Industry Overview

The cookie and cracker manufacturing industry includes about 300 companies with combined annual revenue of $10 billion. Major companies include Kraft's Nabisco subsidiary, Kellogg's Snacks Division, and PepsiCo's Frito-Lay. The industry is highly concentrated: the top 50 companies account for 90 percent of industry revenue.

The cookie and cracker manufacturing industry doesn't include companies that make tortilla, potato, or corn chips; fresh-baked cookies, pies, or breads; hard or soft pretzels; or refrigerated flour or dough mixes.

COMPETITIVE LANDSCAPE

Demand is driven by population growth, consumer tastes, and health considerations. The profitability of individual companies depends on efficient operations, effective marketing, and a strong sales force. Large companies have advantages in purchasing, distribution, and marketing. Small operations can compete effectively by manufacturing allergen- and sugar-free products, high-end cookies and crackers, or products containing unusual ingredients. Average annual revenue per employee is $325,000.

Cookie and cracker manufacturing competes against other "impulse" food providers, including bakeries, fast food restaurants, and manufacturers of snack items like candy and potato chips.

PRODUCTS, OPERATIONS & TECHNOLOGY

The industry's major products are crackers (50 percent) and cookies (50 percent). Major types of crackers include saltine, cracker sandwiches, and graham crackers. Other cracker products include melba toast, cracker meal and crumbs, and taco shells. Popular cookies include chocolate chip, oatmeal, crème-filled, and sandwich cookies. Other products in the cookie domain include toaster pastries, ice cream cones, and wafers for ice cream sandwiches.

Cookie and cracker making typically begins by blending starter ingredients like granulated sugar, shortening and oils, leavening, and flavorings in industrial mixers. If the food uses yeast or requires fermentation, the initial mix may need to rest for several hours. Following the initial blend and waiting period, workers mix in water and bonding agents like oats, gluten, and wheat flour. Blenders can quickly process 2,000 pounds of dough per batch.

After mixing, dough is lifted into a hopper. Crackers are spread onto a sheet and layered (laminated) by a series of metal gauging rolls. If the machine makes shaped crackers (animal or round), rotary cutting machines slice the dough into shapes. Excess dough is lifted and mixed with fresh dough in the hopper. Round cookie dough is forced through inch-long openings at the end of the hopper cylinder, which cuts pieces off with a sharp blade or wire.

The cut cookie or cracker dough moves by conveyor belt to a series of natural gas ovens, which can be up to 300 feet long. Crackers and cookies typically take five minutes to bake and 15 to cool down. The cooled product moves to a finishing station. For sandwich cookies, a stenciling machine squirts a shortening-and-sugar mix onto alternating rows of cookies. Air suction brings the two cookies together to complete the sandwich. In some cases, machines spray flavoring agents like cinnamon, icing, or chocolate. Crackers often receive a final application of spices, herbs, and salt.

The packaging stage varies depending on the product and where it's sold. Cookies and crackers can be individually plastic-wrapped or sold in snack packs or boxes. Finished products are put into cartons and warehoused for shipping. To reduce shipping costs, companies typically operate multiple manufacturing plants across the US. Most plants can
manufacture a range of products, though each plant typically specializes in one or two popular brands.

**Common inputs** include wheat flour; soybean and cottonseed oil; sweeteners like cane and beet sugar, high-fructose corn syrup (HFCS), molasses, and honey; cocoa powder and chocolate syrup; and flavorings like herbs, salt, and spices. Key energy inputs include water, electricity, and natural gas. Commodities can be in short supply due to unpredictable weather patterns and government farm subsidies for competing products. Imported ingredients like chocolate and cinnamon can be in short supply and sometimes of inferior quality, depending on the conditions of major producers in Africa and South America. Manufacturers increasingly rely on HFCS in place of sugar, which is expensive due to federal price supports.

Recent **technological advances** include the ability to quickly prototype and launch new products, automated quality control instrumentation, more uniformity in product shapes, and fully integrated networks to automate baking and packaging. Most large companies track sales in real time using a network of handheld wireless devices and centralized enterprise resource planning (ERP) systems.

**SALES & MARKETING**

**Typical customers** are grocery wholesalers, warehouse clubs, restaurant chains, food service distributors, vending machine distributors, and convenience stores (c-stores). **Sales channels** include third-party brokers, internal sales forces, food distributors, and direct store delivery (DSD), where products are stocked and pulled by the company's distribution arm. Many companies rely on a combination of these.

