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Submissions are subject to an initial editorial review. Manuscripts meeting the minimum standards of *JACR* will receive a blind review from three referees who are either Editorial Board members or *ad hoc* reviewers in the appropriate discipline. Previously published cases or papers (except those appearing in the *Proceedings* of the Southwest Case Research Association) are not eligible for consideration.

All rights, including the right to use cases in printed or electronically produced textbooks are reserved to the Southwest Case Research Association (SWCRA) and to the authors, who share copyright for these purposes. SWCRA charges fees for these publications rights, in order to fund its continuing programs. Case may be released for publication after a publication date has been established by *JACR's* Editor-In-Chief.

Case Format

Cases submitted for review may be single-or double spaced with 1" margins. Papers are o be double-spaced. Figures and tables essential for the reader's understanding of the case content should be included in the text and numbered separately. Exhibits are to be grouped at he end of the case. Citations should be included in the text, with bibliographic information estricted to a "Reference Section" at the end of the case.

Authors' full names and affiliation should be listed on a separate cover page. The postal iddress, telephone number, fax number, and email address of the "contact" author should ilso be included on the cover page.

instructor's Manual or Teaching Note

The following comprehensive elements should be included:

- 1. The intended course and the audience should be identified including specific teaching objectives. Any associated readings or other material that instructors might utilize in teaching the case should be so identified in the "Teaching Note."
- 2. A brief one-page synopsis of the case.
- 3. Assignment questions for students accompanied by a full explanation of each question.
- 4. A teaching plan, including the expected flow of the discussion, key questions, role plays, and the use of handouts or other material.

Manuscript Submission

- 1. Four copies of all manuscripts including the teaching note should be submitted. All accepted manuscripts must be submitted on 3.5 inch discs in MICROSOFT WORD.
- 2. Authors of field-researched cases should submit an authorization from an appropriate officer of the organization so studied.
- 3. Manuscripts should be sent to: Daniel F. Jennings, Department of Engineering Technology, Texas A&M University, College Station, Texas 77843-3367.
- 4. No submission fees are required for SWCRA members of good standing. A submission fee of \$50 is required for other manuscripts. This submission fee does not include membership benefits or a subscription to JACR (see last page for journal application form).

Editor's Comments

Welcome to the second issue of the Journal of Applied Case Research which contains eleven cases. At the time the first issue was published, five cases were in the review process. For this second issue, twenty-eight new cases were submitted with seventeen being rejected and four remaining in the review process at the time of publication. Thanks to the authors for submitting their work to JACR and to the reviewers for their time and efforts in the review process.

The Journal of Applied Case Research Volume 2, Number 1, 2000

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Security Plans, Incorporated¹

Rodley C. Pineda, Tennessee Technological University Stanley J. Phillips, Tennessee Technological University

Security Plans, Incorporated

Tension filled the air as sales managers from all over the country filed into the main conference hall of Security Plans, Inc. (SPI) in Manila. A late afternoon downpour, typical of Philippine weather in early September, has delayed the arrival of some managers from the outlying provinces. Andres Gregorio, Vice-President of Marketing and Sales, called this meeting of the company's sales force to discuss several problems plaguing the preneed industry, in general, and SPI, in particular (refer to Appendix A for a glossary of terms used in this case). The capital city was rife with news of an impending economic recession that could result in lower sales of funeral, education, and retirement plans (the main products sold in the preneed industry) during the rest of 1997. This trend could even continue throughout 1998. An economic recession can make matters worse for SPI since internal company data for the first half of the year already show that sales performance is lagging behind last year's revenue projections. With the room almost filled to capacity, Mr. Gregorio took a deep breath and called the meeting to order.

Company Background

Security Plans, Inc. (SPI) is considered to be one of the pioneers in the preneed industry in the Philippines since it introduced its funeral plan in the market. Through the years, it has added education, pension, cremation and internment plans to its product line (see Figure 1) and has established 34 branches and 30 regional offices nationwide. With a sales force of 17,000, SPI is considered to be one of the largest preneed companies in the country. The position it occupies in the industry has engendered a corporate commitment toward promoting a "pre-need planning consciousness" in society as reflected in its statement of corporate philosophy (refer to Figure 2).

Preneed Industry Background

The preneed industry in the Philippines began in the late 1960's with the introduction of a funeral plan by Security Plans, Inc. This type of plan promised to cover the cost of memorial services at the death of the planholder. In the 1970's and 1980's, preneed companies

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All names and dates have been disguised to protect the anonymity of the company involved.

began to offer investment-type products to the public. Provident Plans, Inc. introduced the first individually-purchased pension plan in 1976.

In the 1980's, preneed companies introduced the concept of the education plan. The original educational plans promised to pay the child's full tuition and fees at the university/college specified at the time of the plan's purchase. Recent plans, such as that sold by SPI, offer a fixed amount after the plan matures, irrespective of the actual cost of tuition and fees. If a child dies prematurely, most plans promise a return of premiums paid less some charges. Premium payment terms usually last five years.

The preneed industry in the Philippines fills the gap left by the absence of a comprehensive welfare system in the country (refer to Appendix B for a brief country background on the Philippines). Families are left to their own devices when financial emergencies occur. Since most families cannot voluntarily sustain saving or investment plans due to low income levels, forced savings enforced by premium collecting salespeople is an attractive option. Preneed companies issue plans that provide financial protection to the planholder or beneficiary in times of need such as death, education and retirement. Planholders pay premiums regularly into the plans in exchange for these benefits. However, preneed plans are often sold as securities with little emphasis on the risk protection aspect of the plan. Instead, life coverage is sold as a rider (a supplementary contract) to the main preneed policy.

The Market for Preneed Plans

Most preneed companies consider middle class families as their primary target market. The typical Filipino middle class family consists of a father, mother and three to four children. Filipino culture dictates that the father is the primary breadwinner of the family. However, the mother is generally responsible for maintaining the family's finances, the children's well-being, and the family's social and religious obligations. Therefore, decisions regarding household savings and expenditures, the children's education, and expenses related to religious and community affairs are often made solely by the mother or jointly with the father.

Financial budgeting is a major concern for most families. A single-income family that relies on work that pays at the daily minimum salary level can only expect to get 185 pesos or 4,800 pesos a month to cover monthly expenses that can run as high as 8,000 to 10,000 pesos. (In January 1996, 1 U.S. dollar was equivalent to 25 pesos.) In addition, Filipinos have a high propensity to save. Saving for a child's higher education is a priority for most families. The Confucian tradition values education as the most important legacy parents can give to their children. A family can incur enormous debt in order to support a child through college. Religious and community traditions also put pressure on the family to save since expenses related to the performance of religious rites such as baptisms, weddings and funerals can be astronomical. A family can lose face if the celebrations conducted for these occasions are small and haphazardly planned.

Finally, most Filipinos work in small businesses or are self-employed and, therefore, are not covered under any social security system. Those employed in government and large private businesses are members of the Government Service Insurance System (GSIS) and Social Security System (SSS), respectively. Since these programs are managed by public corporations that use funds solely from employee and employer contributions, member ben-

efits are calculated conservatively in order to keep the programs fully-funded. A member can expect to get a monthly retirement pension equivalent to 10-15% of an employee's last monthly salary. Retirement savings, therefore, are a vital component of any household budget.

The pressure to save and invest is deeply ingrained into the Filipino psyche. Preneed companies have learned that the industry's growth relies on being able to present their services as an attractive option for families to fulfill these needs.

SPI Sales Organization

The SPI sales force consists of group and unit managers, and sales counselors who are contracted to sell SPI preneed plans. Figure 3 provides the organization chart for SPI's sales organization. The typical SPI salesperson is a married woman, aged 20-55 years. This is due, in part, to SPI's strategy of hiring married women as salespeople. SPI managers believe that women have easier access to wives/mothers and that female salespeople can gain the trust and confidence of these customers more easily than males. There are no Equal Employment Opportunity (EEO) or Affirmative Action programs in the Philippines. Thus, women comprise around 90% of the sales personnel at all levels of the organization.

Preneed plans are commonly sold using personal selling techniques. SPI training programs encourage salespeople to set up appointments and make house calls, and to avoid cold calls. New preneed salespeople usually get their initial sales by approaching their relatives and friends. From these circles, salespeople are trained to accumulate referrals to include in their prospect list. However, a large number of preneed salespeople are unable to fully utilize the referral process and are only able to sell to their relatives and friends.

Once a sale is made, the group manager, unit manager or sales counselor who closed the sale, is entitled to a commission (which is standard practice throughout the preneed industry). This commission, called the basic commission, is computed based on a rate applied to the total premiums paid during the first year by a planholder and is given to the salesperson at the end of the month when the plan is issued. Basic commission rates vary across the different plans and range between 50 to 55%. The salesperson is also entitled to a collecting commission after the first year as long as the plan remains in force. This collecting commission is computed as a percentage of the premiums paid each succeeding year. This percentage decreases every year from a high of 20% to a low of 5% and varies across plans. A spot cash bonus is given to the salesperson if a plan is sold in lump sum mode (i.e., if the entire amount of premiums due for the plan is paid during the first year). A plan completion incentive bonus is also given for some plans once a planholder completes all premium payments.

Sales Counselor

A sales counselor (SC) is recruited by a group or unit manager either through the manager's circle of acquaintances and planholders, or on the recommendation of other salespeople. The sales counselor enters into an exclusive contract with SPI to sell preneed plans in return for basic and collection commissions as described earlier. In addition, sales counselors are given a Business Builders Bonus (BBB) if she has at least 50,000 pesos per month worth of production credits (PC). Total BBB for a month can run as high as 1,000 pesos. An early bird monthly award (a fixed number of pesos) is given to the sales counselor for businesses submitted during the first half of the month. A rookie award is also given to the sales counselor with the

largest PC during her first month at SPI. Provisions for income tax, retirement fund contributions, and bond reserve (a part of licensing requirements) are deducted from the sales counselor's monthly paycheck.

Top sales counselors at SPI usually earn up to one million pesos per month. On average, active sales counselors earn from two to three thousand pesos monthly. In comparison, the monthly rent for a one-bedroom apartment in urbanized areas can run as high as five thousand pesos.

Sales counselors are considered as active if they produce at least one approved application within six months. Otherwise, they are placed on the inactive list and their contracts are subject to termination.

Unit Manager

A unit manager can be either promoted from the ranks of active sales counselors or recruited directly as a unit manager. She is primarily responsible for recruiting and managing sales counselors. As a licensed salesperson, she can personally sell SPI plans. As a unit manager, she is entitled to additional compensation on top of the basic and collecting commissions she earns from her personal selling activities. These additional benefits, however, are contingent on her fulfillment of certain recruiting and production requirements. She is entitled to a percentage of the total production credits (called overriding commission) submitted by her sales counselors. This overriding commission serves to compensate unit managers for the recruitment, training, and management expenses associated with managing sales counselors. The overriding commission rate is applied on the amount of the first-year premium payment turned in by her group. This override rate differs across plans and according to the amount of production credits she and her sales counselors submit during the month. Override rates range from 7.5% to 15% of first year premium payment. A Business Builders Bonus (BBB) is given if: (1) her unit's total PC is at least 200,000 pesos, (2) total first year premium for the month is at least 22,500 pesos, and (3) at least 15 plans are sold during the month. A unit manager's monthly BBB can be as high as 2,000 pesos a month.

A unit manager, unlike the sales counselor, is entitled to a monthly maintenance allowance of up to 2,000 pesos if her unit's monthly PC is above 100,000 pesos. A unit manager can avail of the company car assistance plan which pays up to 70% of the car's cost or 100,000 pesos (whichever is lower), if she has accumulated at least 2 million pesos in production credits. On average, a unit manager earns 3,000 to 4,000 pesos a month from override commissions, allowance and bonuses. This figure excludes basic and collection commissions she may earn out of her personal sales.

A unit manager forfeits the overriding commissions and benefits if she does not fulfill the following requirements:

Age of Group	Minimum Monthly or Quarterly PC Quota
First 3 months	P100,000/mo. or P300,000/qtr.
Second 3 months	P175,000/mo. or P525,000/qtr.
After 6 months	P250,000/mo. or P750,000/qtr.
	Organization and Staffing
Less than 1 year	5 producing sales counselors
One year and over	10 producing sales counselors

In addition, a unit manager must derive at least 24,000 pesos a year from overriding commissions. The unit manager is also evaluated by her group manager on performance and persistency (retention rate of active sales counselors) annually. If a unit manager's performance rating falls under 75% and her persistency drops below 65%, her contract can be terminated by SPI.

Group Manager

Group managers are promoted from the ranks of unit managers in the sales organization. Her duties include building and managing unit managers and sales counselors. As compensation she is entitled to overriding commissions on sales produced by her and her units. These overrides can range from 10% to 20% of the first year premium and a smaller percentage of the second year premium. Overriding commission rates vary across plans.

A group manager can also avail of a Business Builders Bonus (BBB) every month. The BBB for the group manager is calculated using a formula based on the monthly production credit of the group (at least 500,000 pesos), number of plans sold (at least 75), and a minimum level of first year premiums submitted (at least 55,000 pesos). A group manager's BBB can reach as high as 5,000 per month.

Other Sources of Income

Most group and unit managers, and sales counselors have other sources of income. They usually sell other products and services such as real estate, life and property insurance, jewelry, clothing, cosmetics and encyclopedias. Preneed agency contracts often state that the salesperson cannot enter into a contract with another preneed company. However, it is common for some salespeople to sell plans of competing preneed companies by setting up dummy agents who enter into agency contracts with another preneed company.

Current Industry Situation

Today, the preneed industry faces an uncertain future. The industry had sustained an average annual growth rate of 46% during the 1990's with total sales of 7.6 billion pesos in 1996 (refer to Figure 4). However, the outlook for the Philippine economy is bleak since a financial crisis hit East Asia during the second half of 1997. A depreciation of the peso (U.S. \$1 = 40 pesos) has resulted in massive layoffs and a rise in interest rates. Even with government price controls on basic food products, housing, gasoline and utilities, inflation is still expected to rise to 7.5%. Manufacturers have drastically reduced their import of goods and services due to a lack of foreign exchange. This could cause a severe dampening effect on overall economic growth. The minimum daily salary rate was increased by 13 pesos to 198 pesos. However, labor groups feel that this raise is not enough to cover for the loss in the purchasing power of the peso.

