cardboard, metal, tin, aluminum, glass and plastics. However, due to changes in the adaptability of these materials, they have become, in many cases, bitter rivals for markets traditionally held by other materials.

The best examples of materials engaged in all out battles for public favor would be in the beer, soft drink, and milk

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<sup>40</sup>"War for the Packaging Dollar," Dun's Review and Modern Industry, December 1964, p. 90.

markets. The paper carton recently replaced glass as the container for milk sold in food stores, and from 1953 to 1962 paperboard sales increased 62%.<sup>41</sup> However, it now appears that plastic milk bottles are to challenge paper for this purpose. Plastic bottlers indicate that they will soon begin selling a half-gallon and gallon size for which paper is less practical. One dairy in North Carolina has reported a 50% increase in sales from a switch to plastic bottles.<sup>42</sup>

Glass and tin cans, which have held an almost even share of the total market for beer and soft drinks since 1955, are now both threatened by the advent of aluminum.<sup>43</sup> This material is rapidly becoming the major container for many products. Aluminum currently is used to package no less than 80% of the nation's motor oil, and more than 90% of its frozen juices.<sup>44</sup> Aluminum Company of America has produced a series of tab-opening cans for sardines, fruit juices, potted meats, coffee, soups, and soft drinks.<sup>45</sup> But aluminum's most important recent advances have been in packaging beer. First used just in lids, both conventional and self-opening, aluminum now is used for the entire can. Theo Hamm Brewing Company and Anheuser-Busch are packaging a major portion of their output in the light weight metal.

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<sup>41</sup>Business Week, p. 51.

<sup>42</sup>Ibid.

<sup>43</sup>"Materials: The Battle Rages," Dun's Review and Modern Industry, December 1965, p. 88.

<sup>44</sup>Ibid., p. 89.

<sup>45</sup>Ibid.

The aluminum Tapper Keg, which contains over two gallons of draft beer, is selling beer at a rate of 8 to 10 million cases per year.<sup>46</sup> The Tapper, which fits easily into the average home refrigerator, is also being used by the Pepsi-Cola Company to serve soft drinks in the home. The Royal Crown Cola Company, too, is now selling its products in all-aluminum cans.

Meanwhile, the steelmakers have been very active in fighting the competition of aluminum. Tinplate prices have been slashed. So called "skinny tin" is a recent innovation which involves a double reduction of steel in a can.<sup>47</sup> This thin tin helped the production of beer cans climb from 9.8 billion in 1963 to 10.9 billion in 1964.<sup>48</sup> Thin tin is now taking over some markets in soft drinks and soups. In recent years the producers of tincoated steel have spent about \$200 million on new methods with the greatest accent on thin tin.<sup>49</sup> A case of beer packed in thin tin now weighs 22% less than the same amount in nonreturnable glass bottles.<sup>50</sup> It is also becoming more and more competitive in price.

The value of the stakes involved in the glass-tin-aluminum battle for market dominance is awesome. Americans

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<sup>46</sup>Ibid.

<sup>47</sup>Ibid.

<sup>48</sup>Ibid.

<sup>49</sup>Ibid.

<sup>50</sup>Ibid.



should consume over 30 billion 12-ounce units of soft drinks alone in 1967.<sup>51</sup>

Advances are also being made in the use of glass, the oldest type of rigid container now on the market. The properties of glass give it important advantages for use as a container. It is transparent, nonporous, chemically inert, and easily sterilized. It will continue to serve a wide variety of packaging needs in the foreseeable future.

Some 26 billion glass containers are produced every year, while 45 million reusable bottles return to the market.<sup>52</sup> The 70 billion total gives the glass container the top spot among rigid containers. In 1964, despite the progress of both aluminum and steel cans, over 60% of all packaged beer was sold in glass.<sup>53</sup> Since 1959, the output of nonreturnable bottles has soared over 250%.<sup>54</sup>

A new thin, lighter weight glass is now available for use, as are mass produced multi-shaped colored bottles. Efforts are now underway to develop a practical glass container with a thickness no greater than that of a light bulb. New easy-open bottles are also becoming popular.

Glass experts are working steadily to achieve their most elusive goal--the unbreakable bottle. A few have been produced,

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<sup>51</sup>Ibid.

<sup>52</sup>Ibid., p. 119.