For most cookie and cracker manufacturers, Wal-Mart accounts for 10 to 20 percent of total sales. Several companies specialize in producing **private-label** brands for grocery and c-stores. As an aggregate category, the private-label segment is typically among the top five revenue-generating cookie and cracker brands.

**Major marketing** includes TV and radio advertising, coupons, celebrity tie-ins, in-store discounts and end-cap promotions, sweepstakes, and product-specific websites. Companies latch on to emerging food trends by publishing recipes that incorporate the product into a meal or snack (Ritz “bruschetta”). Cookie and cracker makers often co-promote with other food manufactures to further extend a brand (Domino's Oreo dessert pizza, Honey Maid graham cracker pie crust).

**Customer service operations** can be extensive, as bad publicity can severely damage a brand. Most companies manage toll-free help lines and web-based email submission forms to address product questions and concerns. Companies invest heavily in **Internet** promotions, developing extensive, highly interactive websites to promote brand awareness. Most large processors manage restricted-access Intranets or electronic data interchange (EDI) systems to facilitate e-commerce transactions and manage inventory. A few small specialty cookie companies sell directly to consumers on the Internet.

**Typical product prices** are $3 to $4 for a 16-ounce box. Individually wrapped items cost around $0.50 to $1. Private-label brands cost 20 to 40 percent less than name brand. Distributors typically mark up prices 20 to 30 percent from the manufacturer's price; retailers add another 10 to 20 percent.

**FINANCE & REGULATION**

**Cash flow** is slightly seasonal, as crackers and cookies sell better in the second half of the year. Food ingredients are the most expensive input for cookies and crackers, representing around 50 percent of cost of goods sold. Packaging typically accounts for 20 percent of cost of goods; shipping, 10 percent. Most sales are FOB (freight on board), requiring that the manufacturer pay all freight and transportation expenses. To limit price volatility, companies often use financial hedging instruments and enter multi-year contracts with ingredient and packaging material suppliers.

**Gross margins** typically range from 30 to 50 percent. Companies warehouse 30 to 60 days of finished product inventory. **Receivables** are low, typically less than 30 days. Most cookie and cracker makers own their own manufacturing property and processing equipment, though some smaller companies lease equipment and space.

The cookie and cracker industry must comply with **environmental and food safety regulations**. The EPA, state, and local agencies monitor environmental protections, including wastewater treatment, air quality, and stormwater runoff. The FDA oversees food safety and sets rules regarding health claims on labels. The Food Allergen Labeling and Consumer Protection Act requires that manufacturers disclose if specific allergens are in the product. An FDA requirement that manufacturers disclose hydrogenated oils (trans fats) has had a major impact on the cookie and cracker industry; prior to the ruling, cookies and crackers accounted for 40 percent of the average American's daily consumption of trans fat.
Many companies have struggled to reformulate products to limit trans fats yet make them taste good.

**REGIONAL & INTERNATIONAL ISSUES**

Illinois, Pennsylvania, and Georgia are the top states for cookie and cracker manufacturing. Large cookie and cracker manufacturers have headquarters in these states, with production facilities throughout the country.

The US, a net importer of cookies and crackers, imports close to 20 percent of the US market and exports less than 10 percent. Exporting cookies and crackers can be difficult due to fragility and freshness issues and cultural taste preferences.

**HUMAN RESOURCES**

Cookie and cracker manufacturing wages for production workers average nearly 30 percent less than the US national average. Cookie and cracker manufacturing requires mechanical, scientific, and technical skills. Production workers must be physically able to operate machinery and lift heavy objects. A number of schools and institutes offer programs in baking science. Several baking institutes lease manufacturing equipment, providing startup businesses a chance to test and prototype cookies and crackers prior to launch.

The annual injury rate in cookie and cracker manufacturing is about 15 percent higher than the national average. Most injuries involve sprains, strains, fractures, and bruises from handling containers, operating machinery, and falling. Amputations are eight times higher than the national average.

**Industry Employment Growth**

**Bureau of Labor Statistics**

![Graph showing employment growth](image)

**Average Hourly Earnings & Annual Wage Increase**

**Bureau of Labor Statistics**

![Graph showing wage increase](image)
Kellogg 2Q profit rises nearly 4 percent
Associated Press Newswires, 31 July, 2008, 541 words
GRAND RAPIDS, Mich. (AP) - Kellogg Co. said Thursday its profit rose 3.7 percent in the second quarter as a result of product innovation and again raising prices to offset higher costs. The maker of Special K and other cereals and Keebler ...