The preneed industry has to deal with other threats. Some companies have failed to deliver on some of their promised benefits. This is especially true for preneed firms that offer educational plans. Earlier plans that promised to pay the full tuition of planholders' children did not account for the high inflation rates during the late 1980's and early 1990's that caused a rapid rise in tuition rates. The recent economic crisis could further tax the reserves of these companies.

The aggressive investment strategies of preneed companies have raised questions about their solvency among potential planholders. Life insurance companies have taken advantage of this situation by establishing their own preneed companies whose names carry the image of stability and goodwill of the insurance industry. This move gives life insurance agents the ability to carry a full line of life insurance and preneed products compared to agents of preneed companies who can only sell preneed plans.

Possible regulation by the Insurance Commission (IC) constitutes another threat to the preneed industry. If its regulatory powers are expanded, the IC is expected to tighten the licensing requirements for preneed salespeople. Currently, preneed salespeople are licensed according to the lax rules of the Securities and Exchange Commission (SEC). SEC rules require that a preneed salesperson attend a one-day training session as a prerequisite for a license. Tighter licensing requirements may make it more expensive to recruit new salespeople given the cost of additional training. On the other hand, these new requirements may attract a higher quality sales force to the preneed industry.

Current Situation at SPI

Even before the recent economic crisis, 1997 has not been a good year for SPI sales. Revenues are down for all regions and none of these regions have even reached 50% of their production goals for the first half of the year. Other problems plague the sales organization. Attendance at group and unit meetings is low. Sales counselors often show up only to submit applications and collect their commissions. Absentees point out that attendance at these meetings prevent them from selling more preneed plans in the field. The list of "inactive" sales counselors has increased substantially since last year, resulting in a high turnover rate in the sales force. Intense rivalry among groups, units and sales counselors have fostered personal conflicts. One group manager, when asked why her group was more productive than average,

complained, "I have to compensate for the nonproductivity of some group managers" (refer to Appendix C for a brief overview of Filipino organizational behavior).

SPI marketing managers (salaried managers who are not considered part of the sales force) have attempted to increase the productivity of sales personnel through sales drives, recognition programs, and personal tactics such as persuasion and team-building. Still, the problems persist. The continued downturn in sales has baffled marketing managers at SPI especially since sales have risen steadily in the last three years (refer to Figure 5). Andres Gregorio, Vice-President of Marketing and Sales, has canceled the annual leaves of SPI marketing managers and has called an emergency meeting of marketing, group and unit managers to identify the causes of these problems and to formulate solutions.

Figure 1 Security Plans Product Line

SECURITY LIFE PLAN	A plan that promises th
SECURIT DIE ET DANS	- P

A plan that promises the planholder that upon the death of the person named in the plan, SPI will pay

all memorial service costs.

SECURITY EDUCATION PLAN A plan that promises the planholder a predetermined

sum of money once the person named in the

contract reaches 16.

SECURITY PENSION PLAN

A plan that promises the planholder a predetermined

sum of annuity payments once the person named in

the contract reaches a certain retirement age.

SECURITY CREMATION PLAN

A plan that promises the planholder that upon the death of the person named in the contract, SPI will

pay all cremation costs.

SECURITY INTERNMENT PLAN

A plan that promises the planholder that upon the death of the person named in the contract, SPI will

pay all internment costs.

Figure 2 Philosophy of Business

It is the goal of Security Plans, Inc. to make available to the communities where it operates, a full range of pre-need services designed to answer the basic needs, and provide peace of mind, thus, enhance the quality of life.

Our customers deserve respect and prompt, efficient and courteous service with personal attention given to each individual in every transaction. Excellence in customer service has been an institutional value to each and every member of the SPI family. It is more of a commitment rather than a job, and pursued with an almost missionary zeal.

Security Plans, Inc. seeks qualified people who enjoy serving people and who are eager to learn, to innovate, to search for new and better ways to do their work, to accept and adapt to changes. SPI offers personal progress and advancement opportunities to qualified people in our organization.

Cost effectiveness, profitability and good stewardship of corporate funds are essential considerations in the fulfillment of our overall corporate objectives as we maintain our position of strength and leadership in the industry.

Our social responsibility extends to all the communities where we operate. It is reflected in the design of our products, pricing, services, safety and security of funds entrusted to us, type and extent of investments and risks undertaken, and the profits we earn in the achievement of our goals. We expect to fulfill this responsibility with a high degree of excellence.

Figure 3
SPI Sales Organization Chart

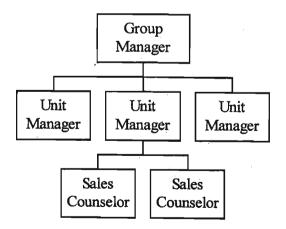


Figure 4: Total Annual Revenues of the Preneed Industry

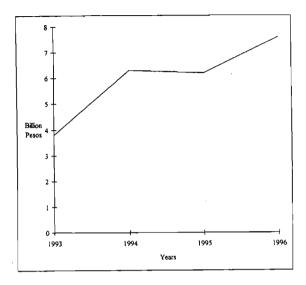
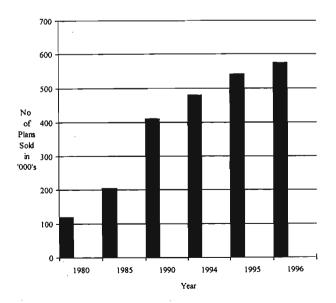


Figure 5: Number of SPI Plans Sold



APPENDIX A

Glossary of Terms Used in the Case

Philippine/Filipino—word that describes anything related to the Philippines

Preneed Plan—the contract entered into between a preneed company and an applicant in which the preneed company promises to pay money or provide services in the future in return for regular payments to be made by the applicant during a fixed period of time. Preneed plans usually promise to provide these benefits after a fixed amount of time (in the case of educational and pension plans) or upon the death of the person named in the contract (for memorial and internment plans).

Planholder—the person who owns the preneed plan (not necessarily the person who is the subject of the plan [e.g. the child named in an educational plan], or the beneficiary of the plan [the person named to receive the benefits of the plan]).

Production Credit—an amount (expressed in pesos) calculated as a percentage of the gross price of a plan. The gross price of a plan is equivalent to the premium paid by a planholder if the latter pays annually. The annual premium is usually less than the sum of four quarterly premiums or 12 monthly premiums since the company incurs additional charges every time a premium payment is processed. If premiums are paid annually or semi-annually, the production credit equals 100% of the gross price; if quarterly, 75% of the gross price; if monthly, 25% of the gross price.

APPENDIX B

Country Background on the Philippines²

Geography

The country is located in Southeast Asia and is slightly larger than Arizona. It is an archipelago consisting of approximately 7,100 islands only a small fraction of which are habitable. The capital, Manila, is on the largest island of Luzon.

People and Culture

Population:

76,103,564 (July 1997 est.)

Age structure:

0-14 years: 38% 15-64 years: 59%

65 years and over: 3%

Population growth rate:

2.13% (1997 est.)

Birth rate: Death rate: 28.97 births/1,000 population (1997 est.) 6.59 deaths/1,000 population (1997 est.)

Gender ratio: at birth: 1.05 male(s)/female

under 15 years: 1.03 male(s)/female 15-64 years: 0.98 male(s)/female 65 years and over: 0.81 male(s)/female

total population: 0.99 male(s)/female

(1997 est.)

Life expectancy at birth:

total population: 66.13 years

male: 63.35 years

female: 69.05 years (1997 est.)

Ethnic groups:

Christian Malay 91.5%, Muslim Malay 4%,

Chinese 1.5%, other 3%

Religions:

Roman Catholic 83%, Protestant 9%,

Muslim 5%, Buddhist and other 3%

Literacy Rate:

total population: 94.6%

male: 95%; female: 94.3% (1995 est.)

Economy

GDP—real growth rate: 5.5% (1996 est.)

GDP—per capita: purchasing power parity—\$2,600 (1996 est.) GDP—composition by sector: agriculture: 22%; industry: 32%;

services: 46% (1996 est.)

Inflation rate—consumer price index: 8.4% (1996)

Labor force: total: 29.13 million (1996 est.); agriculture 43.4%,

services 22.6%, government services 17.9%, industry and commerce 16.1%

(1995)

Unemployment rate: 8.6% (1996)

Industries: textiles, pharmaceuticals, chemicals, wood products, food

processing, electronics assembly, petroleum refining, fishing

Agriculture—products: rice, coconuts, corn, sugarcane, bananas, pineapples, mangoes; pork,eggs, beef; fish catch of 2 million metric tons annually

²Adapted from 1997 CIA Factbook by the Central Intelligence Agency.

APPENDIX C

Background on Filipino Organizational Behavior

Filipino organizational behavior reflects the values and traditions of the greater society in which the organization is immersed. Despite their training and education in western concepts of management, Filipino managers often have to deal with behavioral patterns present in Filipino organizations. These behavioral patterns are based on several values (Andres, 1985):

- 1. amor propio (self-esteem)—Filipinos have a need to be treated as a person, not as an object. Individual and personal dignity must be protected at all times. A severe loss of face is experienced when one loses his/her amor propio.
- 2. hiya (face-saving)—Filipinos fear losing one's face by doing something that is socially unacceptable. Society inflicts a sense of inferiority, embarrassment, and alienation on somebody who does not conform to standard rules of behavior.
- 3. utang na loob (debt of honor)—Filipinos feel a deep sense of obligation to somebody who does him/her a favor. Often, this debt is repaid in nonmonetary form, the value of which is to be decided when the favor is returned. The person who does the favor often decides on whether the debt has been paid back in full.
- 4. pakikisama (collectivism)—Filipinos have a deep sense of belongingness and prefer to maintain good relationships with others within the group rather than foster competition and conflict. Painful confrontation is avoided at all cost. Frankness and overt aggressiveness is frowned upon.
- 5. bahala na (fate)—Filipinos may leave everything up to fate and do nothing when faced with serious obstacles. This may be caused by a sense of frustration, uncertainty or downright laziness.

Together, these values may reinforce certain workplace behaviors. An unacceptable behavior of a worker may be left unreported by another coworker to preserve the collectivity (pakikisama). If the misbehavior is reported, the offending party may lose face (hiya) and may quit instead of facing the disciplinary action for fear of losing his/her self-esteem (amor propio). If left unreported, the offending party will have a debt of honor (utang na loob) toward the coworker who kept the secret. Knowing that their secret may be discovered later, both may instead leave their future up to fate (bahala na).

Rapid Growth at CDM, Inc. and Reading the Fine Print

Ian G. Child, University of Alabama at Birmingham Woody D. Richardson, University of Alabama at Birmingham

John Wild backed his car down the drive and headed into the city. Since becoming a consultant over seven years ago, he had made this drive hundreds of time before. Today, he was lunching with Jim Leach, an outside director for Clinical Data Management, Inc. (CDM), and Arthur Stolle the CEO of CDM. John had done some work for Jim before Jim had retired as CEO of a major pharmaceutical company about five years ago. Jim asked if John could meet for lunch to discuss some problems CDM seemed to be having.

Jim shook John's hand as he entered the restaurant. "John, I would like you to meet Arthur Stolle, CEO of CDM," said Jim. "Nice to meet you, I hope you'll be able to help us out," said Arthur. Jim continued, "if after hearing our current position and you are agreeable, we would like you to devote two weeks to a preliminary, on-site investigation and write a confidential report to be addressed only to Arthur and myself. Of course we expect you to keep these discussions confidential regardless of whether you accept the work." John agreed and listened intently as Arthur and Jim filled him in on the nature of CDM and its operation.

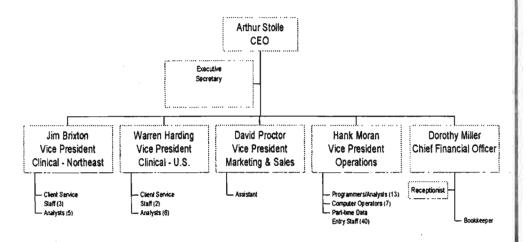
Clinical Data Management, Inc.

CDM was a service company, founded 3 years previously, whose business was to process and validate large amounts of new drug clinical trial data. Annual revenues were running at \$3.5 to \$4 million. Its clients, large to medium sized pharmaceutical companies used the data to determine the effectiveness and freedom from side effects of new drugs under clinical conditions. In the current budget year, 75 percent of revenue was projected to come from 3 drug companies, and a further 15-20 percent from 2 others. CDM expected revenues to increase significantly and reach \$12 million in five years as well as by expansion of their US client base. This is a business in which a rock solid reputation for timeliness and quality is essential. In addition, because drug trails take several years to complete, there must never be any question of financial difficulties that could been seen as endangering long term corporate viability. The bulk of this growth would come from sales to Japanese and European clients needing trials in the the U.S. Arthur had to personally make these sales, requiring him to delegate day-to-day operations to CDM's management team. CDM had a staff of 46 full-time and 40 part-time personnel reporting to 4 VPs and the new CFO (see Exhibit 1). The part-

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time staff were mostly hourly paid data entry operators drawn from a stable pool of medical or pharmacy students or nurses. A medical background was necessary due to the medical and pharmaceutical terminology used in the clinical trials. The number of part-timers utilized in any one week depended on the volume of work to be done that week. Some had worked for CDM for 2 years. Until recently, when business had begun to increase rapidly, work volumes had fluctuated considerably from week to week and this part-time staff arrangement enabled CDM to control this large element of direct costs very successfully.

CDM Organization Chart



CDM Management

Arthur was an MD with a Ph.D. in pharmacology and had 20 years experience in senior clinical positions with two major pharmaceutical companies testing potential new drugs. CDM was the first company in which he had senior general management and financial responsibility. Arthur likened his management responsibilities to "getting an MBA the hard way." One vice-president was a pharmacist (Pharm D), one was a pharmacologist (Ph.D.), one was a computer "wizard", and one, whose responsibilities included marketing/sales, had a public relations masters level degree was married with a young child and worked only 3 days each week. Neither Arthur, nor any of his VPs, other than a newly hired CFO, had a strong business background. The final member of the senior team, the CFO, had an MBA and CPA with one year's work experience in a mid-level position in very large chemical company.

Arthur explained that CDM was a not-for-profit, 501 (c) (3) corporation, formed 3 years earlier with initial funding from several teaching hospitals and universities in Delaware, Washington, D.C. and Pennsylvania. One of CDM's charter provisions was that after the first two start-up years, it must not lose money in any calendar year. The board gave strict written

instructions to Arthur that if "results in any particular year would not meet budget, he must promptly inform the board."

