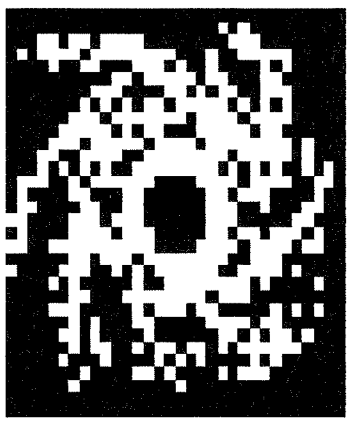
MAYTAG CORPORATION

A STRATEGIC DIAGNOSIS



COURSE: MGT 693
TIME: Thursday 7:00 PM
INSTRUCTOR: Dr. Rex Mitchell
PREPARED BY: Glen Cooper

EXTERNAL ENVIRONMENT

General

The white goods (i.e. refrigerators, freezers, washing machines, dryers, ranges and dishwashers) industry can be divided into two gross markets: North American and International.

As evidenced in the saturation table below most households in the U.S. had at least one range, water heater, and refrigerator. Washers and dryers are probably more saturated then indicated owing to multi-unit (e.g. appartments) dwellings sharing an appliance. Disposers, dishwashers and freezers have not experienced much increase in saturation over the last five to ten years, it, therefore, appears nearly saturated. Microwave ovens may still be an expanding market for a few years but its star performance over the last fifteen years is not likely to continue.

Major Appliance Saturation in the United States
(Percent of households with at least one appliance)

	1988	1987	1983	1978	1973
Ranges (electric and gas) [1]	102.8	101.6	100.7	99.0	99.0
Water heaters (electric and gas)	100.0	99.2	99.9	99.9	98.9
Refrigerators	99.9	99.9	99.9	99.9	99.9
Microwave ovens	76.0	65.9	33.3	7.2	1.2
Washers [2]	72.0	68.9	73.6	68.9	67.8
Dryers (electric and gas) [2]	61.5	58.7	64.0	57.2	49.0
Disposers	50.0	46.4	50.0	42.9	35.3
Dishwasher	49.5	47.4	45.0	41.9	34.3
Freezers	42.0	40.7	42.8	40.0	31.0

Notes:
[1] Greater than 100% indicates more than one unit per household
[2] Amount is understated due to dwellings that share an appliance (e.g. apartments)

Source: Appliance (September 1989), pg 50

The saturation levels mean that most of the sells in this industry will be replacements. However, the increasing life expectancy of major appliances, now at an average of about 14 years, puts the replacement market on a downward slope.

The combination of these factors and others have lead to a future North American unit sales growth prediction of only 1% to 2% annually for the foreseeable future.

International markets are expected to integrate, are less mature, and are predicted to have unit sales growth of 5% annually.

Another major area of the appliance industry is floor care. This market is composed of vacuum cleaners and floor polishers. Although the market is highly saturated (98% of U.S. households have at least one vacuum cleaner) and product life expectancy is high (over ten years) it is still expected to grow in the U.S. by 2% to 3% annually (see table below).

U.S. Shipments of Floor Care Appliances
(Amounts in 000s)

	1995 (Est.)	1993 (Est.)	1990 (Est.)	1989
Vacuum Cleaners	20,297	19,654	18,120	17,698
Annual Growth Rate	2%	3%	2%	
Floor Polishers	200	190	175	191
Annual Growth Rate	3%	3%	(8%)	
Total	20,497	19,844	18,295	17,889
Annual Growth Rate	2%	3%	2%	

Source: Appliance (April 1990) pg. 35 and (January 1990), pp. 59, and 63

Competition

Beginning in 1955 the U.S. appliances industry began to consolidate. Most companies merged with or acquired other companies in an effort to expand product lines. The consolidations have lead to greater price competition and pressure on margins. The U.S. industry is now consolidated around four major competitors. These competitors along with their market share are listed below.