HIGHER PRICES HELPED KRAFT OFFSET COSTS
The Capital Times & Wisconsin State Journal, 29 July, 2008, 381 words
Kraft Foods, the nation's largest food and beverage maker, reported a second-quarter profit increase of nearly 4 percent on Monday, saying higher prices helped offset rising commodity costs. The maker of Oscar Mayer meats, Velveeta, Oreo ...

Getting away from gluten
Los Angeles Times, 07 July, 2008, 1692 words
At the Whole Foods Market in El Segundo, two women stand scanning a refrigerator case filled with packages of gluten-free food -- carrot cake, rice flour bread, scones, ginger cookies, pecan pie and chocolate chip muffins. Judy Beckett, a ...

QUARTERLY INDUSTRY UPDATE
Commodity Ingredients Prices Rise - Prices for many primary ingredients for cookies and crackers continue to rise. Wheat flour prices rose 60 percent in May 2008 from May 2007, continuing their sharp rise. Prices for corn and oats, two other primary commodities important in cookie and cracker manufacturing, also increased: 20 percent for corn and 35 percent for oats. Manufacturers pass raw material price increases to consumers, adding to the rising food costs at US grocers.

Hydrox Returns - Five years after discontinuing the Hydrox brand, Kellogg is relaunching the chocolate cream cookie on a limited basis. Kellogg made the decision after consumers campaigned to bring back the cookie, which was overtaken by Oreo in popularity. Kellogg may introduce Hydrox on a more extended basis if the trial introduction is successful.

Government Urged to Reduce Conservation Reserve Program - The USDA is being urged by farming interests to release non-environmentally sensitive cropland from the Conservation Reserve Program (CRP). With many crops being severely challenged, releasing CRP land should help farmers produce more grains, balance supply and demand, and reduce grain costs for cookie and cracker manufacturers. The June flooding in Iowa further reduced farmland and will increasingly pressure crop prices.

Business Challenges
CRITICAL ISSUES
Highly Competitive Industry - The cookie and cracker industry competes with a number of other impulse purchases and snacking options, including potato chips, nuts, energy bars, in-store bakery items, fast food, and baking at home. Cookies and crackers are indulgence items that are among the first foods eliminated or restricted for those trying to lose weight. Cookie and cracker manufacturers compete against one another, bidding for space on store shelves of major retailers and battling for consumer mindshare.

 Prices received by cookie manufacturers for finished products increased 5.9 percent in May 2008 compared to year-ago levels; cracker prices rose 5.2 percent.

Volatile Ingredient Prices - The price of critical commodity inputs such as wheat flour, shortening, soybean oil, corn sweetener, and chocolate can increase significantly due to poor farm yields, unpredictable weather patterns, high import tariffs, and government farm subsidies. Ingredient prices typically represent 50 percent of a cookie and cracker manufacturer's total cost of goods sold. Because of the large number of competitive substitutes and that cookies and crackers are discretionary purchases, manufacturers are often unable to pass higher costs to consumers.
The cost of wheat flour, a major ingredient in cookies and crackers, increased 60 percent in May 2008 compared to a year ago; shortening and cooking oil increased 55 percent.

OTHER BUSINESS CHALLENGES

Vulnerability to Litigation, Regulation - Increased awareness of obesity in the US has made cookie and cracker manufacturers more vulnerable to litigation and federal regulation. Leading companies are often sued; recent litigation surrounded the use of trans fats, accusations of marketing unhealthy products to children, and weight-loss claims. Companies emphasize the importance of industry self-regulation, trying to stay one step ahead of potential lawsuits and federal clamp-downs on advertising, ingredients, and labeling claims.

Dependence on Large Customers - Buying power is firmly in the hands of retailers, particularly large national chains. Wal-Mart typically accounts for 15 to 20 percent of all cookie and cracker sales. For most large manufacturers, their top five customers represent 30 to 50 percent of total revenues. Consolidation of grocery stores has increased retail buying power. Retailers maximize profits by tightly managing shelf space and forcing manufacturers to bid against one another for guaranteed minimum advertising dollars and "free fill" quantities for the first shipment of new products.