The company did prepare an annual operating budget, but had not engaged in strategic planning. The budget was presented to the board at its August annual meeting, but as Arthur explained was "sorta forgotten after that because CDM had never had any financial problems, had made a small profit for the past two years, and always seemed to have money in the bank." CDM's finance staff had, until 4 months ago, consisted of a book keeper "helped from time to time" by Arthur's secretary. As a privately held corporation, CDM was not required to prepare audited statements, but one of the founding hospitals had its audit manager conduct an informal review each year and reported no problems to CDM's board.

Potential Problems Emerge

Over the past 4 months, business increased significantly almost doubling expected revenues over the budget submitted to the board last year. This growth was seen by the board as great news and at the end of the previous year Arthur and senior staff were promised substantial bonuses if they pulled it off. Staff had been hired to handle the new business, including, for the first time, a CFO. However, in the past 3-4 months Arthur told John,

"CDM had previously been a pleasantly busy, happy place to work, but lately things have started to get tense. . . . There is still the excitement of growth, but we need more office and production space. Everyone is working long hours, but yet, recently we never seem to have cash in the bank and I don't know why."

Until 18 months ago, all data processing had been contracted to a local company under a month to month contract. However, it became clear that if business increased, CDM would save money by purchasing a computer, building a computer room, and hiring a data processing manager and operations staff. So, 18 months earlier CDM did that and financed the total computer and leasehold improvement costs (\$560,000) with a bank loan from Atlantic Coast Bank (ACB). CDM gave ACB previous year informally audited financials and a very rudimentary profit and loss (P&L) and balance sheet budget for the next three years that showed that CDM would have no difficulty meeting monthly loan repayments. ACB asked for and received, guarantees from 3 board member teaching hospitals for 25 percent of the loaned amount and the bank retained title to the computer.

Despite all these positive aspects, Arthur repeated that he was uneasy about the fact that "we're highly profitable, but we never seem to have money in the bank" and was unsure whether this indicated a problem that he should discuss at an upcoming board meeting. Jim added, "we decided that the opinion of an outsider might be useful, so we gave you a call."

John poured another glass of water and said, "I'll be glad to take a look at CDM—could you have the CFO prepare an updated P&L and cash flow budget for the coming year?" Arthur replied that "It might take a few days—Dorothy is very busy installing a new financial computer system." John picked up the check and the three men agreed that John would start his investigation in two weeks.

The On-Site Investigation

When John reported on Monday at 8:00 a.m., Arthur handed him the organization chart and the latest profit and loss projections (Exhibit 2) which were prepared in his own hand writing. "Dorothy was so busy on the computer project that I jotted down the P&L information myself. John, please be upbeat when you talk to our folks. We have a great team feeling and excellent morale and I don't want to alarm the employees especially if my concerns are unfounded," said Arthur.

John found the CFO's office and introduced himself to Dorothy Miller. She apologized for not having the cash flow projection ready, but stressed that she was very busy installing a new computerized financial system. John asked for her take on Arthur's comment that the company was profitable but recently never seemed to have any cash. "There is a cash flow problem, but I don't think it is too serious," said Dorothy. "As soon as we get this computer system up and running I should be able to give you a more concrete diagnosis. The system should be operational in about 2 weeks."

John continued down the hall to the bookkeeper's cubicle. Nadine, a woman of around 50 years of age had been a bookkeeper all her working life. When asked about the lack of cash she replied without hesitation, "it's simple, we aren't being paid—all the revenue is tied up in accounts receivable. I've been juggling vendor payments deciding who should be paid and who should be delayed for the last 2-3 months!" "Have you told Dorothy about this," John asked. "Yes, but she wants to get that computer running before she'll believe me," Nadine snapped. Clearly, her relationship with Dorothy was strained

Exhibit 2
CDM Expected Profit & Loss -19xx

Revenue:			\$3,218,300
	Contracts in-hand	\$2,850,100	, , , , , , , , , , , , , , , , , , , ,
	Expected Contracts	368,200	
Expenses			
	Full-time Salary & Wages*	1,701,000	
	Part-time Wages	241,000	
	Benefits/FICA etc.	460,000	
	Space Leases	240,000	
	Utilities	14,400	
	Telephone	16,000	
	T&E	42,000	
	Office Supplies	8,500	
	Computer Supplies	12,200	
	Janitorial	1,400	
	Other	52,000	
Total Expens	ses		<u>\$2,994,500</u>
Net income			\$223,800
'Full-time Sa	llaries:		
CEO, C	CFO, & 4 VPs	\$390,000	
> \$40,000 Salaries		\$858,0001	
< \$40,0	000 Salaries	\$453,000	
Total Full-tin	ne Salaries	\$1,701,000	

After talking with the two VPs responsible for the major clients, John determined that they were unaware that CDM had not been paid. However, they felt it "unwise to push them too hard for payment because they are too important as clients."

Later that evening John reviewed the loan agreement with ACB and noticed that one of the conditions was that CDM was obliged to immediately inform the bank if its current ratio fell below 1.1, and that if it did, the bank had the option to call the loan. John was stunned that no one at CDM had mentioned this provision during his interviews. See Exhibit 3 for the call provision of the loan.

¹ Of this amount approximately 75% was accounted for by Computer personnel.

Exhibit 3 Call Provision of Loan

4(d) Lessee further agrees that if at any time during the term of this lease the current ratio of CDM, Inc. (including any and all subsidiaries of CDM, Inc.) as calculated using standard accounting practices shall fall below the Triggering Event ratio of 1.1 and shall remain below this level for any one twenty four (24) hour period lessee shall be in default of this agreement under terms of paragraph 1(e) (Principal Repayment) with the repayment consequences set forth in paragraph 7a of this Lease. Lessee agrees to notify Lessor within twenty four (24) hours of any such Triggering Event and that all such notices be made in accordance with the procedure set forth in paragraph 6a.

Tuesday. John asked Dorothy if she was aware of the provision and she said she was not. However, she immediately recognized the potentially serious consequences and offered to immediately work with Nadine to prepare a balance sheet. Four hours later she informed John the current ratio was 1.12, but that unless CDM collected a substantial amount of receivables by Friday, the payroll that day would push the current ratio below 1.1 (see Exhibit 4). Other transactions that Dorothy felt absolutely had to be made by Friday, and expected cash inflows are shown in Exhibit 5.

John entered Arthur's office, closed the door, and slowly began to speak. "Arthur, CDM has a problem collecting its receivables, but your VPs are reluctant to press the clients for payments. Furthermore, your loan agreement with ACB requires that you notify them if your current ratio drops below 1.1." "What is a current ratio?" Arthur inquired. John briefly explained the concept. "Okay, what is our current ratio? Arthur asked. "Well its 1.12 today, but will probably drop to 1.08 after payroll checks are cut on Friday," John explained. "And that means we have to tell the bank, right" said Art. "Yes" said John, "but their principal concern will go beyond this payroll. This will set off warning bells and they will be worrying about the future and security of their loan."

Arthur sat down and said "I guess I should have paid more attention to the budget, which I don't like doing, and less to growing the business which I do like doing." Arthur immediately called a meeting of the VPs and explained that CDM had a short-term problem and that CDM urgently needed to collect money from its clients. At this point, one of the VPs informed the group that CDM could not collect from one major client because they had already paid in advance. Another of his accounts required product delivery before payments were triggered. Another VP chimed in, "I could call my two clients, but I'm afraid that if they thought we had financial troubles they would give us no further business." Dorothy confirmed that one of the clients was ten days late with payment and suggested she call their payables department. The group thought this was an excellent suggestion and she hurried to her office to call. She returned smiling, "there is no problem with payment and they will cut the check for \$110,000 on Thursday." "That should cover the payroll," John added. "Yes, but it needs to be deposited on Thursday. What will the company think if I pick up the check, personally?" Dorothy asked. "It will certainly be a red flag, but I don't see that you have much choice," John stated. Arthur agreed.

John explained that CDM could have the same problem next payroll and that a week by week for three months cash flow projection was urgently needed. Dorothy and the other VPs agreed and promised to work through the night if necessary to have the forecast finished by first thing Wednesday morning. Dorothy also agreed to produce a pro forma balance sheet and calculate the current ratio for the last day of each week for the thirteen week period.

Exhibit 4
CDM Balance Sheet

	Tuesday Noon		Friday p.m.	
Current Assets				
Cash	7,231		4,931	
Accounts Receivable	521,612		459,187	
Supplies	17,315		17,315	
Pre-paid Expenses	1,700		1,700	
	•	547,678		483,133
Property & Equipment				
Office furniture	24,172		24,172	
Equipment ²	37,115		37,115	
less depreciation	(6,107)		(6,107)	
Computer (less dep.)	392,00 <u>3</u>		<u>392,003</u>	
Total Assets		\$995,041		\$930,316
Current Liabilities Accounts Payable Invesitgator Fees Payable ³ Taxes Payable Current portion LTD Current portion Lease ⁴	17,122 348,638 17,189 28,108 78,102	489,159	16,718 285,988 17,189 26,437 78,102	424,434
Long-term Liabilities Notes Payable LT Leases Equity Paid-in Capital Retained Earnings	71,175 382,094 10,000 42,613		71,175 382,094 10,000 _42,613	
Total Liabilities		<u>995,041</u>		930,316

² Not Including computer on lease.

³ Fees to participating physicians/laboratories etc.

Including computer lease

Exhibit 5
CDM Cash Flow

Client Income	\$102,300
	•
Total Inflow	\$102,300
	Total Inflow

Wednesday. The news that morning was bad. Even if CDM delayed paying all its accounts payable, the company would have a negative cash flow and would trigger the bank's notification requirement in ten days. This time, the prospects for collecting a receivable quickly were not there. John explained to Arthur that CDM was in a classic "hole" of many start-up companies, it had a good P&L but a negative cash flow. Arthur called Jim Leach and asked if he and John could come over right away. Two hours later Arthur and John were in Jim's office explaining the situation. Jim suggested that the board chairman be informed immediately. The three also agreed that ACB be informed that CDM had a short term problem with the hopes they would be impressed with CDM's up-front attitude and give the company time to correct the problem. In seeking ACB assistance, particularly with regard to the loan call provision, the three thought the bank would be understanding. "Banks hate surprises!" John said. "Maybe by telling them ten days before the event they'll be more sympathetic. Perhaps, they'll even agree to give us a short-term line of credit." Arthur said hesitantly.

Band Aid Management

John advised that Arthur do everything possible to cut or delay expenses and that it would be politically good to go to the bank with a plan for expense reduction which included a short term reduction in salaries by all staff. When this idea was presented at the staff meeting on Wednesday afternoon, the line VPs made a plea not to reduce the salaries and wages of low income staff because many of them lived from paycheck to paycheck. Arthur agreed and suggested that all senior staff (President, CFO and 4 VPs) should take a 20% cut and that all manager level and other staff earning more than \$30,000 per annum would be asked to take a 10% cut. Hank, the VP of computer operations said he was uneasy about asking his staff because there was a shortage of computer staff in the area and they were critical to the immediate operations of the company. "If we lose staff and slow down, the clients will be on our backs very quickly," he said. The group agreed that a loss of marketing and client service

staff for a few weeks could be managed, but any loss of computer production personnel could seriously impact product delivery. This, in turn, could result in our clients refusing to pay agreed periodic payments predicated on CDM meeting certain delivery dates. In other words, if production slowed, the financial situation would get much worse very quickly. Arthur asked all VPs to consider the salary cut proposal overnight and be prepared to back it or present good reasons why they should not do this at 8:00 a.m. the next morning. Meanwhile, Arthur asked for a 10:00 a.m. meeting with the bank.

Thursday. At the 8:00 a.m. meeting all VPs agreed that they had no other quick solutions and that they felt they could carry their staff and retain their support. Arthur wanted to be totally open with the employees and immediately called a general meeting of all employees. Arthur told them what the problem was and that it was a short-term one. He asked for their cooperation to "ride this small problem in our history. You are well aware of our rapid growth and we fully expect to restore these cuts in 2-3 months, but we can't guarantee that." At the close of the meeting, every affected staff member was given a letter confirming the cut and indicating the company's full intention to return to the previous pay level. As the employees filed out of the room, a few stopped to voice their support to Arthur.

The Bank Meeting

At 10:00 a.m. three bank officers and the bank lawyer strode into the bank conference room and greeted Arthur, Jim, John and CDM's Board Chairman. Arthur presented the cash flow problem and the Chairman stated their belief that it was short term. They also outlined the plans for expense reduction and salary cuts and hinted that a short-term line of credit would help enormously. When they had finished, the bank officers and lawyer asked to be excused and left the room for discussion.

Arthur turned to John, "well—what do you think?" "It doesn't look good—they didn't ask many questions" John replied. "The presence of the lawyer makes me think the worst" added Jim.

The bankers and lawyer returned shortly to say that they were pleased with the CDM's salary and expense reduction plan. However, they went on to request that CDM find \$200,000 within the next ten days to be applied to principal reduction. If this was done they would not call the loan. They had heard the thinly veiled hope that a line of credit might be extended to CDM, but said they felt they should not take on any further debt. They went on to state that they did not object to CDM obtaining a loan for this amount from another bank, their only concern was to reduce the bank's exposure.

The ride back to the office was solemn. The chairman said he had anticipated the possibility of this reaction by the bank and felt that a meeting with CDM's law firm to discuss the possibility of declaring bankruptcy was in order. "Seeking court protection from our creditors and the bank might give us time to reorganize and correct our financial problems," he explained. Arthur and John didn't object to having exploratory discussions. However, Jim pointed out that the law firm would want \$25,000 up-front payment which would compound the cash flow problem. The four agreed that the Chairman would set up a meeting on Friday with the law firm, and call an emergency board meeting for that same afternoon.

⁵ Taxes recorded as payables not in this figure.

When it Rains it Pours

As Arthur and John entered the office, Arthur's secretary told him that Hank, the VP of computer operations wanted to see Arthur as soon as possible. A white-faced Hank entered Arthur's office and stated, "my systems analysts and programmers revolted and said they will all resign at the end of the week unless they were exempted from the salary reduction plan." Hank said they were very arrogant and had blamed "management" for the errors and had said there was no reason why they should pay for our errors. Further they indicated that they knew that in the current computer staff employment market that they would have no difficulty getting replacement jobs almost immediately. Hank was distraught because he had misread the situation and offered to resign there and then. Arthur consoled him, "there is no reason to talk like that—go back and tell them that I would like to address their concerns, personally."