<sup>53</sup>Ibid.

<sup>54</sup>Ibid.

but at enormous cost.<sup>55</sup> However, the day may arrive when the manufacture of a bottle harder than carbon steel will affect the entire packaging industry.

Important new methods are being used in specialized food packaging. From boxes and cans, the industry has gone to coils and foils and poly-this and poly-that. Materials are being combined in one package. Examples are: paper laminated to plastic films, aluminum foil bags lined with paper, and rigid aluminum food trays with paperboard tops and plastic windows. Well over 100 million pounds of aluminum foil were produced in 1965.<sup>56</sup> Polyethylene bags are used to package scores of fresh and frozen foods.

An example of scientific progress in packaging is a method known as shrink filming.<sup>57</sup> Shrink film is a plastic film that is loosely wrapped around a product. Then the product goes through a heating process which shrinks the film up to 70%. The result is an extremely taut, transparent, strongly wrapped package.

New plastic products like the Celanese Corporation's Celcon and DuPont's Delrin will likely begin changing entire segments of the aerosol industry. These new copolymers can withstand the highest aerosol pressures. They have sufficient vapor barrier properties for a wide range of products, and

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<sup>55</sup>Ibid., p. 120.

<sup>56</sup>Business Week, p. 46.

<sup>57</sup>Ibid., p. 47.

they can be fashioned into aerosol containers in fancy shapes at competitive prices.

Two new printing methods should soon make big news in packaging processes. One is electrostatic printing which is already used on unwrapped fresh fruits.<sup>58</sup> In this method, no printing device touches the surface being lettered. This means that any kind of surface can be given a good printing job without distortion. Another new method is three-dimensional printing which packagers may use in the near future. The American Can Company is working on a commercially feasible method of 3-D printing and has reported satisfactory progress.<sup>59</sup>

[ There will apparently be no let up to the endless change in packaging technology. Producers and packagers will be constantly striving to keep abreast of coming developments. Great problems will face management in evaluating materials and processes, and in deciding on the best system available for a particular need.] As competition increases, fortunes may be won or lost on such decisions. He who will continue to benefit most from packaging innovations, is of course, the consumer. Tomorrow's package, whether made of paper, metal, glass, plastics, or combinations of these will undoubtedly be lighter in weight, greater in strength, smaller in design, less wasteful of packaging material, more imaginative in construction, more convenient to use, and more economical in cost.

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<sup>58</sup>Ibid., p. 49.

<sup>59</sup>Ibid.



## CHAPTER VI

## A FORECAST FOR THE FUTURE

Barring a major war or an unforeseen business recession, the total value of goods and services produced in the United States should exceed a trillion dollars by 1975.<sup>60</sup> This would be a rise of some \$400 billion over the total for the year 1965, and would represent the greatest growth in any decade in American history.

During this period, employment will reach record levels, and vast numbers of the work force will be upgraded to white collar or highly skilled blue collar jobs. Automated machinery will perform many of the tedious, repetitive jobs now done by unskilled labor. As a result, Americans will have not only more leisure time, but also more money to spend on modern conveniences made possible by higher per capita productivity. By 1975, after a projected 34 million increase in population, total disposable family income should approach \$750 billion.<sup>61</sup> This means that the population would have available \$300 billion more in 1975 than in 1965 to spend on all of its needs. More important will be the sharp increase in discretionary income between now and 1975. Discretionary income in

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<sup>60</sup>"Voice of Industry," Dun's Review and Modern Industry, December 1965, p. 127.

<sup>61</sup>Ibid.

the United States in 1965 was estimated at \$160 billion.<sup>62</sup> By 1975, this figure will at least double. One-half of all income will be discretionary.

The higher living standards foreseeable in the 1970's will have a tremendous effect upon all phases of American business. From a marketing standpoint, these conditions could ignite a packaging explosion simply by extending the self-service and convenience-living concepts which have accounted for the current rate of the industry's growth. The \$26 billion which American business is now spending for packaging could, in the economic climate that lies ahead, easily double by 1975.<sup>63</sup>

Population increases alone could bring about a 20% increase in food packaging by 1975.<sup>64</sup> Though a significant gain, this would represent only a small fraction of the full potential. The important growth would come from increasing numbers of new food products incorporating service features and conveniences requiring greater packaging ingenuity as the level of packaging sophistication increases. The American housewife today has a choice of from 7,000 to 8,000 packaged food items.<sup>65</sup> Food companies are now spending about \$125 million a year on research to widen this assortment by providing new

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<sup>62</sup>Ibid.