Changing Consumer Tastes - Consumer buying behavior is notoriously fickle in this industry. Companies often spend millions to reformulate products or develop new brands to capitalize on dietary fads (low-carb, fat-free, sugar-free). Dietary trends can become quickly passé or replaced by new and emerging health concerns, which often conflict with a manufacturer's health claims. Customers often embrace a brand and concept only to abandon it within a few years. Revenues for Nabisco SnackWells, once a $500 million brand, have dropped 60 percent. Nabisco recently reformulated the SnackWell line to add more fat and flavor to the product, de-emphasizing its heart healthy claims in favor of taste.

Product Innovation - The cookie and cracker manufacturing industry is dominated by mature, mass-market-oriented corporations that can be slow to respond to new consumer trends. Rather than offer new products, companies are often content to create new line extensions of proven brands: Oreo cookies can be found in more than 40 Nabisco products. This strategy of product proliferation often erodes brand loyalty and increases the risk that a company will cannibalize its own product lines. Launching a truly new, exciting product can be difficult and expensive.

Trends & Opportunities

BUSINESS TRENDS

Declining Packaged Cookie Sales - Increased awareness of obesity rates and a trend away from processed snacks are leading to a decline in packaged cookie sales. According to research firm Information Resources, packaged cookie sales have declined around 2 to 5 percent annually for the past several years, but have surged for in-store fresh-baked cookies.

Private-Label Category Grows - The market share for private-label cookies and crackers has increased despite overall category declines. Private-label cookies account for around 10 percent of total cookie sales; private-label crackers, 8 percent of the overall cracker market. Private-labels have benefited by going upscale with gourmet offerings, blurring the traditional distinction between private-label and branded products.

Employment Falls - To boost profitability in the face of stagnant demand, manufacturers are consolidating warehouse operations and eliminating production jobs. Employment has declined 13 percent over the past five years. Nabisco recently closed 13 plants and eliminated nearly 4,000 factory jobs. Despite the drop in employment, labor productivity has been essentially flat over the past five years.

Healthier Ingredients - Manufacturers are reformulating cookies and crackers to include healthier ingredients. One-third of all crackers sold in the US claim to have low or reduced fat or to be fat-free, according to ACNielsen. Nabisco is retreating from traditional cookie advertising to children to promote "better-for-you" products. The company's KidSense Fun Packs include reformulated Teddy Grahams, Cheese Nips, and Ritz crackers, all free of trans fats, saturated fat, and artificial flavors and sweeteners. The company also offers an Oreo product line made with organic wheat flour, cane sugar, rice syrup, and corn starch.

"100 Calorie" Crackers, Cookies - Sales of "100 Calorie" cookies and crackers now exceed $200 million and are expected to grow 20 to 30 percent annually. Consumer marketing firm the Hartman Group finds that 30 percent of Americans believe that 100-calorie packages are worth the extra cost, as the packs make counting calories easy. Snack
packs are about 20 percent more profitable than larger packages.

**INDUSTRY OPPORTUNITIES**

**Gluten-, Allergen-Free Products** - Demand for gluten-free cookies and crackers is growing, fueled by more diagnoses of celiac disease. Celiac disease sufferers can't eat items containing wheat gluten, an ingredient common to all cookies and crackers containing wheat flour. Sales are also strong for products free of common allergens like peanuts, tree nuts, eggs, and dairy. Manufacturers making allergen-free claims must manufacture products in a dedicated facility free of these items.

**Boosting C-Store Sales** - As the grocery segment continues to consolidate and flex its buying power, cookie and cracker makers are revisiting their convenience store (c-store) sales strategy. C-stores and gas station markets make money on impulse purchases like snacks, candy, and soda. Companies that can figure out how to promote and sell to c-stores may find that this sales channel can help boost sagging sales. Cookies and crackers account for only 15 percent of all packaged sweet snacks sold in c-stores and less than 0.5 percent of total in-store revenues.

**International Expansion** - Manufacturers are expanding into other countries by creating new product lines, expanding facilities, and acquiring established international plants. Kraft has launched new cookie product lines in China, Singapore, and the Persian Gulf region. NexCen is expanding Mrs. Field's Great American Cookie Company into overseas markets. Products sold internationally are often reformulated and repackaged to accommodate taste preferences of a country or region.

**Return to Indulgence** - Some cookie makers may do well to develop rich, gourmet cookies that celebrate excellent ingredients and make no pretense to be healthy. With the shift toward trans fat-free, whole grain, and low-fat cookies, the cookie category is becoming an indulgence with strings attached. Customers want healthier snacks, but also enjoy the occasional no-holds-barred, decadent treat. Smaller manufacturers may find opportunities in breaking from the trend of 100-calorie snacks and fat-free cookies.