Hank headed back to his department. Arthur looked at John and said, "do you regret having signed on with us?" "It hasn't been dull to this point," John agreed. "Where do we go from here," Arthur mused. John grabbed a legal pad and began to write.

- 1. How can CDM amass \$200,000 in the next 10 days?
- 2. Can CDM afford to meet with the lawyers? Can it afford not to?
- 3. How should Arthur respond to the system analysts and programmers? Is it fair to exempt them, but not the other staff from the salary reductions?
- 4. What else can be done to improve cash flow?
- 5. Do we really understand the problem?

Arthur asked John to give him some time to think. "Come back in an hour and we'll tackle the items on your list." John closed Arthur's door and headed to the break room for a cup of coffee.

Baldor Electric Company

Robert McGlashan, University of Houston-Clear Lake Nan Muir, University of Houston-Clear Lake Long W. Lam, University of Houston-Clear Lake

Baldor Electric Company

In the first quarter of 1997, Baldor Electric Company reported record sales and earnings. The company, one of the leaders in the electric motor industry, was proud of its performance in North America but very disappointed in its European business which was below expectations because of the strong U.S. dollar and other factors. Baldor had also been hurt by currency devaluations in Mexico. In addition, the electric motor industry, including Baldor, was having to deal with new U.S. government regulations which called for increases in motor efficiency. The regulations were driving costs up while customers were not willing to accept price increases. The Baldor executive team was trying to decide how to deal with these and other critical internal and external environmental issues so that its string of 21 consecutive quarters of increased sales and earnings would be extended. According to Baldor's 1996 annual report, the major issue was "How does a 77 year-old company in a 100 year-old industry keep going?"

Baldor Background

Baldor Electric Company was founded in St. Louis, Missouri in 1920 by Edwin C. Ballman, C.E.O. from 1920 to 1960. It had been quite successful throughout its existence (see recent financial information in Exhibits 1-4). Baldor's current management team believed that its success was due in no small part to continuity of leadership. In its 77 year history, Baldor had had only four chief executive officers. Three of those were still very much involved in operations.

The company's original slogan was, "Baldor—A Better Motor." Management tried to base critical decisions on that slogan. For example, in 1920, Baldor was the only U.S. motor manufacturer featuring ball bearings as standard, without increasing prices. In 1922, Baldor began working on "energy-efficient" motors long before that became an industry priority. The company was able to establish a position as a leader in energy efficiency, a position it still enjoyed in 1996. Through the years, Baldor focused on building high quality, competitively priced motors for industry. Sales climbed steadily and in the 1950s Baldor expanded its

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manufacturing capabilities. This included opening a new plant in Fort Smith, Arkansas. In the 1960s, the Fort Smith site became Baldor's current headquarters.

The 1960s were a turbulent time for Baldor, and it became more intent on balancing its growing manufacturing capabilities with an emphasis on listening to customers and responding rapidly to their needs. New products were introduced, manufacturing techniques were modernized, a sales and distribution network was created, and new markets were developed. Baldor also introduced employee and customer training programs. The sales and distribution network was extended to Canada in the early 1970s and to Europe in the early 1980s. In the 1970s, Baldor vertically integrated into die casting and other motor components. The company also acquired several smaller motor and electronic control companies. According to the company, these acquisitions contributed significantly to growth in sales and earnings in the 1980s and 1990s.

In the 1970s during the energy crunch, the company's high efficiency motors made a positive contribution toward Baldor's performance and reputation. Energy efficiency declined somewhat in importance in customers' minds in the 1980s, but in the 1990s again became critical. Because of this emphasis on energy efficiency, Baldor executives believed there would be a strong future for smart motors—a new kind of drive combining an adjustable speed control and a motor.

In addition to taking care of its customers, Baldor prided itself on taking care of employees. The company was non-union, and no workers had been laid off at its main plants since 1962. The company also invested heavily in education and training for its workers—about \$2 million annually.

On occasion, Baldor had not followed strategies implemented by most other companies in its industry. Three examples illustrate the willingness of Baldor to take roads less traveled. First, in its early years, Baldor made totally enclosed, fan cooled motors rather than the traditional "open" type. Second, the company placed great emphasis in the 1920s and 1930s on the efficiency of electric motors when electricity was cheap and the importance of high efficiency was not appreciated. Third, when overseas competition heated up in the late 1970s, some manufacturers in the electric motor industry in the U.S. established production facilities in other countries to take advantage of lower labor costs. Baldor did not and believed it made a correct decision because of currency fluctuations and possible decrease in quality.

In recent years, Baldor ceased dependence on the agriculture and oil industries. In the early 1980s, slumps in these two industries, combined with an influx of foreign motors, resulted in significant sales decreases and reductions in profit of about one third. As a result of this experience, Baldor broadened its product line to include less cyclical markets.

The company's corporate mission statement in 1997 read as follows:

To be the best (as determined by our customers) marketers, designers, and manufacturers of electric motors and drives. To achieve this, we must:

- Provide better value to our customers than any of our competitors,
- Attract and retain competent employees dedicated to reaching our common goals and objectives,
- · Produce good, long term results for our shareholders.

The company's slogan is "Right motor, right price, right time."

The company was perceived to be doing many things right. Since 1989, independent trade journal surveys showed Baldor was the supplier customers would buy motors from if they used only one supplier.

Electric Motor Industry

Table 1 shows the sales of industrial motors and drives (a drive is one or more motors and a control device) in the U. S. from 1991 to 1996. In 1996, the U.S. market for industrial electric motors was about \$3.25 billion and estimated to grow about 3-5% per year until the year 2000. In addition, the domestic market for motor starters, servo drives and adjustable speed drives was estimated to be about \$2.85 billion and grow more rapidly than the basic motor business—about 8-15% per year. \(^1\)

Table 1
U. S. Sales of Industrial Electric Motors and Drives
(dollars in billions)

<u> 1991</u>	<u>1992</u>	<u> 1993</u>	<u> 1994</u>	<u> 1995</u>	<u> 1996</u>
\$4.3	\$4.8	\$4.9	\$5.2	\$5.7	\$6.1

Source: Baldor Electric Company Notice of Annual Meeting of Shareholders (May 3, 1997).

Of the two types of customers to which Baldor sold, the Original Equipment Manufacturer (OEM) business tended to be more custom in nature than the distributor business. The distributor business was oriented toward maintenance, repair and overhaul applications. The OEM business tended to be more cyclical than the distributor business.

A strong product line in controls can generate additional motor sales because each drive can contain more than one motor. Customers seemed to prefer buying motors and controls from one source.

The National Electrical Manufacturers Association (NEMA) stated a number of factors important for selecting electric motors: power sources, temperature, latitude, torque requirement, services, duty cycle, types of motor enclosures, and efficiency. NEMA also established a set of recommended levels for energy-efficient motors.

New federal efficiency standards required by the Energy Policy Act of 1992 were scheduled to go into effect on October 24, 1997. This legislation required an approximate 3% average increase in the nominal full-load efficiency of all general purpose, three phase, standard electric motors, with a few exemptions. This type of general purpose motor comprised about 85% of all motors produced in the U. S. and accounted for about 45% of Baldor's

¹Starters turn motors on and off. Adjustable speed drives are motors whose speed can be controlled. Servo drives are programmable and are used for precision position and speed control in such applications as robotics, machines tools and metering equipment.

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production. In producing only motors which meet these new standards, manufacturers have to use more active materials in their motors—copper, iron, and aluminum.

It was estimated that 50-60% of the electricity generated in the U.S. was used to power electric motors. Motors which were run in continuous duty mode consumed up to 10 times their purchase price in electricity per year. Because of this, some utilities were starting to pay rebates to customers who installed energy-efficient motors. In 1996, the energy-efficient motor segment was one of the fastest growing segments in the U.S. market for industrial motors: it accounted for 22% of the 1-20 horsepower (HP) segment and 42% of the 25-200 HP segment.

Competition

Baldor in 1995 had about 12% of the total electric motor market and about 35% of the 1 to 20 horsepower market. The primary domestic competitor was judged by Baldor management to be Reliance Electric. Other significant domestic competitors included Emerson Electric, Leeson, GE, and Magnetek. Major foreign competition included Toshiba (Japan), TECO (Taiwan), Siemens (Germany), and Hyundai (Korea).

In the adjustable speed drive sector, business was fragmented, with Reliance again being a major force, along with ABB, Siemens, Allen-Bradley, Toshiba, Magnetek and Emerson Electric. The starter business at Baldor faced competition mostly from Allen-Bradley, Cutler-Hammer (Eaton Corp.) and Square D (Groupe Schneider).

Reliance Electric

Reliance Electric manufactured standard and custom-designed motors, drives, and controls. It had four research centers in Ohio, Arizona, Switzerland, and Japan. The company was recognized by the White House as one of the four leaders in energy-efficient motors and drives. It also aided the Department of Energy in drafting the 1992 Energy Policy Act. In 1993, Reliance introduced a series of energy-efficient motors that would meet such regulatory requirements. In 1995, the company was also developing superconducting electrical motors that could further reduce energy consumption. Most production facilities of Reliance Electric were ISO 9000 certified. Although Reliance Electric had solid sales for both electric motors and drives in 1993, the engineered drive business suffered from a decreasing number of orders. The market for engineered drives took the form of relatively large custom projects from individual customers and was under pressure of competitive pricing. In addition, the drive business in Europe did not perform to expectations. In 1995, Reliance Electric was acquired by Rockwell International. Reliance was combined with Allen-Bradley and others to form the Automation division, becoming the largest business unit of Rockwell. Under Rockwell, Reliance received a funding grant from the Department of Energy in 1996 to develop energy-efficient motors using high temperature superconductors.

Emerson Electric

Emerson Electric manufactured both industrial motors and drives, and components for appliances, heating and air conditioning equipment. The company's strategy was to lower its overall manufacturing costs and develop technological capability through its expertise development.

oped at four research centers (the research on electrical motors was conducted at the Motor Technology Center in St. Louis). In 1994, Emerson invested in new drive technology to increase the reliability and control capability of its electric motors. In 1993-94, Emerson acquired two U. K. companies that were involved in the motor and drive business—F. G. Wilson, a producer of power-generating systems, which had strong market presence and was a low-cost producer in developing countries; and Control Techniques, a manufacturer of electronic drives, which had developed an advanced technology in variable speed drives. In 1996, Control Techniques offered a complete package of drives, motors, and gears under the identity of "Emerson Drives Solutions" and began the production of digital drives for its AC motor customers.

General Electric

General Electric was a diversified conglomerate with operations in aircraft engines, appliances, lighting, motors, medical systems, plastics, capital services, and related areas. In 1994, GE combined its motor division with industrial drives, and installation service and engineering to form GE Motors and Industrial Systems. This division served commercial customers in industries such as utilities, paper, petrochemical, mining, and materials handling. Its consumer businesses included motors for heating, ventilating, air conditioning, appliances, pumps, and electrical vehicles. In 1995, GE formed a joint venture with Fuji Electric of Japan to develop drives. The company also had other joint ventures with companies from Mainland China, Europe, and other Asia-Pacific countries.

Magnetek

Magnetek had operations in three business segments: motors and controls, lighting products, and power supplies. For the motors and controls segments, the company manufactured AC and DC fractional and integral motors, medium voltage generators, and electronic adjustable speed drives. The AC motors were mainly used in residential appliances, pool and spa pumps, commercial ventilation, food services, mining, and petrochemicals. The DC motors were sold to manufacturers of conveyors, machine tools, and packaging and exercise equipment. In the mid 1970s, the company developed its first energy-efficient motors, and in 1995 offered a line of energy-saving motors. In 1994, about 70% of Magnetek's motors were sold to OEMs through its direct sales force. In 1995, the company opened a new fractional-horsepower plant in Tennessee and an integral-horsepower plant in Mexico. It also expanded a fractional-horsepower motor facility in England and motor and generator operations in Hungary. Magnetek also manufactured electric adjustable speed drives for paper converting, extrusion elevators (including Otis elevators), and machine tools. In 1995, the company introduced the smallest drive in the market for full-function adjustable frequency motor control. Their drive business tripled between 1990-94 and accounted for 17% of the motor segment sales in 1997. Magnetek also owned the marketing rights to an electronic drive technology developed by Yaskawa of Japan. Most drives were sold primarily through its specialized engineering sales force.

Table 2 shows 1996 sales and profit data for Baldor and some of its competitors.²

Table 2
Selected Financial Data for Baldor and Competitors^a

	Rockwell ^b	General Electric	Emerson Electric	Magnetek	Baldor
A. Corporate					
Sales	10,542	79,179	11,150	1,161	503
Operating Income	896	10,806	1,609	(37)	57
B. Segment ^c					
Sales	4,165	10,412	6,635	530	
Operating Income	537	1,617	926	36	
C. International-Corporat	te ^d				
Sales	450	25,447	3,982	206	42
Operating Income	N. A.	2,569	463	3	2

a Dollars in millions.

Management

Roland S. Boreham, Jr., 70 years old, Chairman of the Board, joined Baldor in 1961 as Vice President of Sales, after, incidentally, praising Baldor management for superb engineering but criticizing its "lousy marketing." A Baldor executive said, "You can almost trace the growth of the company from the time Rollie hit town." Boreham became Executive Vice President in 1970 and President in 1975. He was named CEO in 1978 and Chairman of the Board in 1981. He held an undergraduate degree in physics meteorology and a master's in electrical engineering. From 1948 to 1961, he was a manufacturer's representative for Baldor in Southern California. He was judged by colleagues to be low-keyed and very accessible. Boreham also did not believe in the importance of hierarchy. Baldor maintained no organization chart. Boreham stated, "Having a hierarchy is old-fashioned. You can't control people, especially Americans, but you can enlist their support."

Robert L. Qualls, 63 years old, was named CEO in 1993, succeeding Rollie Boreham. He maintained the philosophy of his predecessor CEOs in terms of customer value and service, employee involvement, and shareholder satisfaction. Qualls received his undergraduate degree from Mississippi State University and graduate degree from Louisiana State University. Prior to becoming CEO, Qualls was named President in 1990, a position he held until 1996.