Company	Market Share
Whirlpool	33%
General Electric	25
A.B. Electrolux (WCI)	18
Maytag	15
Others	9

As the analysis on the following page indicates Maytag maybe ranked five in market share but it has out performed the other major competitors in terms of important profitability and activity ratios over the last three years. Note that the return on investment and profit margins appear to be showing a downward trend over the last three years for all competitors. This is probably due to new facilities investments, discussed later, and the increased price competition discussed above. The European market is consolidated around four major companies but has many more smaller companies still maintaining market presents. The market share is as follows:

Company	Market Share
A.B. Electrolux (Sweden)	21%
Whirlpool International (U.S./Netherlands)	11
Bosch-Siemens (Germany)	11
Merloni (Italy)	10
Others	47

Operating Results of Major U.S. Competitors

(Dollar amounts in millions)

	1989	1988	1987	Average
Maytag				
Revenue	$2,855.4	$1,663.9	$1,634.1	
Operating income	262.4	182.9	218.5	
Assets	2,217.6	785.7	666.8	
Return on Investment	11.8%	23.3%	32.8%	18.1%
Profit Margin	9.1%	12.0%	14.0%	10.8%
Asset turnover	1.3	2.1	2.5	1.7
General Electric				
Revenue	$5,620.0	$5,289.0	$4,721.0	
Operating income	399.0	61.0	490.0	
Assets	2,825.0	2,284.0	1,529.0	
Return on Investment	14.1%	2.7%	32.0%	14.3%
Profit Margin	7.1%	1.2%	10.4%	6.1%
Asset turnover	2.0	2.3	3.1	2.4
Whirlpool				
Revenue	$6,152.4	$4,314.5	$4,114.8	
Operating income	367.8	233.4	274.6	
Assets	3,418.6	1,864.5	1,809.8	
Return on Investment	10.8%	12.5%	15.2%	12.3%
Profit Margin	6.0%	5.4%	6.7%	6.0%
Asset turnover	1.8	2.3	2.3	2.1
A.B. Electrolux				
Revenue [1]	43,682.0	41,088.0	39,487.0	
Operating income [1]	2,005.0	2,303.0	2,187.0	
Assets	NA	NA	NA	
Return on Investment	NA	NA	NA	NA
Profit Margin	4.6%	5.6%	5.5%	5.2%
Asset turnover	NA	NA	NA	NA

[1] Amounts reported in Swedish Kronor

In the floor care appliance market Hoover, now controlled by Maytag, is clearly the U.S. market leader. U.S. market share is as follows:

Company		Market Share
	Floor Care	
Hoover		36%
Eureka		20
Ryobi		10
Whirlpool (Kenmore)		8
Other		26
	Floor Polishers	
Hoover		55%
Regina		38
Electrolux		7

Competitive pressures have forced the major manufactures to engage in renovating and building new facilities to gain economies and quality. For example, A.B. Electrolux invested $500 million in a new state-of-the-art facility, while various other companies are investing in U.S.-Mexican border companies called "maquiladoras" to take advantage of Mexico's lower labor costs.

The lure of growth and profits from the European market has resulted in several joint ventures and purchases. In 1989 Whirlpool International established a joint venture, including an optional buy out, with Philips' Dutch appliance operations. Also in 1989, General Electric paid $580 million for a joint appliance venture with the U.K. General Electric Corp.

New customer-oriented features are being developed in this competitive environment but these innovations are difficult to keep for more than one year as competitors rush to duplicate any new idea. Two areas of growing interest which may not be easily duplicated are "smart appliances" and "fuzzy logic." The purpose of these technological innovations are to provide customers with easier to use appliances.

In general competition has been heating up over the last couple of decades which has resulted in fewer firms vying for market share in a market that is growing very slowly.

Potential Entrants

A major concern of the industry is the potential impact of Japanese competition. However, as of 1990 this threat has not been realized. The reason for this is that the focus on cost cutting and quality has lead to improvements which tends to make entering the market difficult. For example, Whirlpool changed its manufacturing process from extrusion to roll-formed components which decreased defects by 2% and cut material and labor costs by 15%. However, the Japanese are experimenting with new technologies, such as "fuzzy logic," mentioned above, that could provide them with a successful edge in the world market.

One factor that discourages entrants is the capital intenseness of the appliance industry but this could also change. Research has been going into the area of process improvements (including robotics) that could result in smaller factories. These smaller factories could have smaller profitable production runs and shorter lead times to market. This would enable such competitors to satisfy specific market niches.

Suppliers

Appliance manufacturers could be characterized as "metal benders." Most of the industry technology needs, for now, are low to medium. Additionally, the general industry is vertically integrated. These factors combine to give suppliers very little control over the industry as a whole.

Buyers

Approximately 70% of white good sales in the U.S. are for replacement, 20% for new housing, and 5% from other.