**Hybrid Cookie Bars** - Cookie bar product sales have increased over the past few years. These products combine the appeal of traditional cookies, but are reformulated and repackaged as energy and meal-replacement bars or combined with a candy product. Healthy hybrid products blur the line between indulgence and energy, appealing to the active and health-oriented. Some hybrid cookie energy bars contain whole grains and energy-boosting ingredients like caffeine and ginseng; cookie-and-candy hybrids are more indulgent, combining cookie bits with chocolate, fudge, or caramel.

**Executive Insight**

**CHIEF EXECUTIVE OFFICER - CEO**

**Identifying Optimal Product Mix**
Profits in the cookie and cracker manufacturing industry depend on the right product mix, and usually one or two powerhouse brands lead the way. CEOs are heroes or failures depending on how well they develop the company's mix of cookie, cracker, and snack products. The balance is difficult: relying too much on line extensions can water down a brand, yet the costs and risks of launching new brands are high.

**Cutting Costs**
Soft demand and sagging sales have cookie and cracker manufacturers focusing on lowering company operating costs. Cost-cutting measures include closing plants operating well below capacity levels, eliminating middle management, increasing product throughput, and reducing inventory levels. Work hasn't shifted overseas; restructuring has been a domestic focus.

**CHIEF FINANCIAL OFFICER - CFO**

**Managing Commodity Purchases**
Ingredient costs are volatile, often rising or falling 10 percent or more from year to year. Finance executives must know when to secure long-term agricultural commodity contracts and when to hedge against rising prices. Energy purchases are just as critical to profitability: escalating natural gas and electricity prices can erode a company's bottom line.

**Maximizing Retail Contracts**
Cookie and cracker companies depend highly on large retailers like Wal-Mart. Companies must secure profitable long-term contracts with major retailers, and carefully consider the commitments required to support the needs of large buyers. A CFO must work in tandem with the company's head of sales to establish wholesale prices, set marketing budgets, and determine the optimal size and structure of the company's sales force.

CHIEF INFORMATION OFFICER - CIO

Fully Integrating Operations
Cookie and cracker manufacturers are highly diversified, vertically integrated corporations. Most have divisions that are completely unrelated to snacks. Integrating multiple divisions and the company's many sales, operations, marketing, and accounting departments is key to effective operations. Successful technology departments know how to prioritize, set realistic timelines, and work within a budget.

Modifying Products to Match Health Trends
Modern food technology allows companies to easily test and prototype new formulations and ingredients. R&D teams can respond to emerging health and diet trends by developing new products that come close to the taste and quality of more decadent offerings, but doing so isn't cheap: Nabisco spent millions to eliminate trans fats from the crème filling in Oreos.

HUMAN RESOURCES - HR

Hiring Qualified Workers
Overall employment is declining, but the need to secure and retain qualified employees remains strong. Because of technological advances and the need to quickly develop new products, hiring managers generally look for workers with a technical or college degree. HR professionals recruit MBAs and graduates with advanced science and technology skills to fill management positions.

Training Workers on Safety
Cookie and cracker manufacturers rely on fast-moving, complex machinery that must be operated carefully. Companies teach employees how to operate equipment safely to comply with federal and state regulations and to minimize worker injuries. Packaging and drying can be particularly dangerous steps in the manufacturing process.

VP SALES/MARKETING - SALES

Implementing Sales Strategy
Cookie and cracker manufacturers build and manage a vast range of sales forces, but there's no one ideal way to sell a snack. As such, companies spend considerable energy and resources developing the ideal sales mix. Some commit to direct store delivery and stock store shelves using a team of salespeople, others rely on a third-party distributor. Most companies combine these strategies and incorporate a national broker network to support the team.

Developing New Brands
The cookie and cracker industry is seeking the next SnackWell, yet the industry has been slow to respond to shifts in customer preferences. The corporate trend to rely on line extensions reduces the likelihood that sales, marketing, and product development teams will uncover the next big brand. Sales and marketing leaders who have their pulse on emerging food, dietary, and lifestyle trends may find themselves managing the next powerhouse brand.

Call Preparation Questions

CONVERSATION STARTERS

Who are the company's primary competitors?
The cookie and cracker industry competes with a number of other impulse purchases and snacking options, including potato chips, nuts, energy bars, in-store bakery items, fast food, and baking at home.