In 1996, John A. McFarland, previously Vice President of Sales, was promoted to President of Baldor and joined the board of directors. The need for fresh ideas and alternative management views were cited by the company as reasons for McFarland's promotion. Table 3 shows officers of the company.

Table 3
Baldor Executives

Name	Position	Age	Became An Officer
Robert L. Qualls	Chief Executive Officer	63	1986
John A. McFarland	President	45	1990
Robert D. Butler	Vice President-Operations	54	1996
Christine Clemons	Controller	31	1995
Charles H. Cramer	Vice President-Personnel	51	1984
Lloyd G. Davis	Executive Vice President-Finance, Chief Financial Officer, Secretary and Treasurer	48	1992
Gene J. Hagerdorn	Vice President-Materials	48	1994
James R. Kimzey	Executive Vice President-Research and Engineering	57	1984
Robert L. Null, Jr.	Vice President-Manufacturing	53	1990
Jerry D. Peerbolte	Vice President-Marketing	39	1990

All eight functional Vice Presidents reported to the CEO. The Vice President-Materials position was created in 1994 to formulate strategies in response to rising raw material costs. There were no ethnic minorities who were officers.

^b Rockwell acquired Reliance Electric in 1995 as part of the Division of Automation.

^e The business segment that manufactures electric motors, controls, drives, as well as other non-motor related products: Rockwell—Division of Automation; GE—Division of Industrial Products and Systems; Emerson—Division of Commercial and Industrial; Magnetek—Division of Motors and Controls. Baldor only manufactures motors, controls, and drives.

^d Excludes exports.

² Specific financial data are difficult to secure for many competitors because they are SBUs of larger corporations.

Board of Directors

Experience and longevity were hallmarks of the board, especially among the internal directors. They were very experienced in the electric motor industry. Two of the three Chairmen and three of the four CEOs the company had over its 77-year history served on the board. There was no female or ethnic minority representation. As a group, officers and directors owned almost 29% of the Company's common stock. Board membership is shown in Table 4.

Table 4
Baldor Board of Directors

Name	Position	Internal or	Years of Board	Age
		External	Service	
R. S. Boreham	Chairman	Internal	35	71
R. L. Qualls	CEO	Internal	9	62
J. A. McFarland	President	Internal	<1	44
F. C. Ballman	Former CEO (retired)	Internal	42	83
J. W. Asher	Mgmt Consultant	External	23	71
O. A. Baumann	Mfr 's Rep (retired)	External	35	74
R. J. Messey	CFO, Sverdrup Corp.	External	3	50
R. L. Proost	VP, A.G. Edwards	External	8	58
W. J. Wheat	Professor of Mgmt	External	5	70

Source: Baldor Electric Company Notice of Annual Meeting of Shareholders (May 6, 1995). Baldor Annual Report (1996).

The Value Formula

Chairman Boreham constantly emphasized the importance of "providing value" as expressed in the mission statement. Employees received formal training on "Understanding and Providing Value." Baldor believed value to be so critical to company performance that it institutionalized that thinking through its Value Formula, which was made the cornerstone of Baldor's business philosophy. The formula was: $Vp = (Qp \times Sp) / C \times T$. It suggested that perceived value (Vp) from the customers' viewpoint will improve by increasing perceived quality (Qp) and service (Sp), and also by reducing user costs (C) and delivery time (T). In explaining the formula, Boreham stated,

It means perceived value is derived from perceived quality times perceived service divided by cost times time. The word "perceived" is important. Quality, service, cost, and delivery times are only as good as the customer perceives

them to be, not as we perceive them to be. Stating that philosophy in a formula helps both our sales engineers and customers think of all the factors that go into the buying process, not just one or two factors.

The Baldor management team was concerned about how their value concept could be used to help overcome the challenge presented by the new federal efficiency standards. Even though Baldor had a reputation of manufacturing energy efficient motors, costs had increased because of motor redesign required, but customers were not willing to accept price increases to compensate for the redesign.

Other Objectives

In addition to the direction provided by the Value formula, Baldor had established several long term targets in 1997:

Financial:	
Annual sales growth	12-15%
Pre-tax profit margin	12-14%
Return on equity	18-22%
Dividend payout	30-40%
Debt to total capital	20-30%
Other:	
 Annual U. S. motor sales growth 	8-10%
International sales to total sales	15-20%
Drive sales to total sales	30-35%

Products

The company manufactured over 4000 models of industrial electric motors for general purposes (stock products) sold mostly to distributors. It also manufactured motors for specific customer requirements (custom products) sold mostly to OEMs. Stock motors were generally shipped to buyers immediately after order, whereas custom motors were designed, produced, and delivered to customers within four weeks. Each category accounted for about half the company's motor sales. Electric motors represented 84% of total sales. Motors by themselves represented 77%. The other 7% of motor sales was in the form of drive packages (a drive is a combination of one or more motors and a control which is used to adjust motor speed). Controls accounted for 13% of sales. Percentage sales of major products are shown in Figure 1.

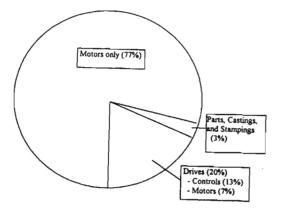
Super-E Motors

While Baldor produced various industrial AC and DC motors that ranged from 1/50 to 700 horsepower, the Super-E model was designed as a premium product that delivered higher efficiency. Baldor had always focused on energy-efficient motors. In 1976, Baldor was

recognized by the Department of Energy for developing energy-efficient products. The company continued to lead the industry on efficiency ratings and began to market its premium efficient Super-E motors in 1983. As both electric utilities and industry pushed for energy savings, sales of Baldor's Super-E motors improved substantially, growing at a pace two times the company's overall growth rate from 1986 to 1996.

Super-E motors cost more to manufacture, required more materials, better bearings and aluminum, and higher precision. Thus, this type of motor often carried a higher sticker price. According to Baldor, however, the higher prices were often recovered quickly by energy saving. For example, on a single 30 HP motor costing \$1400, the energy savings could approach \$1000 per year. Besides producing lower operating costs, Super-E motors ran at lower temperatures, thus increasing their dependability and durability. It was not uncommon for a large factory or office building to replace all their motors to achieve such savings and increased performance.

Figure 1 **Baldor Percentage Sales of Major Products**



Definite-Purpose Motors

In addition to standardized models, Baldor offered customers a wide range of definitepurpose motors: the Washdown Duty for the food processing and wet environment; the Chemical Processing for the harsh environment of manufacturing plants; and the Farm Duty for the agricultural outdoor environment. These types of specialty motors addressed the market niche that standardized motors often failed to support. For example, an engineering manager of Mushroom Cooperative Canning in Pennsylvania purchased several non-Baldor motors for food processing, but all failed after extensive use in the wet environment. Baldor's Washdown motors, however, were able to function effectively in hot and soapy water. As a result, customers such as Mushroom Cooperative were willing to pay a 40-50% premium over other brands.

Controls and Drives

Baldor Electric Company

Baldor also manufactured various controls for electric motors that were designed to reduce energy costs. However, drive products represented what the company believed was another growth opportunity. Although a drive was simply a combination of one or more motors and a control, it was often needed by a variety of industrial manufacturers of products such as elevators, machine tools, and textile equipment. Top management of Baldor cited several reasons for entry into the drive business:

- since each drive contained at least one motor, it increased sales of Baldor's motors;
- Baldor could become a sole supplier for customers, who often preferred to have the same source for motors and controls; and
- · the worldwide drives market was growing twice as fast as the motor market and was also more profitable.

Baldor believed its drives were easier to program and more cost-efficient to operate.

Shortly prior to 1995, Baldor manufactured drives of more than 10 horsepower. Continuing its efforts in the drives market, in 1995 Baldor announced a new drive called SmartMotor, which combined an adjustable speed control and industrial motor in one package. Driven by a single microprocessor, SmartMotor greatly increased the compatibility between motors and controls. It was also designed for easier installation and longer durability. In 1996, Baldor manufactured SmartMotors up to 5 horsepower and planned to produce 7.5 and 10 horsepower models.

The effort to develop new drives and motors was consistent with Baldor's product strategy. In the past, Baldor invested substantially in research and new product development, as well as improvements in production methods. Such expenses increased steadily from \$9.4 million in 1990 to \$20 million in 1996. In 1996, about 30% of sales was generated from products developed in the preceding five years. A strong investment in R&D also allowed Baldor to catalog over 250 "Matched Performance" drive packages.

Production

Production Facilities

Baldor owned and operated thirteen manufacturing plants in the U. S. (five in Arkansas, others in Minnesota, Missouri, Mississippi, North and South Carolina, Oklahoma, and Washington) and one in Germany. The Ozark plant in Arkansas was completed in 1995 at a cost of \$6 million, and specialized in the production of steel frame motors. The addition of this new plant enabled the Columbus facility in Mississippi to concentrate on cast iron motors and improve economies of scale.

Baldor also believed that its production plants had the best manufacturing lead times in the motor industry. For example, in 1992, Baldor's engineering department released more than 5,000 new specifications for custom motors, with lead times ranging from four to six weeks, half the industry average.

Production had not been without problems, however. Rapid growth was to blame for some of these problems. For example, the Seattle plant had reached 100% capacity in 1995, and management made a decision to build a new plant a few miles away. The new plant was completed behind schedule in May 1996, and as a result, business was interrupted and deliveries were delayed. Consequently, some good customers were lost. In addition, the company lost some good employees who were not willing to continue working at the new location.

Flex-flo Manufacturing

One of Baldor's manufacturing strengths was derived from its flex-flo production process. Before flex-flo, Baldor used the conventional batch system, in which the company made hundreds and sometimes thousands of a particular type of motor before switching to production of another type. This process generated a large stock of finished motors and created high inventory costs for the company. Under the flex-flo system, a production plant was divided into four areas: (a) shaft-rotor assembly; (b) end plates; (c) stators and winding; and, (d) motor assembly. The first three production areas operated simultaneously to manufacture various motor components. In the fourth area, each worker assembled a complete motor from a tray of components manufactured previously in the other three areas. Attached to the tray was a computer printout that specified the type of motor, method of assembly, and procedure for testing. Any tray with missing components was routed to a specific area for additional attention. A typical shift had about 22 final assembly people. Production rate was about 24,000 motors per week. Each person was capable of assembling as many as 2000 different models.

The flex-flo manufacturing process shortened production runs, reduced manufacturing lead times, and increased production efficiency. More importantly, compared with batch production, the flex-flo system produced a great variety of motors in a single assembly line and, within each production area, allowed workers to form teams to manage product quality, production schedule, and operating costs. The flexibility of flex-flo also allowed a production plant to experiment with new manufacturing methods and technologies, without disrupting the normal production schedule. For example, in the Ozark plant, people were able to adopt a new electronic display of engineering information and created a new manufacturing unit for reducing the number of connections in the motor windings.

The flex-flo system was often coordinated with the computer-based Order/Ship/Bill information system, which tracked sales orders from origination to completion. By linking all warehouses, manufacturing facilities, and district offices electronically, this information system greatly facilitated manufacturing scheduling and material planning. Moreover, it provided real-time information about inventory availability, customer credit, and product pricing.

Supply of Raw Materials

Baldor basically followed a vertical integration strategy with respect to raw materials, producing most of the components in-house to control the quality of its products. This included laminations, motor hardware, and aluminum die castings. A typical Baldor electric motor had 84% of its components made by the company. According to Baldor, such a vertical integration strategy helped to improve profit margins and facilitated just-in-time production. For raw materials not produced by Baldor (e. g. electrical switches, bearings, steel, copper wire, gray iron castings, and insulating materials), the company maintained multiple sources of supply. Because these materials were primarily commodity products, the company execu-

tives believed they had experienced few problems in the past in securing raw materials. Indeed, competitive pressures of the commodity market tended to drive down prices, improve quality, and reduce delivery time. Even though Baldor was one of the largest buyers of these products and thus enjoyed more leverage, the company executives believed they had nurtured long-term relationships with its suppliers.

Marketing

Distribution

Baldor did not sell directly to end-users. Instead, the company's customers were either original equipment manufacturers (OEMs) or other distributors (which in turn sold Baldor's products to industrial end-users and manufacturers). In 1996, Baldor's sales to OEMs and distributors were about equal. The former channel primarily distributed custom motors whereas the latter used more stock (standardized) motors.

To reach the OEMs and distributors in the U. S., Baldor had 45 district offices and over 2000 manufacturer's representatives as its sales force. These district offices were independently run and not owned by Baldor. However, managers of all district offices were responsible for product quotations, technical and performance issues, delivery and after-sale services to Baldor's customers. District offices hired the manufacturer's representative, purchased the equipment, owned the warehouse and other fixtures in their facilities except the inventory, which was owned_by Baldor. Such sales practices began in Baldor in the 1960s because the company believed that it was thus able to create entrepreneurial spirit and reduce layers of bureaucracy within the organization. The company also believed in stability in its sales representatives. Baldor's district managers averaged twenty years with the company and most had served the same geographical area during this time. As a result, Baldor's customers were able to contact the same district manager over the years.

Baldor also maintained close contact with its district managers to collect customer feedback and other important information. In return, Baldor provided its district offices with electronic catalogs and sufficient inventory. Baldor was the first in the industry to create a CD-ROM database. This database contained over 20,000 specifications. Customers were able to use this CD-ROM to choose the right motors by typing a few specifications (frame size, AC or DC, horsepower, RPM, voltage, phase, etc.) and saved the effort of searching through paper catalogs. On average, Baldor maintained \$50 million worth of inventory in its district office warehouses (31 of them), which provided district offices an edge in meeting customer demands. For example, Forbes reported,

"One Saturday last summer Clark's Equipment subsidiary in Fargo, N. D. lost a 20hp motor on its small-bulldozer production line, idling the plant. Baldor's rep in Minneapolis, Leslie Anderson, who services Clark, didn't have the right motor in stock, but its computer told him that the Cincinnati rep, Gene Papet, did. Papet's people overnighted the 300-lb motor to the customer, getting the plant up and running by Sunday. 'We don't have a competitor that has this kind of inventory,' beams Anderson."