The replacement demand comes from final consumers and is satisfied by either (1) large national chain stores/mass merchandisers, (2) department, furniture and discount stores or (3) appliance dealers.

Around 60% of sells come through the chain stores. For example, Whirlpool has traditionally been distributing through Sears while Maytag through Montgomery Wards. Sears has been such a "power retailer" of home appliances that it sold one out of four major appliances sold in the U.S. Discount stores are also a very important channel and their concern for price puts pressure on the manufactures to lower costs. It should be expected that as more merchandise is sold in the large department stores, as appears to be the trend, that these buyers will increase their influence on manufactures. Traditionally, 30% - 40% of white goods were sold through appliance dealers. This method of distribution is on the decline.

Another channel is the commercial market. This consists of Laundromats and other institutions. This has never been a significant buyer.

Finally, home builders purchase appliances to install during home construction. Builders tend to be cost-conscious and prefer to buy middle to low end products and often buy all their appliances (i.e. whole set-ups) from a single supplier.

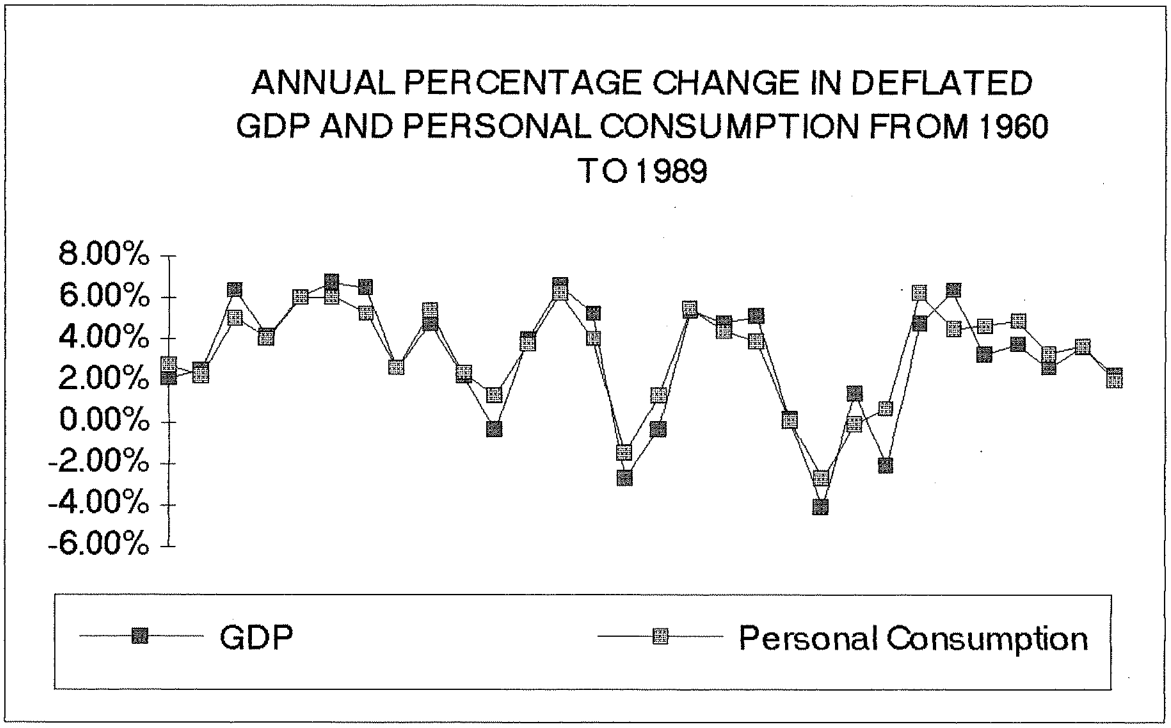
It should be noted that as a group both the U.S. and European ultimate consumers are maturing and becoming better educated as a group. These customers will generally have greater expectations from appliance producers.