How do volatile ingredient prices affect the company?
The price of critical commodity inputs such as wheat flour, shortening, soybean oil, corn sweetener, and chocolate can increase significantly due to poor farm yields, unpredictable weather patterns, high import tariffs, and government farm subsidies.

**How has the rise in obesity rates affected the company's strategy?**
Increased awareness of obesity in the US has made cookie and cracker manufacturers more vulnerable to litigation and federal regulation.

**Does the company make allergen- or gluten-free products?**
Demand for gluten-free cookies and crackers is growing, fueled by more diagnoses of celiac disease.

**What is the company's convenience store sales strategy?**
As the grocery segment continues to consolidate and flex its buying power, cookie and cracker makers are revisiting their convenience store (c-store) sales strategy.

**How important is the international market to company growth?**
Manufacturers are expanding into other countries by creating new product lines, expanding facilities, and acquiring established international plants.

**QUARTERLY INDUSTRY UPDATE**

**How are increasing commodity prices affecting the company?**
Wheat flour, corn, and oats prices have risen substantially in the past year.

**What does the company think of releasing cropland from the Conservation Reserve Program (CRP)?**
Farming interests are urging the government to release land from the CRP.

**OPERATIONS, PRODUCTS, AND FACILITIES**

**What major crackers does the company produce?**
Major types of crackers include saltine, cracker sandwiches, and graham crackers. A few companies produce melba toast, cracker meal and crumbs, and taco shells.

**What are the company's major cookie products?**
Major cookies include chocolate chip, oatmeal, crème-filled, and sandwich cookies. Other products include toaster pastries, ice cream cones, and wafers for ice cream sandwiches.

**How many production locations does the company operate?**
To reduce product shipping costs, companies typically operate multiple manufacturing plants across the US.

**Do manufacturing plants specialize in particular products?**
Most plants can manufacture a range of products, though each plant typically specializes in one or two popular brands.

**What are the company's quality control measures?**
Quality control managers inspect incoming ingredients, test the viscosity of oils, and examine finished products, which are evaluated against an established standard.

**What are the company's major operating expenses?**
Common inputs in the cookie and cracker manufacturing industry are wheat flour; soybean and cottonseed oil; sweeteners like cane and beet sugar, high-fructose corn syrup, molasses, and honey; cocoa powder and chocolate syrup; herbs, salt, and spices; and energy inputs like electricity and gas.

**What packaging alternatives does the company offer for its products?**
Cookies and crackers can be individually plastic-wrapped or sold in snack packs or boxes.

**CUSTOMERS, MARKETING, PRICING, COMPETITION**

**Who are the company's customers?**
Typical customers are grocery wholesalers, warehouse clubs, restaurant chains, food service and vending machine distributors, and convenience stores (c-stores).

**How much does the company rely on key accounts for sales?**
For most cookie and cracker manufacturers, Wal-Mart typically accounts for 10 to 20 percent of total sales.
Does the company produce private-label brands?
Some companies specialize in private-label brands for grocery and c-stores. In aggregate, the private-label segment is typically among the top five revenue-generating cookie and cracker brands.

What are the company’s sales channels?
Sales channels can include third-party brokers, internal sales forces, food distributors, and direct store delivery (DSD).

How does the company market its products?
Major types of marketing include TV and radio ads, coupons, celebrity tie-ins, discounts and promotions, sweepstakes, and product-specific websites.

How does the company respond to food trends?
Companies latch on to emerging food trends by publishing recipes that incorporate the product into a meal or snack. Cookie and cracker makers often reformulate products to capitalize on food and diet trends.

How does the company respond to customer needs and inquiries?
Most companies manage toll-free help lines and web-based email submission forms to address product questions and concerns.

How invested is the company in Internet marketing?
Highly interactive, extensive websites promote brand awareness. Most large companies manage restricted-access Intranets or electronic data interchange systems for e-commerce transactions and inventory management. Smaller companies may sell direct-to-consumer on the Internet.

What are the typical prices received by the company?
Typical product prices are $3 to $4 for a 16-ounce box. Individually wrapped items cost around $0.50 to $1. Private-label brands cost 20 to 40 percent less than name brand products.

How has retailer consolidation challenged the company’s success?
Consolidation of retailers has shifted the buying power from manufacturers toward retailers.

REGULATIONS, R&D, IMPORTS AND EXPORTS

How does the company respond to FDA regulations?
The FDA oversees food safety and sets rules regarding health claims on labels.