<sup>63</sup>Ibid.

<sup>64</sup>Ibid.

<sup>65</sup>"Packaging: Why You Must Plan for the Future," Business Management, April 1967, p. 51.



products and improving old ones.<sup>66</sup> Some leading food company executives have indicated their belief that by 1975, the big retail food outlets will stock over 12,000 items, 65% of which will differ from those sold today.<sup>67</sup>

America's growing affluence will have equal impact on the growth of packaging in all other product lines including household items, appliances and furnishings, clothing, recreational goods and medical products. The American consumer has expressed a desire to make living as convenient, comfortable, and healthful as he can afford, and packaging will play an important role in achieving that end.

Continued profound social changes and the adoption of the self-service concept by more and more retail outlets will further stimulate packaging developments. As labor costs make the staffing of drug, hardware, clothing and even department stores more uneconomical, products that were once displayed in bulk or sold in unpackaged form will be put in packages. The package then will serve a dual role as the workhorse in distribution, and as the super-salesman at the point of purchase.

The concepts of packaging are so deep-seated in the marketing of consumer goods that they have exerted noticeable influence in the sale of industrial goods.<sup>68</sup> This trend can

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<sup>66</sup>Voice of Industry, p. 127.

<sup>67</sup>Ibid.

<sup>68</sup>"Industrial: The Key Word is Merchandising," Dun's Review and Modern Industry, December 1965, p. 92.



be expected to continue. The drab and unimaginative package that once typified industrial products is rapidly giving way to creative packages designed to promote the image of the producer and provide the user with many of the convenience features he desires.

For the years ahead, one can foresee sweeping changes in packaging concepts, and more frequent changes in established package designs as the struggle among sellers to gain and hold desired markets intensifies. Competition will provide an ever increasing stimulus for the development of new materials, new processes, and new packaging systems.

## CHAPTER VII

## CONCLUSIONS

The findings of this study evolve around one central and recurring theme--the tremendously important role played by the package in retail selling. Proper packaging can mean the difference between success and failure for many competitive items. Creative and clever packaging may be the most important single consideration in the promotion of a product. Surprisingly, packaging can be even more important than the quality of the product itself. Some products of demonstrably inferior quality have been observed to outsell their rivals, even at identical prices. The package then, can have a very direct impact upon total sales, revenue, and profits.

If packaging is of major importance today, it can only become more so in the future. As modern marketing techniques become more sophisticated and new packaging innovations are introduced, packaging considerations can only grow in importance.

Simply recognizing the potential value of creative packaging would be a milestone for many firms today. Many corporation presidents, board chairmen, and key executives have failed to grasp the significance of packaging decisions. Many packages are created or changed without sufficient research,

planning, or coordination. Professional packaging assistance from consulting firms is usually a sound investment for the vast majority of companies.

Other major conclusions reached in this study include:

1. Product designers and production staffs should consider packaging at the earliest possible point in a new or improved product's life to allow maximum lead time for package development. Hasty or "crash" packaging programs usually produce the least successful packages.

2. Packaging provides a method of competing in a market without resorting to price competition. Effective packaging changes can result in a product capturing wider segments of a potential market.

3. A product should be considered as a packaged entity in all marketing operations. The package, no less than the product, may be improved; both can increase the profitability of the product.

4. Consumer motivational research is of growing importance to marketing, and may realize its greatest utility in package evaluation.

5. Advertising and promotional efforts should be centered on the package. The package must convey the desired image of the product and the company.

6. Package design is an art. Size, shape, color, and graphic combinations require imaginative talent. Selection of package materials presents a wide range of alternatives.



7. There are two basic packaging costs, material costs and machinery costs. Production line equipment for packaging can be quite expensive and may represent a major investment that should be closely evaluated.

8. Price rises due to more effective packaging may have no effect on sales, or may actually increase sales and total revenues. Rarely are sales lost.

9. The functional tasks performed by a package can be identified. An optimum package will utilize those attributes which facilitate the major objectives of the package.

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