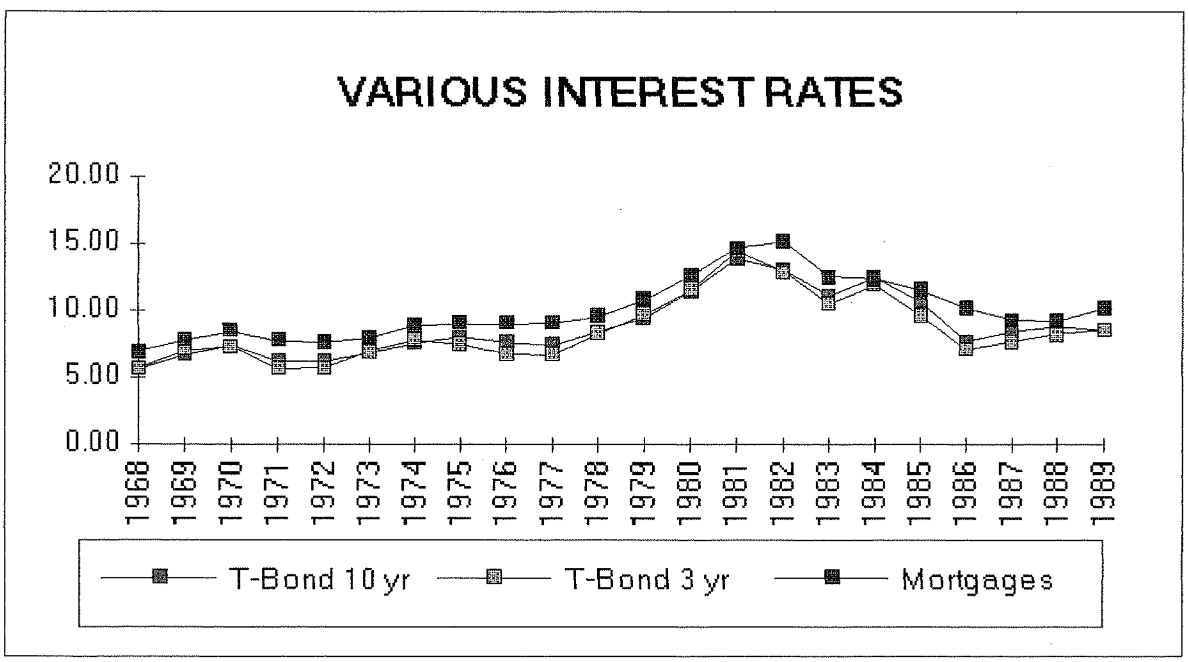
Legal/Political

Recent government regulations relating to Chlorofluoro-Carbons (CFCs) used in refrigeration and volatile organic compounds (VOCs) used in manufacturing has significantly effected the industry and its product designs. In addition, the government in the U.S. is requiring energy conservation which is also requiring changes in product design. Although these factors should be carefully monitored they do not pose a serious threat to the industry.

Economy

There are many factors that can result in economic swings. Although the factors diagrammed on the next page are not conclusive, the fact that the percentage changes in GDP and personal consumption are decreasing while interest rates are increasing does lend credence to the notion that 1990's may begin with an economic down turn.


ANNUAL PERCENTAGE CHANGE IN DEFLATED GDP AND PERSONAL CONSUMPTION FROM 1960 TO 1989
8.00%
6.00%
4.00%
2.00%
0.00%
-2.00%
-4.00%
-6.00%
GDP
Personal Consumption


VARIOUS INTEREST RATES
20.00
15.00
10.00
5.00
0.00
1968
1969
1970
1971
1972
1973
1974
1975
1976
1977
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
1988
1989
T-Bond 10 yr
T-Bond 3 yr
Mortgages

INTERNAL ENVIRONMENT

Finance

As was noted earlier Maytag is one of the leading firms in terms of profitability returns in the industry. However, in 1989 net income (from continuing operations) dropped $4 million. As the below relative size analysis indicates this decline was not only due to an increase in interest expense as a percent of total revenue but also due to an increase in selling and G&A expense.

STATEMENTS OF CONSOLIDATED INCOME RELATIVE SIZE ANALYSIS: MAYTAG CORPORATION

	1989	1988	1987
Net Sales	100.0%	100.0%	100.0%
Cost of sales	74.9%	75.0%	72.3%
Gross profit	25.1%	25.0%	27.7%
Selling, general and administrative expenses	16.1%	13.0%	13.6%
Operating income	9.1%	12.0%	14.0%
Interest expense	(2.7%)	(1.0%)	(0.6%)
Other-net	0.3%	0.5%	0.5%
Income from continuing operations before taxes	6.7%	11.4%	13.9%
Taxes	2.4%	4.2%	5.8%
Income from continuing operations	4.3%	7.2%	8.1%
Income from discontinued operations	0.0%	1.2%	0.3%
Net income	4.3%	8.4%	8.4%

In 1989 Maytag purchased Hoover. Although it is difficult to determine from financial information available it appears that the associated acquisition of foreign operations maybe negatively impacting Maytag's current operations. It appears that after adjusting for goodwill foreign operations make up 16% of total assets but only contributed .5% to income before taxes.