How does the company ensure safety in food allergen labeling?
The Food Allergen Labeling and Consumer Protection Act requires that manufacturers disclose if the product contains specific allergens.

How challenging is trans fat disclosure to the company's production and profits?
Prior to the FDA ruling on trans fat disclosure, cookies and crackers accounted for 40 percent of the average American's daily trans fat consumption. Companies have struggled to reformulate products to limit trans fats without sacrificing taste.

How important are exports to the company’s revenue?
US cookie and cracker exports are less than 10 percent of industry revenue.

ORGANIZATION AND MANAGEMENT

What is the company's average hourly wage for production workers?
Cookie and cracker manufacturing wages for production workers are nearly 30 percent lower than the national average.

What skills or training does the company require of its workers?
Cookie and cracker manufacturing requires mechanical, scientific, and technical skills. Production workers must be physically able to operate machinery and lift heavy objects.

What is the company's worker safety record?
The annual injury rate in cookie and cracker manufacturing is about 15 percent higher than the national average. Sprains, strains, fractures, and bruises typically result from handling containers, operating machinery, and falling. Amputations are eight times higher than the national average.

FINANCIAL ANALYSIS

How does seasonality affect company cash flow?
Cash flow is slightly seasonal, as crackers and cookies sell better in the second half of the year.

What are the primary components of the company's cost of goods sold?
Food ingredients are the most expensive input for cookies and crackers, representing around 50 percent of the total cost of goods sold. Packaging typically accounts for 20 percent of cost of goods; freight, 10 percent.

What is the company's average inventory?
Companies maintain 30 to 60 days of finished product inventory.

On average, how long does it take the company to collect from buyers?
Receivables are low, typically less than 30 days.

Does the company own its equipment?
Most cookie and cracker makers own their manufacturing property and processing equipment, though some smaller companies lease equipment and space.

What are the company's gross margins?
Gross margins typically range from 30 to 50 percent.

BUSINESS AND TECHNOLOGY STRATEGIES

What new technologies has the company invested in?
Recent advances include the ability to quickly prototype and launch new products, automated quality control instrumentation, new decorative printing techniques, and fully integrated networks to automate baking and packaging.

How does the company track sales?
Most large companies manage sales in real time using a network of handheld wireless devices and centralized enterprise resource planning systems.

What plans does the company have to expand?
Larger companies have economies of scale in purchasing, distribution, and marketing.

If a small company, how can the company compete against larger operations?
Small operations can compete effectively by manufacturing sugar-free cookies, low-fat crackers, or products containing organic or unusual ingredients.

Financial Information

COMPANY BENCHMARK INFORMATION

Cookie and Cracker Manufacturing - (NAICS: 311821)

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### Net Profit After Tax

3.7%

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### Balance Sheet

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### Financial Ratios

(Click on any ratio for comprehensive definitions)

<table>
<thead>
<tr>
<th>Ratio</th>
<th>Value</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quick Ratio</td>
<td>1.19</td>
<td>-</td>
</tr>
<tr>
<td>Current Ratio</td>
<td>2.43</td>
<td>-</td>
</tr>
<tr>
<td>Current Liabilities to Net Worth</td>
<td>23.0%</td>
<td>-</td>
</tr>
<tr>
<td>Current Liabilities to Inventory</td>
<td>203.5%</td>
<td>-</td>
</tr>
<tr>
<td>Total Liabilities to Net Worth</td>
<td>66.0%</td>
<td>-</td>
</tr>
<tr>
<td>Fixed Assets to Net Worth</td>
<td>48.5%</td>
<td>-</td>
</tr>
<tr>
<td>Collection Period</td>
<td>28.0</td>
<td>-</td>
</tr>
<tr>
<td>Inventory Turnover</td>
<td>14.4</td>
<td>-</td>
</tr>
<tr>
<td>Assets to Sales</td>
<td>61.0%</td>
<td>-</td>
</tr>
<tr>
<td>Sales to Working Capital</td>
<td>6.1</td>
<td>-</td>
</tr>
<tr>
<td>Accounts Payable to Sales</td>
<td>3.5%</td>
<td>-</td>
</tr>
<tr>
<td>Return on Sales</td>
<td>3.5%</td>
<td>-</td>
</tr>
<tr>
<td>Return on Assets</td>
<td>5.0%</td>
<td>-</td>
</tr>
<tr>
<td>Return on Investment</td>
<td>13.5%</td>
<td>-</td>
</tr>
<tr>
<td>Interest Coverage</td>
<td>8.0</td>
<td>-</td>
</tr>
</tbody>
</table>

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Financial industry data provided by Fintel -- offering leading benchmarking with a database of over 900 industries. Utilize financial analysis through profitability, liquidity, sustainable growth rate, business valuation, custom research, and other tools. Visit us on the web at [www.fintel.us/firstresearch](http://www.fintel.us/firstresearch) to find out how we can help you.