Market Segments

Baldor served the market for industrial electrical motors and drives and did not manufacture products for consumer goods. In other words, customers would not find motors made by Baldor in electrical appliances, which was primarily a high-volume, low-margin business. Instead, Baldor's products were found in pumps, machine tools, packaging machinery, medical equipment, printing machines, conveyors, fitness equipment etc. Baldor also served a large number of customers, thus avoiding any influence from dominant buyers.

International Markets

While Baldor achieved success in the domestic market, it was also involved in the export business. In 1996, the global motor market was estimated to be about \$5 billion. The current Chairman of the Board, Rollie Boreham, once suggested that one way to understand foreign competition was through selling abroad, by which the company could learn about newer and sometimes cheaper products. Boreham also expressed that some of Baldor's major competitors, such as Toshiba, Siemens, and ABB, were among the largest in the world. These competitors also had the majority of their operations outside the U. S. Results of Baldor's international effort were impressive as of 1996: (a) Baldor's products were sold in more than 55 foreign countries (see Table 5 for a breakdown of international sales by region); (b) international sales accounted for about 15% of the company's business and had been growing at a rate 50% faster than domestic sales; and, (c) sales in North America were up nearly 10%. Despite these growth figures, sales in Europe remained flat between 1995 and 1996.

Table 5
Baldor's International Sales by Region

Region	Percentage of International Sales
Asia (including Australia)	12%
Europe	33%
Canada	33%
South America	6%
Other	15%

^a Excluded sales from the purchase of Optimized Controls. Numbers do not add to 100% because of rounding.

When asked about specific plans to improve Baldor's sales and profits in the overseas market, Chairman Boreham believed international executives would be the key for success. He stated

Until recently our international sales have been homegrown. John McFarland. . . volunteered back in 1993 and I said, "Well, what do you know about international sales?", and he said, "I don't know, but I can sure learn," and he did, and he developed a team that took us from \$3 million to \$70 million. Now we think it's time to get some people who are international professionals rather than homegrown, so we've added two very important key people just within the last few days, one to handle, to run our European operation and the Near East and other to handle our Asiatic and our Eastern business. . .they both had at least fifteen or twenty years experience in international, and successful experience. (Baldor 1997 Shareholders' Meeting Presentation, p. 29)

To strengthen the company's presence in the control market, Baldor acquired the U. K.-based Optimised Controls Ltd. in early 1997. Optimised Controls had annual sales of around \$7 million and produced a variety of products based on motion control technology. Motion control technology instructs several motors how to coordinate in order to perform a single task in a synchronized fashion. The acquisition of Optimised Controls was also seen by Baldor as a way of increasing its penetration in Europe and in the semiconductor industry.

Part of Baldor's exporting strategy was to uncover neglected market niches. For example, the company produced motors for dental lathes in Japan, which eventually led to orders from Toyota. More importantly, Baldor's flex-flo system provided an edge against competition when it came to flexibility in meeting foreign standards for motors. Products sold internationally were distributed through Baldor's overseas district offices (see Table 6). However, unlike its independent domestic sales operations, Baldor had majority interests in its overseas district sales offices in Singapore, Indonesia, and Australia. Baldor was the sole owner of offices in Europe and Mexico.

Table 6
Location of Baldor International District Offices

Region	Country (number of sales offices)
Asia	Australia (2), Indonesia (1), Singapore (1)
Europe	France (2), Germany (1), Sweden (1), Switzerland (1), U. K. (1)
North America (non U. S.)	Canada (5), Mexico (3)
South America	Argentina (1), Brazil (1), Chile (1), Venezuela (1)

Source: Baldor Annual Report (1995).

Source: "Baldor Electric Company," (May 22, 1997). Merrill Lynch, pp. 11.

In 1997, Baldor had no plans to open new production plants overseas. As a result, compared with most local producers in the foreign market, Baldor had to charge steeper prices to cover transportation costs, suffered from higher tariffs and other trade barriers, and was exposed to more risks arising from currency fluctuations.

In particular, the strong U.S. dollar in Europe was hurting sales figures, and the currency devaluation in Mexico had been a problem in 1994 and 1995. In order to combat the currency fluctuation problem, management was considering engaging in hedging activities. They had no prior experience in using this financial strategy.

Market Development

In 1996, Baldor estimated its share of the U.S. industrial electrical motor market at 12%. Within the market segment of 1 to 20 HP, Baldor maintained about 35% market share, which it believed to lead that segment, Lloyd Davis, CFO of Baldor, believed that future market opportunities were in the two segments that the company had yet to dominate: motors of less than 1 HP and those of more than 20 HP. In 1995, Baldor estimated its market share at 6% for motors less than 1HP. For motors of more than 20HP, the estimates were 16% for 25-50 HP, 9% for 60-100 HP, and 3% for 125-500 HP. Lloyd Davis expected extensive marketing to increase customer knowledge of Baldor and to function as a possible strategy in capturing these market segments.

Another opportunity to grow was in the international market, where Baldor had already experienced an increase in sales. But the pattern of success was not equal among regions. For example, sales in Australia and Europe were greater than sales in Asia. Competition was also more intense in motors than drives. In talking with shareholders, Roland S. Boreham, Jr., Chairman of Baldor, stated "it seems like most countries, whether it be in Latin America, or Asia, or Europe, have motor manufacturers who are kind of local pride. You know, Italy has theirs and Mexico theirs, so wherever we go with motors, we're bucking up against a local manufacturer. Whereas with drives, we have some unique drives, particularly in the vector drive area that are not available abroad, so our drives are quite popular in most foreign countries" (Baldor 1997 Shareholders' Meeting Presentation, p. 30).

Human Resource Management

The Baldor corporate culture emphasized constancy of purpose, teamwork, entrepreneurial spirit, and sharing of rewards. The last area was reinforced by a profit sharing program which had been in place since the early 1960s. According to management, people took pride in their work and turnover was low. Though non-union, the company paid close to union wages. People at Baldor tended to regard jobs as careers.

Boreham believed training was very important and that investment in this area was as critical as in R & D and capital equipment. He said,

We think the return (on training) is high, and that's why we have one of the most vigorous training programs in our industry. We believe that this results in greater value in our products.

In response to a question about how training on the company's Value Formula had been received, Boreham further stated,

Very well, by both employees and customers. In fact, our employees, on their own. actually made up a 24-hour study curriculum based on the formula, and formed teams to teach courses in each element of the value equation. Every employee has now completed the course on the value part of the equation, and most have gone through training on the quality and cost parts.

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Baldor provided a literacy and continuing education program for employees. The company offered graduate equivalency diploma (GED) preparation courses for those wanting to earn a high school equivalency diploma. Speed reading, human relations, and computer courses were also available.

In 1987, Baldor sent all 96 of its mid-level managers through the Crosby quality training program to enhance the Company's reputation for producing high quality products, Following this, it sent almost 2000 of its then 2500 employees through in-house classroom training. In 1997, Baldor had about 3600 employees.

Financial Information

Exhibits 1-4 show Baldor's financial data on stock prices, foreign operations, income statements, and balance sheets.

External Environment Issues

Baldor executives were constantly aware of what external environment factors could do to and for their organization and industry. Some of these factors uppermost in their minds in early 1997 were:

- Raw materials prices had been increasing. Steel, copper and aluminum prices were of vital concern to motor manufacturers.
- The trend toward a service-oriented economy in the U.S. could affect the markets for industrial suppliers.
- The passage of NAFTA and GATT could spur sales in North America and foreign markets.
- Expanding use of technologies was causing more demand for "smart" devices.
- Ecological concerns would likely continue to increase demand for energy-efficient devices.
- · An "electromagnetism" health scare, similar to those involving cellular phones and high-voltage power lines, could arise concerning motors.
- Companies using electrostatic painting processes (such as Baldor and competitors) faced increasingly stringent environmental controls.
- Customers wanted one-stop shopping, quick delivery of standard products, and short lead times on custom products, all at reasonable prices.
- The bulk of the materials used to manufacture electric motors were industrial commodities available from several suppliers and shortages were rare. But, there were fewer suppliers of the specialty electronics components needed to manufacture drives, and shortages sometimes occurred.

The Future

In 1997, Baldor management was mindful of their value philosophy and all its components. They had key decisions to make for the future regarding product and market development, currency fluctuation problems, increasing costs because of government regulations, unwillingness of customers to accept price increases and other important issues. Their financial strength, along with acquisitions, allowed them to consider pursuing two complementary product strategies in the future. The first would be to extend and fill in both ends of their industrial electric motor line, already one of the broadest in the industry. The second would be the rapid expansion of their drives products which were designed to augment the motor lines with electric controls. International sales growth may also favor a market development strategy.

One of the issues that concerned some Baldor managers was their past success and the need to avoid becoming complacent. Lloyd Davis, CFO, stated a need for the company to "avoid becoming arrogant" because of past success. Jim Hayes, Plant Manager at Fort Smith, was quoted as saying, "To be the 'Best' we truly have to provide better value to our customers than any other competitor does. If we quit trying or become complacent or arrogant, we lose this position very rapidly."

Chairman Boreham reflected on Baldor having taken "roads less traveled" in its successful past. There had been the attention in Baldor's early years to totally enclosed and energy efficient motors and the decision in the late 1970s to remain a domestic manufacturer. These strategies had been counter to those of many other companies in the electric motor industry. Boreham said, "Pride takes you one direction, short-term profit another. Pride usually wins out if you're a confident person." At Baldor Electric, pride had served the company well in the past with respect to communities, customers, products, and employees. In the future, what roads should Baldor take? Should some of them once again be roads less traveled? Would these roads allow a 77 year-old company in a 100 year-old industry to keep growing?

REFERENCES

Andreas, John C. (August, 1990). "Why Select an Energy-Efficient Motor?" Consulting-Specifying Engineer, 8(2), pp. 80-88.

"25 Who Help The U. S. Win," (Spring/Summer, 1991). Fortune.

"Baldor Electric," (Sept. 21, 1994). A G. Edwards & Sons Securities Research, pp. 1-6.

Baldor Circuit. (Vol. 6, August, 1995).

Baldor Electric Annual Reports. (1990 to 1996).

Baldor Electric Company Fact Sheet. (1995).

Baldor Electric Press Release. (March 8, 1995).

Baldor Electric Press Release. (March 15, 1995).

Baldor Electric Presentations to the Investment Community and Trade Press. (Spring, 1995).

Baldor Electric Product Catalogs. (1995).

Bartos, Frank J. (November, 1994) "Line Regenerative AC Drives Eye the Future," Control Engineering.

Personal interview with Lloyd G. Davis, Baldor Electric. (September 15, 1995).

Telephone interview with Christine Clemons, Baldor Electric. (October 5, 1995).

"It's the Customers' View of Value That Counts." (December 5, 1995). Design News.

Elkins, Damon (July, 1988). "Factors to Consider when Selecting Electric Motors." Consulting-Specifying Engineer, 4(1), pp. 74-77.

Emerson Electric Annual Report. (1994)

Farnham, Alan (July 17, 1989). "Baldor's Success: Made in America," Fortune, pp. 101-105.

General Electric Annual Reports. (1994-95)

Magnetek Annual Reports. (1994-95)

Murray, Charles J. (February 7, 1994). "Drives Simplifies Programming," *Design News*, pp. 539.

Porter, Michael E. (1985). Competitive Advantage. (New York: Free Press)

Reliance Electric Annual Report. (1993)

S&P Small Cap 600 Directory (1995). Baldor Electric Company. (New York: Standard & Poor's)

Schwind, Gene F. (January, 1991). "Scheduling and Handling Make for Smooth

Motor Manufacturing," Material Handling Engineering, pp. 64-68.

Securities and Exchange Commission. (1993 & 94). Form 10-K, Baldor Electric Company (Washington, D. C.: Securities and Exchange Commission).

Sullivan, R. Lee (March 13, 1995). "Powerhouse," Forbes, pp. 134.

Source: Annual Reports except data on market value, which were obtained from Standards & Poors.	Shareholders of Record	Market Value (in millions)	Common Shares Outstanding (in thousands)	Dividends Per Share	Earnings Per Share	Return on Average Equity	Price - Low	Price – High		
xcept data on	3244	\$226	14,923	\$0.18	\$0.44	9.3%	\$10.38	\$16.63	1991	Baldo Stock
market value	3251	\$326	15,267	\$0.19	\$0.56	10.9%	\$14.75	\$22.38	1992	Exhibit 1 Baldor Electric Company Stock Market Performance
, which were	3510	\$427	28,066	\$0.23	\$0.69	12.7%	\$16.25	\$24.5	1993	1 Company rformance
obtained fron	3681	\$494	28,503	\$0.28	\$0.92	15.3%	\$21.25	\$27.5	1994	τυ
n Standards	3981	\$561	28,891	\$0.34	\$1.12	16.3%	\$18.5	\$25	1995	
& Poors.	4568	\$648	27,217	\$0.40	\$1.29	17.1%	\$17.25	\$26.5	1996	
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Exhibit 2

Baldor Electric Company Sales
(thousands of dollars)

	1989	1990	1991	1992	1993	1994	1995	1996
Net Sales								
United States Companies:								
Domestic Customers	250,699	258,000	249,783	276,536	308,949	363,548	407,078	430,014
Export Customers	13,143	14,222	15,193	16,997	19,262	21,232	25,068	30,831
	263,842	272,222	264,976	293,533	328,211	384,780	432,146	460,845
Foreign Affiliates	17.620	21,808	21,519	25,397	28,384	33,372	40,957	42,030
•	281,462	294,030	286,495	318,930	356,595	418,152	473,103	502,875
Earnings Before Income Taxes	:							
United States Companies	20,181	22,027	18,851	23,990	30,746	41,508	51,723	55,160
Foreign Affiliates	_1,306	1,146	648	_ 983	1,624	1,704	1,223	_2,032
· ·	21,487	23,173	19,499	24,973	32,370	43,212	52,946	57,192
Assets:	•	,	•	•	•	,		,
United States Companies	172,358	183,983	185,409	193,822	218,509	261,984	285,381	297,496
Foreign Affiliates	13,116	_16,711	_17,868	18,119	19,441	21,171	28,081	27,990
-	185,474	200,694	203,277	211,941	237,950	283,155	313,462	325,486

Source: Annual Reports

Exhibit 3
Baldor Electric Company
Income Statements

(thousands of dollars)