Maytag has also been investing heavily in new plant and equipment. In 1989, 1988, and 1987 Maytag invested $100 million, $94 million, and $39 million, respectively. These investments draw down current operations by adding to admi nistrative costs which are most often not completely capitalized in the accounting records. Nor do such investments normally provide immediate returns.

Once these new facilities are completed and become operational, profit performance may improve.

However, this situation may continue as Maytag intends to make the following further capital expenditures in the near term:

	Amount (millions)
Hoover North American - North Canto, OH plant redesign	$38.0
Hoover U.K., Merthyr Tydfil, South Wales - plant renovation (Black Dragon)	22.0
Dixie-Narco Group - conversion of Admiral plant	31.0
Jenn-Air Company Indianapolis - facility upgrade and expansion	26.5
Jackson, TN - build new plant	42.0
Total	$159.5

Based on a review of the relative size analysis, presented on the following page, the acquisition of Hoover nor other actions taken by Maytag during 1989 has significantly effected the balance sheet. Given this and the current cash being generated from operations, it is unclear where the funds for these new capital expenditures will come from. Nor does a review of selected leverage ratios, see below, indicate any significant change with the exception of the times interest earned ratio. This ratio indicates a companies ability to meet its annual interest costs and shows a marked deterioration in Maytag. This is a result of the aforementioned increase in selling and G&A, and interest expense. This ratio

STATEMENTS OF CONSOLIDATED FINANCIAL CONDITION
RELATIVE SIZE ANALYSIS
MAYTAG CORPORATION

	1989	1988
Cash	1.6%	0.8%
Accounts receivable	20.6%	18.8%
Inventories	22.4%	19.8%
Others	2.1%	3.0%
Total current assets	46.8%	42.4%
Other assets	24.2%	33.9%
Property, plant and equipment	43.9%	46.8%
Less allowances for depreciation	(14.9%)	(23.1%)
Net property, plant and equipment	29.0%	23.7%
Total asset	100.0%	100.0%
Notes payable	2.8%	0.6%
Accounts payable	7.4%	7.6%
Other	9.2%	9.8%
Current maturities of long-term debt	0.7%	0.5%
Total current liabilities	20.1%	18.5%
Deferred income taxes	2.5%	3.9%
Long-term debt	36.0%	39.0%
Other noncurrent liabilities	3.0%	0.9%
Common stock	6.0%	8.4%
Additional paid-in capital	20.0%	3.1%
Retained earnings	27.6%	48.2%
Common stock in treasury	(10.6%)	(21.9%)
Employee stock plans	(2.8%)	(0.1%)
Foreign currency translation	(1.8%)	0.0%
Total shareowners' equity	38.5%	37.7%
Total liabilities and shareowners' equity	100.0%	100.0%

Total of 41.5% compared to 43.8% in prior year should be monitored closely to assure that the company avoids defaulting on any interest payments which could significantly increase the cost of future borrowings.

LEVERAGE RATIOS
MAYTAG CORPORATION

	1989	1988
Debt to asset ratio	61.5%	62.3%
Debt to equity ratio	159.7%	165.2%
Long-term debt to capital	107.6%	116.1%
Times interest earned	3.5	11.9
Current liabilities to equity	52.1%	49.2%

It is of course possible that additional equity could be issued to pay for the proposed expenditures. However, the recent drop from $26 per share to $16 in Maytag's market stock price and the difficult economic outlook ahead makes this alternative less attractive. Other options for raising funds includes reducing G&A expenses thus providing more funds from operations, reducing dividends (which was $100 million in 1989), or finding cash rich companies for merger.

In summary Maytag's financial position appears healthy with the only question being where additional capital expenditure funds will come from.

Marketing

Maytag's primary markets are the U.S. and Canada. With the acquisition of Hoover in 1989, Maytag has now entered the international market place.

Maytag's lonely repairman advertising campaign was one of the most successful in history and earned Maytag great name recognition and a reputation for quality. This reputation for quality has been reinforced by consistently high ratings from *Consumer Reports* surveys.