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**ECONOMIC STATISTICS AND INFORMATION**

**Change in Producer Prices** - Bureau of Labor Statistics
Valuation Multiples

Cookie and Cracker Manufacturing

Acquisition multiples below are calculated using at least 3 middle-market (valued at less than $1 billion) industry transactions completed between 6/1997 and 5/2007. Last update: May 2008.

<table>
<thead>
<tr>
<th>Valuation Multiple</th>
<th>MVIC/Net Sales</th>
<th>MVIC/Gross Profit</th>
<th>MVIC/EBIT</th>
<th>MVIC/EBITDA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Median Value</td>
<td>0.6</td>
<td>0.9</td>
<td>4.9</td>
<td>N/A</td>
</tr>
</tbody>
</table>

**MVIC (Market Value of Invested Capital)** = Also known as the selling price, the MVIC is the total consideration paid to the seller and includes any cash, notes and/or securities that were used as a form of payment plus any interest-bearing liabilities assumed by the buyer.

**Net Sales** = Annual Gross sales, net of returns and discounts allowed, if any.

**Gross Profit** = Net Sales minus Cost of Goods Sold.

**EBIT** = Operating Profit

**EBITDA** = Operating Profit + Noncash Charges.

SOURCE: Pratt’s Stats™ (Portland, OR: Business Valuation Resources, LLC) To purchase more detailed information, please either visit www.BVMarketData.com or call Business Valuation Resources at 888-287-8258.

Industry Forecast

US personal consumption expenditures of bakery and pasta products, which includes crackers and cookies, are forecast to grow at an annual compounded rate of 3.9 percent between 2007 and 2012.
First Research forecasts are based on INFORUM forecasts that are licensed from the Interindustry Economic Research Fund, Inc. (IERF) in College Park, MD. INFORUM's "interindustry-macro" approach to modeling the economy captures the links between industries and the aggregate economy.

**First Research Industry Growth Rating**

The First Research Industry Growth Rating reflects the expected industry growth relative to other industries, based on INFORUM’s forecasted average annual growth for the combined years of 2008 and 2009.

- Demand: Tied to population growth and food trends
- Must manage volatile commodity prices
- Risk: Concerns over obesity reduce demand

**First Research Industry Drivers**

Changes in the economic environment that may positively or negatively affect industry growth.

- **Consumer Spending:** Change in overall level of consumer spending on goods and services
- **Commodity Prices:** Changes in prices for commodities, such as crops, metals, and other raw materials

**Web Links & Acronyms**

**INDUSTRY WEBSITES**

- **All Business: Cookies and Crackers**
  News feed featuring articles on cookies and crackers.
- **American Bakers Association (ABA)**
  Trade association for bakeries, including cookie and cracker manufacturers.
- **American Institute of Baking (AIB)**
  Broad industry association that includes packaging companies and food suppliers.
- **Food Timeline: Cookies, Crackers, and Biscuits**
  Historical snapshots for a wide range of cookies, crackers, and biscuits.
- **Private Label Magazine**
  News and insights into private label manufacturing.
- **Snack Food and Wholesale Bakery**
  News, interviews, new products, and feature stories covering cookies, crackers, and other snack foods.
The Biscuit and Cracker Manufacturers Association
Trade association for cracker manufacturers.

GLOSSARY OF ACRONYMS

ABA - American Bakers Association
AIB - American Institute of Baking
DSD - direct store delivery
EDI - electronic data interchange
ERP - enterprise resource planning
FOB - freight on board
HFCS - high fructose corn syrup

“The purpose of the Profiles is for sales call preparation and general business and industry analysis. Profiles provide general background information only and are not intended to furnish detailed information about the creditworthiness of any individual borrower or purchaser or to be used for making any loans, leases or extension of credit to any individual borrower or purchaser. First Research, Inc. is not an investment advisor, nor is it in the business of advising others as to the value of securities or the advisability of investing in securities, and the Profiles are not intended to be relied upon or used for investment purposes.”

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