	1989	1990	1991	1992	1993	1994	1995	1996
Net Sales	281,462	294,030	286,495	318,930	356,595	418,152	473,103	502,875
Other Income	739	661	<u>707</u>	<u>705</u>	1.398	1,668	2,596	2,497
Total Revenue	282,201	294,691	287,202	319,635	357,993	419,820	475,699	505,372
Cost of Goods Sold	204,321	211,342	206,953	229,686	255,557	297,212	334,306	353,345
S & A Expense	52,192	55,951	56,867	60,697	64,807	72,329	80,019	84,522
Profit Sharing	2,777	3,044	2,652	3,371	4,284	5,788	7,168	7,645
Interest Expense	1.424	1.181	1.281	908	975	1,279	1,260	2,668
Total Expenses	260,714	271,518	267,753	294,662	325,623	376,608	422,753	448,180
Earnings Before Taxes	21,487	23,173	19,449	24,973	32,370	43,212	52,946	57,192
Income Taxes	<u>8,380</u>	9.036	7,527	9,709	12,944	16,853	20,641	22,019
Net Income	13,107	14,137	11,922	15,264	19,426	26,359	32,305	35,173

Source: Annual Reports

Exhibit 4
Baldor Electric Company
Balance Sheets
(thousands of dollars)

	1989	1990	1991	1992	1993	1994	1995	1996
Cash	6,789	4,405	6,775	5,921	7,310	8,848	6,322	7,950
Marketable Securities		3,332	5,271	16,812	22,914	25,996	28,487	17,892
Accounts Receivable	45,384	51,344	49,392	51,401	59,566	71,003	77,768	80,183
Inventories	47,876	48,602	49,407	49,675	53,619	64,098	83,689	92,387
Other Current and Deferred								
Tax Assets	3,742	_5,596	6,325	5,531	8,593	11,227	15,829	_19,745
Total Current Assets	103,791	113,279	117,170	129,340	152,002	181,172	212,095	218,157
Property, Plant, & Equipment	66,968	72,542	71,279	71,157	72,396	81,502	89,071	95,364
Other non-Current Assets	<u> 14,986</u>	<u> 14,873</u>	14.828	11,444	13,552	20,481	12,296	11.965
Total Assets	185,745	200,694	203,277	211,941	237,950	283,155	313,462	325,486
Accounts Payable	11,541	11,327	9,670	9,340	12,690	18,802	18,996	20,314
Employee Compensation	3,674	4,091	4,109	3,761	4,740	5,776	5,110	5,932
Profit Sharing	2,784	3,045	2,661	3,371	4,284	5,789	7,168	7,645
Anticipated Warranty Costs	2,350	2,450	2,405	2,500	2,750	3,700	4,100	4,500
Accrued Insurance Obligations			4,518	4,792	6,616	9,156	12,627	14,286
Other Accrued Expenses	9,530	11,100	5,788	7,014	9,710	15,697	16,080	16,626
Income Taxes	2,970	2,777	1,259	533	2,121	2,777	1,967	766
Short-term borrowing		2,276	1,085			•		
Current Maturity of LT Debt	1,090	907	935	<u>686</u>	490	925	<u>978</u>	_1,113
Total Current Liabilities	33,939	37,973	32,430	31,997	43,401	62,622	67,026	71,182
Long-Term Debt	22,543	25,299	24,376	23,209	22,474	26,303	25,255	45,027
Deferred Income Taxes	14,627	13,490	12,808	11,509	<u>11,536</u>	9,968	<u>9,804</u>	8,952
Total Liabilities	71,109	76,762	69,614	66,715	77,411	98,893	102,085	125,161
Shareholders' Equity	114,636	123,932	133,663	145,226	160,539	184,262	211,377	200,325
Total Liabilities & Equity	185,745	200,694	203,277	211,941	237,950	283,155	313,462	325,486

Tredegar Industries: From Spin-off to Success

Gerard George, Syracuse University
D. Robley Wood Jr., Virginia Commonwealth University
John Daniels, University of Richmond

Tredegar Industries: From Spin-off to Success Company Background

Tredegar Industries became an independent company on July 10, 1989, when Richmond, Virginia based Ethyl Corporation spun off its plastics, aluminum, and energy businesses. General Motors and Exxon (Standard Oil of New Jersey) had formed the Ethyl Corporation as a joint venture in 1924 to produce tetraethyl lead that was added to gasoline to reduce engine "knock." The Albemarle Paper Manufacturing Company of Richmond, Virginia, purchased Ethyl Corporation in 1962 and adopted the Ethyl name for all of its operations. Ethyl Corporation faced the eventual ban of tetraethyl lead being used as a gasoline additive and therefore decided to use its strong cash flow to diversify into plastics, aluminum extrusions, energy, life insurance, pharmaceuticals, and petroleum additives. In the late 1980's, Ethyl's management did a tax-free spin-off to their shareholders of its aluminum, plastics, and energy units. The new company was named Tredegar Industries. Tredegar's name was adopted from an iron foundry business started in 1836, in Richmond, Virginia. Throughout its history, Tredegar Iron Works had a reputation for producing high-quality products, and that commitment to quality was the foundation upon which Tredegar Industries was built. Subsequently, Ethyl completed two more spin-offs, and today its primary focus is on the fuel and lubricant additives businesses.

Management Team

A team of veteran managers was assembled to lead Tredegar. The President and Chief Executive Officer was John D. Gottwald, who had previously been the Corporate Vice President-Aluminum, Plastics and Energy of Ethyl. The organizational structure consisted of two executive vice presidents. One Executive Vice President was Richard W. Goodrum, who had been the Divisional Vice President-Aluminum, Plastics, and Energy for Ethyl. The other member of Tredegar's top management team was Executive Vice President Norman A. Scher, who had been a partner in the law firm of Hunton & Williams where he had worked in the areas of corporate financing, mergers, and acquisitions. In 1995, Mr. Goodrum retired after 39 years of service to Ethyl and Tredegar. Mr. Gottwald continues as President and Chief Executive Officer, and Mr. Scher is now the Executive Vice President and Chief Financial

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Officer. Tredegar is headquartered in Richmond, VA and employs about 2500 people in operations spread around the world.

Spin-off and Initial Businesses

Plastic Segment: Tredegar Industries was initially comprised of three business segments that operated in the plastics, aluminum and energy sectors of the U.S. economy. The plastics segment was composed of the films and molded products divisions. The film products division supplied plastic films for products such as diapers, greenhouses, food packaging, and masking. Permeable films were supplied to Procter & Gamble for use in infant and adult diapers and feminine hygiene products. Patents applicable to the production of these films were jointly held by Procter & Gamble and Tredegar. In 1989, this class of products accounted for more than 20% of the consolidated revenues of Tredegar. The molded products division competed in the following four markets: packaging, beverage closures, industrial products, and injection-mold tools. The molded products division was the leading producer of lip balm sticks in the U.S., and it held patents on plastic carbonated beverage closures that are used in such countries as Japan, Canada, and Australia. This division also makes machine parts and injection molds for internal use and sale to outside customers.

Aluminum and Vinyl Segment: The aluminum segment produced soft alloy aluminum extrusions for the construction, automotive accessories, and marine industries. This segment was also a leading producer of vinyl extrusions for new and replacement windows and doors.

Energy Segment: The energy segment owned mineral rights on 133,000 acres of land through its 97% ownership of The Elk Horn Coal Corporation. These mineral rights were primarily for substantial low-sulfur coal reserves in eastern Kentucky. In addition, the energy segment owned interest in oil and gas-producing properties in western Canada and the US gulf coast.

Evolution of Tredegar 1990-1998

In 1990 Tredegar was comprised primarily of under-performing businesses, was \$100 million in debt, and had 5000 employees in 35 different locations. The three business segments, plastics, aluminum and energy, were analyzed and Tredegar's management concluded that the best strategy was to invest in those businesses in which they had a competitive advantage and exit all others. In 1990, the process of shedding unprofitable and non-strategic businesses began. At the same time, management focused on restructuring and possible investments for future growth. In 1990 Tredegar had divestiture activity in all three of its business segments. It sold U.S. oil and gas assets for \$16.5 million resulting in a pretax loss of \$7.6 million. They also announced their exit as a supplier of molded products for the automotive market. The process of reducing non-strategic assets continued in 1991. The Molded Products business segment (plastics) announced that plants in California and Kentucky would be closed within one year. The Molded Products tooling plant in Massachusetts was put up for sale and the beverage closure business was sold for a gain of \$894,000. In 1991 Tredegar invested \$2.4 million in Emisphere Technologies, Inc., a pharmaceutical research and development organization that was developing an oral delivery system for drugs currently administered by injection.

In 1992 Tredegar sold part of its investment in Emisphere Technologies Inc., for a gain of \$1.1 million. In 1993 Tredegar sold its remaining investment in Emisphere for a \$2.2 million profit. During 1993 Tredegar's management announced that they planned to dispose of a film products plant in New Jersey. Also in 1993, it was announced that Tredegar had invested in a research effort called Molecumetics located in Bellevue, Washington. Molecumetics is working to improve the drug discovery process through proprietary chemistry.

Tredegar Industries: From Spin-off to Success

In 1994 Tredegar's management closed the New Jersey film plant and announced that a molded products plant in Illinois was to be closed. They also announced that they would take a \$9.5 million write-off in connection with an investment in APPX Software. In 1994 Tredegar sold its 97% ownership in The Elk Horn Coal Corporation for approximately \$71 million and its oil and gas properties for \$8 million. In 1994 Tredegar completed its exit from the energy business.

During 1995, Tredegar announced that it was exploring the sale of the entire Molded Products and Brudi divisions. The Brudi division was part of the metal products business segment and it produced attachments, integral carriages and uprights for forklift trucks.

The Molded Products division of Tredegar was sold in 1996 for \$57.5 million. The Brudi division was also sold in 1996 for \$18.1 million. During 1996 Tredegar Investments was listed as a separate business segment in Tredegar's annual report. It was stated that Tredegar Investments' purpose was to identify and invest in early-stage, technology-based companies that have substantial growth potential.

During 1997 Tredegar added to its aluminum extrusions business by purchasing an aluminum extrusion and fabrication plant located in Texas from the Reynolds Metal Company. The Texas plant had sales of \$25.7 million for the period of May 31 through December 31, 1997 and most of the sales were to the transportation, electrical, and consumer durables market.

In early 1998 Tredegar acquired two Canada-based aluminum extrusions and fabrication plants from Reynolds Metals Company whose 1997 collective sales were approximately \$53 million. Both facilities manufacture products for the construction, transportation, electrical, machinery and consumer durables markets. Also in early 1998, Tredegar sold APPX software that had been part of its technology division.

Current Business Segments

In 1998 Tredegar was a diversified firm with three main business segments: plastic & film products, aluminum extrusions, and technology. These three segments generated a total sales in 1997 of \$581 Million with film products (53.3%), aluminum extrusions (45.9%), and technology (0.8%) of total 1997 sales. The three businesses have diverse operations and are located in different parts of the world (Exhibit 1). Each of the three businesses are discussed below:

Plastic Films and Vinyl Extrusions

Tredegar's plastics business is composed of the Film Products division and Fiberlux, Inc. Film Products manufactures plastic films for disposable personal products (primarily feminine hygiene and diaper products) and packaging, medical, industrial and agricultural products. Fiberlux produces vinyl extrusions for windows and patio doors. Tredegar makes

these products at various US locations and sells them both directly and through distributors. Tredegar also has films plants located in the Netherlands, Brazil and Argentina, where it produces films primarily for the European and Latin American markets. During 1998, Film Products expects to begin operating a production facility near Guangzhou, China, and expects to begin construction of a production site in Budapest, Hungary. The Budapest facility should be operational in 1999. Both sites will produce disposable permeable films for feminine hygiene products. Film Products and Fiberlux compete in all of their markets on the basis of product quality, price and service.

Film Products

The primary raw materials for films produced by Film Products are low-density and linear low-density polyethylene resins, which are obtained from domestic and foreign suppliers at competitive prices. Management believes there will be an adequate supply of polyethylene resins in the immediate future. Film Products has a technical center in Terre Haute, Indiana, and holds 35 U.S. patents and 14 U.S. trademarks. Expenditures for R&D have averaged \$4.7 million per year during the past three years. Film Products produces films for two major market categories: disposables and industrial.

Disposables. Film Products is one of the largest U.S. suppliers of embossed and permeable films for disposable personal products. In each of the last three years, this class of products accounted for more than 35% of Tredegar's consolidated revenues. Film Products supplies permeable films for use as liners in feminine hygiene products, adult incontinent products and hospital underpads. Film Products also supplies embossed films and nonwoven film laminates for use as backsheet in such disposable products as baby diapers, adult incontinent products, feminine hygiene products and hospital underpads. Film Products' primary customer for permeable films, embossed films and nonwoven film laminates is The Procter & Gamble Company (P&G), the leading global disposable diaper manufacturer, accounting for nearly 75% of the segment's sales. P&G and Tredegar have had a successful long-term relationship based on cooperation, product innovation and continuous process improvement.

Industrial. Film Products produces coextruded and monolayer permeable films under the VisPore(R) name. These films are used to regulate fluid and vapor transmission in many industrial, medical, agricultural and packaging markets. Specific examples include filter plies for surgical masks and other medical applications, permeable ground cover, natural cheese mold release cloths and rubber bale wrap. Film Products also produces differentially embossed monolayer and coextruded films. Some of these films are extruded in a Class 10,000 clean room and act as a disposable, protective coversheet for photopolymers used in the manufacture of circuit boards. Other films sold under the ULTRAMASK(R) name are used as masking films to protect polycarbonate, acrylics and glass from damage during fabrication, shipping and handling. Film Products produces a line of oriented films for food packaging, in-mold labels and other applications under the name Monax(R) Plus. These are high-strength, high moisture barrier films that provide cost and source reduction benefits over competing packaging materials.

Fiberlux

Fiberlux is a leading U.S. producer of rigid vinyl extrusions for windows and patio doors. Fiberlux products are sold to fabricators and directly to end users. The subsidiary's primary raw material, polyvinyl chloride resin, is purchased from producers in open market purchases and under contract. No critical shortages of polyvinyl chloride resins are expected. It holds one U.S. patent and three U.S. trademarks.

Aluminum Extrusions

Aluminum Extrusions segment is composed of The William L. Bonnell Company, Inc., Capitol Products Corporation, Bon L Campo Limited Partnership and Bon L Canada Inc., which together produce soft alloy aluminum extrusions primarily for building and construction, transportation, electrical and consumer durables markets. The Bon L Campo Limited Partnership and Bon L Canada Inc. were acquired in 1997 and 1998, respectively.