Along with the emphasis on quality Maytag has generally been pricing products at the high end. The exception has been Magic Chef Co. (manufacturer of gas and electric ranges) which has been pricing at the middle to lower end of the market and Jenn-Air (manufacturer of electric and gas grill-ranges and cook tops) which prices in the high to middle market.

Maytag has been primarily distributing appliances through a network of over 9,000 independent retail dealers through the U.S. and Canada. Maytag has also been distributing through Montgomery Ward but has not entered into the "power retailer" market because it did not want to aggravate its small retailer network. Unlike the rest of the corporation Jenn-Air Company has been marketing to such a "power retailer" - Sears. Finally Magic Chef has been successfully distributing to home builders.

Hoover is a successful worldwide corporation selling not only vacuum cleaners, for which the name has strong market presence, but also washing machines, dryers, refrigerators, dishwashers, and microwave ovens. 75% of Hoover's European sales come from British consumers. Hoover has strong operations in Australia and has plants in France, Mexico, Colombia and Portugal.

Dixie-Narco Maytag group manufactures vending machines. These machines are sold to soft drink syrup distributors, canteen owners, independent bottlers, and full-service vending machine operators. This market is expected to expand in North American and internationally.

Production and Operations

As was discussed in the finance section Maytag has been investing heavily in new plants and equipment. This trend is expected to continue by management. Primarily Maytag produces its products in larger manufacturing plants that are capital intensive. This capital intensity is evidenced by the fact that over 40% of Maytag's assets are in property, plant and equipment.

Current production centers around "focus manufacturing." Under this concept productivity is increase by having single plants concentrate on one process. For example, at the Galesburg Illinois plant refrigerator production is the focus. This plant manufactures for refrigerators for not only Maytag but also Admiral and Magic Chef.

Organization

Maytag has historically been organized around market segment. Each company in the Maytag family controlled a certain customer and supplies that customer with the product, quality and price level desired. The purchase of Hoover, however, added several family members that are organized by geographic location.

Technology

Although the manufacturing of appliances can be classified as low technology, two major technology trends are evident: factory automation and appliance electronics. One of these has been embraced by Maytag and the other not. Maytag has clearly embraced factory automation. The current capital expenditures on new plants have created factories that are the models of the industry. Appliance electronics, through the use of such technologies as "fuzzy logic," has not been an area that Maytag has yet to explore.

CONCLUSION

Maytag's corporate mission as stated in its strategic plan is "to serve the best interest of its shareowners, customers, and employees." In accomplishing this mission the plan states that Maytag will increase shareowner value, identify and satisfy consumer needs, and provide a quality environment for and optimize the talents of its employees.

Maytag's strategy to accomplish its mission will be to create a foundation of quality, increase its profitability, synergize the blending of assets, technologies, and skills, and to go global. To these ends Maytag has been fairly successful. However, in reviewing the below table of internal strengths and weaknesses and external opportunities and threats (S.W.O.T. table) Maytag has several critical issues.

INTERNAL

Strengths

- One of the more profitable competitors
- One of the top five competitors in terms of market share
- Modernized plants
- Maytag & Hoover high name recognition
- Reputation for quality
- Hoover's international presence
- Diversified marketing presences
- Distribution channel from Jenn-Air to Sears
- Some penetration into the home builder market
- presences in vending machine market

Weaknesses

- Low international white goods market share
- Drag on profitability due to merger with Hoover
- Drag on cash and earnings due to current capital investments
- Weakened ability to afford debt
- Decline in stock price
- Reliance on smaller retailers distribution channel
- Lacks of focus on appliance electronics

EXTERNAL

Opportunities

- Higher sales growth interationally
- Less consolidated European market
- Mexico lower labor costs
- Growing vending machine market
- Maturing customers
- Appliance electronics

Threats

- Low sales growth in North American market
- Pressure from increased competition on margins
- Increase effiencies of industry competitors
- Downward trend on industry profits
- Large retailers price pressure
- Move toward large retail stores
- Potential economic downturn
- Research into factory downsizing
- Japanese R&D into appliance electronics
- Government regulation of chemicals used in manufacturing
- Government regulation of energy consumption

These critical issues are:

1. The ability to continue its aggressive modernization program to reduce production costs due to financial and market conditions restraining access to capital.
2. The ability to successfully integrate Hoover and thereby benefit from the growth in the international market place.
3. The ability to capitalize on its strong name recognition.
4. The ability to locate and capitalize on smaller markets that have higher profit potential.

Given success in these areas Maytag should be able to fulfill its mission.