Aluminum Extrusions manufactures plain, anodized and painted aluminum extrusions for sale directly to fabricators and distributors that use aluminum extrusions in the production of curtain walls, moldings, architectural shapes, running boards, tub and shower doors, boat windshields, window components, tractor-trailer shapes, ladders and furniture, among other products. Sales are made primarily in the United States, principally east of the Rocky Mountains. Revenues are primarily generated in the building and commercial construction (62%), transportation (14%), consumer durbles (7%) and other (17%) industries. The aluminum extrusion segment depends on the growth and strength in these industries influenced primarily by trends in housing starts, commercial construction and auto sales. Aluminum Extrusions competes primarily on the basis of product quality, price and service.

Technology

Tredegar's technology interests include Molecumetics Ltd., and Tredegar Investments Inc.

Molecumetics, a subsidiary of Tredegar, operates a drug design research laboratory in Seattle, Washington, where it uses its patented chemistry to develop new drug candidates for licensing to pharmaceutical and biotech companies in exchange for up-front fees, research and development support payments, milestone-driven success payments, and future royalties. In 1997, Molecumetics signed research and marketing partnerships with two large Japanese pharmaceutical companies, Asahi Chemical Industry Co., Ltd. and Teijin Limited. Both collaborations are aimed at developing therapeutics for treatment of blood-clotting disorders. Molecumetics is separately developing and optimizing drug lead compounds for each partner. In turn, Asahi and Teijin are responsible for preclinical and clinical development in Japan and other Asian countries. In each case, Molecumetics retains U.S. and European rights to any compounds developed under the agreement. Molecumetics holds nine U.S. patents and three U.S. trademarks and has filed a number of other patent applications with respect to its technology. Businesses included in the Technology segment spent \$7.2 million in 1997, \$6.8 million in 1996 and \$5.0 million in 1995 for research and development.

Tredegar Investments. This division identifies and invests in early-stage, technology-based companies that have substantial growth potential. "The primary reason why we invest in new technologies is that we are constantly learning and seeking new ways to maximize

shareholder value." says John Gottwald, CEO of Tredegar. Some of the companies in which Tredegar holds significant positions include:

Cardiogenesis Corporation, engaged in the development of proprietary methods and systems to perform surgical and catheter-based percutaneous transmyocardial revascularization (TMR). TMR is used to treat patients with severe coronary disease. With revenues of approximately \$ 7 million having an EPS of -1.47 for 1997 and First Call EPS estimates of -2.06 and -0.38 for 1998 and 1999 respectively. Stock price has ranged from \$5.3 to \$13.6 per share in the last 12 months.

Advanced Fibre Communications designs, develops, markets, and supports the Universal Modular Carrier 1000, a digital loop carrier system. This device allows voice and data communications over fiber optic, coaxial cables, copper wires, and analog radio networks. The company recorded sales of \$309 Million and profits of \$.48 per share in 1997. First Call estimates show the company's earnings at .76 and 1.11 for 1998 and 1999 respectively. The stock price has ranged from \$21.75 to \$ 44.5 per share in 1997.

Network Appliance designs and manufactures high performance network data storage devices which provide file service for data-intensive storage environments. On sales of \$145 Million, the company had an EPS of .35 per share. First Call estimates show the company's earnings to be .58 and .83 for 1998 and 1999 respectively. The stock price has ranged from \$17.17 to \$38.38 per share in 1997.

Ciena Corporation makes and sells dense wavelength division multiplexing systems for long distance fiberoptic telecom networks. On sales of \$454 Million in 1997, the company recorded an EPS of 1.09. First Call estimates the company earning 1.35 and 1.66 per share for 1998 and 1999 respectively. The stock price has ranged from \$ 32.25 to \$62 in 1997.

At the end of 1997, Tredegar had 27 corporate investments including those listed above through its private investment fund. The distribution of investments among different industrial sectors was venture funds (22%), life sciences (41%), information technologies (21%) and communications (16%). The investments are recorded at cost, Any income or loss recognition in the future will come as a result of disposition of all or part of the investments. The cost of these investments as of Dec 31, 1997 was \$ 25.8 million with an estimated fair value of \$40.8 million.

Performance

Since 1990, Tredegar's first full year of operations, the company has come a long way. The firm has evolved by shedding unproductive units and turning non-performing units around within a short time frame. The company's earnings have grown from a loss of \$ 24.7 Million (EPS of -1.45) in 1990 to a remarkable profit of \$58.5 (EPS of 4.43) in 1997 (see Exhibit 2 for eight-year summary of operations). The return to shareholders has increased from -52% in 1990 to 65% in 1997 (see Exhibit 3 for per share data). The company has total assets of \$410 Million in 1997 (see Exhibit 4 for the balance sheet data). The strong financial condition of the company is evident in the financial statements.

Spin-off to Success

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It is commonplace: A large, profitable conglomerate recognizes that it cannot successfully manage a small subsidiary unrelated to its core business. So it spins off the subsidiary, leaving a fledgling company to seek its own destiny. A spin-off has an existing culture, customer base and staff with a corporate strategy that must be redirected quickly. An interview with Tredegar CEO John Gottwald, highlights some fundamental operating philosophies that are critical for a successful turnaround.

- Understand who you really are. The company's key strengths were in specialty product niches, where it held patent protection and broad distribution. We quickly began channeling our resources into product categories that we felt were the strongest. By doing so, we extend the lines that yield results and detract from unproductive units.
- Identify committed managers, guide them in setting their goals, and then let go. We lost many good people in the early years. We did not make any real effort to entice them to stay, deciding instead to see who would stay and be committed to a turnaround strategy. For example, the original corporate staff consisted of over 100 employees many of whom considered themselves to be in an oversight and control capacity. We decided that we needed to change the culture to one of value creation where the corporate staff viewed the line divisions as their customers. To accomplish this, we divided the line managers into 3 groups and instructed them to think like owners of the business. They were charged with identifying the staff services that they would like to purchase out of their operating budgets and the people that they would like to work on their team. This exercise produced dramatic results. In 1998, the corporate staff consists of less than forty employees, the reporting structure is flatter, costs are down, and teamwork is greater.
- Spend like a start-up. Cash is king for any small company that cannot go back to dip into its parent's deep pockets. In the first few years, we ruthlessly cut back on costs, including saving on recurring costs associated with non-profitable businesses. Disposing units that did not contribute to the bottom line not only helped improve cash positions, but also stopped the drain caused by maintaining these unproductive units.
- Increase efficiency and quality. We saw the creation of Tredegar as a rare opportunity to introduce a new management philosophy and culture to a group of under-performing businesses and product lines. We decided to stress quality as the most important driver of performance because we saw quality as a way to differentiate us from the competition. We defined quality as exceeding the customer's expectations for the life of the product by constantly reducing variation in all processes. We had a company-wide training effort to teach employees to use statistical process control and improve job skills. The goal was to increase material efficiency (i.e., good pounds versus total pounds produced), sales pounds per employee, reduced rework, more on-time deliveries, and fewer customer returns. The end result of this effort was products of consistent high quality, shorter lead times, more on-time deliveries, and ultimately, and more satisfied customers.
- Reward to the lowest possible level. Directors, officers and employees own almost half of Tredegar shares so that management, employee and shareholder interests are directly linked. Most of our workforce receives performance-based compensation and many own stock options. We think that this strengthens the link between employees, customers and

shareholders. We reward highly competent self-starters who enjoy winning. Building this performance driven culture has taken a lot of time and effort but is our most important competitive advantage.

Future Possibilities and Expanding Horizons

As Tredegar looks for ways to continue growth in sales and earnings, it has many alternatives. One such alternative is to place more emphasis on foreign operations. These may be sales oriented, such as to spread fixed developmental or production costs over a larger output. They may be resource-acquisition oriented to secure differentiated or lower cost capabilities from foreign locations. Or they may be defensive by preventing competitors from gaining advantages that may be used against Tredegar elsewhere. But any foreign alternative must be weighed against the use of resources domestically, such as to move into new potential growth industries. Each of Tredegar's product divisions has taken different strategies for international operations.

Film products is the most international of Tredegar's divisions. In its 1996 annual report, this division listed "continued expansion into Asian, Latin American, and European markets" as one of its primary strategies. By 1998 Tredegar had new plants under construction in both China and Hungary. Tredegar's expansion strategy mirrors those of Procter & Gamble, Tredegar's largest customer. If Tredegar does not supply Procter & Gamble for, say the Chinese market, Procter & Gamble might switch to a competitive supplier, such as Clopay or CT for that market. A satisfactory relationship between Procter & Gamble and Clopay or CT in China might erode Tredegar's position vis-à-vis Procter & Gamble in the United States. Between 1990 and 1997, the film products division's dependence on non-North American sales grew from 21 percent to 42 percent. The major growth was in Latin America, where 18 percent of sales were located in 1997—up from zero in 1990. The breakdown of sales by type of film product varies substantially among North America (59%), Latin America (18%), Europe (10%), and Far East (14%).

The aluminum extrusions division includes only Canada in its international strategy as outlined in the 1997 Annual Report. In early 1998, Tredegar acquired two Canada-based aluminum extrusions and fabrications plants from Reynolds Metals. These two plants generated about \$50 million in 1996 sales; therefore, they comprise almost 9 percent of Tredegar's total sales and almost 19 percent of its aluminum extrusion sales. This purchase was motivated primarily by the growth in the United States construction and building industries that fueled growth in aluminum demand. To meet that demand quickly, Tredegar needed to acquire additional capacity.

The Molecumetics division is attempting to move rapidly into domestic and international strategic alliances in order to broaden its portfolio of research opportunities while spreading high fixed costs. In 1997, the division entered into agreements with Asahi Chemical Industry and with Teijin Limited, both from Japan

Tredegar has grown from a spin-off with a combination of successful and unsuccessful units in 1989. They have managed to divest their unproductive units while improving productive units. In an eight-year span, Tredegar's stock price has increased by about 1200%. In May 1998, they announced a three-for-one stock split and a 33% increase in first quarter dividend from 3 cents to 4 cents on a post-split basis. After a lot of hard work and a success story under his belt, Mr. Gottwald notes "when I think about how much Tredegar has changed since its creation in 1989, I can't help but wonder if external perceptions have kept pace."

Exhibit 1 Plant Locations and Principal Operations

Film Products Locations Carbondale, Pennsylvania LaGrange, Georgia Manchester, Iowa New Bern, North Carolina Tacoma, Washington (leased) Terre Haute, Indiana (technical center and production facility) Budapest, Hungary Guangzhou, China (leased) Kerkrade, the Netherlands San Juan, Argentina Sao Paulo, Brazil

Production of vinyl extrusions for Purchase, New York (headquarters) (leased) windows and patio doors

Biotechnology

Principal Operations

Production of plastic films

Aluminum Extrusions Locations Carthage, Tennessee El Campo, Texas Kentland, Indiana Newnan, Georgia Richmond Hill, Ontario Ste. Therese, Quebec

Production of aluminum extrusions, fabrication and finishing

Molecumetics Bellevue, Washington

Fiberlux Locations

Pawling, New York

Investments

Tredegar Investments Seattle, Washington

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Exhibit 2 Results of Operations (Eight-Year Summary) (\$ thousands)

Years Ended	1007	100/	1005	1004	1002	1002	1001	1000
December 31	1997	1996	1995	1994	1993	1992	1991	1990
Net sales Other income	581,004	523,551	589,454	502,208	449,208	445,229	439,186	505,884
(expense), net	17,015	4,248	(669)	(296)	(387)	226	745	861
Total Revenues	598,019	527,799	588,785	501,912	448,821	445,455	439,931	506,745
Cost of goods sold	457,946	417,270	490,510	419,823	379,286	370,652	373,429	450,843
S, G & A exp.	37,035	39,719	48,229	47,978	47,973	48,130	49,764	54,457
R&D expenses	13,170	11,066	8,763	8,275	9,141	5,026	4,541	4,850
Interest expense	1,952	2,176	3,039	4,008	5,044	5,615	7,489	7,101
Unusual items	(2,250)	(11,427)	(78)	16,494	452	90	721	32,915
Total Expenses	507,853	458,804	550,463	496,578	441,896	429,513	435,944	550,166
EBT	90,166	68,995	38,322	5,334	6,925	15,942	3,987	(43,421)
Income taxes	31,720	23,960	14,269	3,917	3,202	6,425	1,468	(14,734)
Income (loss) from continuing operations	58,446	45,035	24,053	1,417	3,723	9,517	2,519	(28,687)
Income from discontinued operations	-	-	-	37,218	6,784	5,795	3,104	4,001
Net income (loss) before								
extraordinary items	58,446	45,035	24,053	38,635	10,507	15,312	5,623	(24,686)
Net Income (loss)	58,446	45,035	24,053	38,635	9,542	15,312	5,623	(24,686)

Exhibit 3 Per-Share Data (Eight-Year Summary) (\$, except shares outstanding)

Years Ended				•	,			
December 31	1997	1996	1995	1994	1993	1000		
Diluted earnings (loss)					1773	1992	1991	1990
per share:	4.43	3.44	1.80	2.47	.58	2-		
Equity per share	22.03	15.0-			.30	.93	.34	(1.45)
Cash dividends declared	22.03	17.37	14.00	12.74	10.35	9.94	9.19	9.01
per share	.34	.26	.18	.16	.16	.16	.16	
Shares outstanding at end of period	12,371	12,238	12,176	13,488	16 242		.16	.16
Closing market price				13,100	16,343	16,341	16,341	16,341
High Low End of year	73.94 37.63 65.88	45.38 20.50 40.13	23.17 11.58 21.50	12.42 9.33 11.58	12.00 8.33	12.42 6.67	7.17 4.25	10.50 4.67
Return to shareholders	65.004			11.50	10.00	10.33	6.67	4.92
	65.0%	87.8%	87.2%	17.4%	(1.7)%	57.4%	38.8%	(52.0)%

Exhibit 4 Balance Sheet Data (Eight-Year Summary)

Years Ended	1997	1996	1995	1994	1993	1992	1991	1990
December 31	223130	194422	126402	134897	116820	113938	119439	133584
Cullelle	410937	341077	314052	318345	353383	354910	338633	342168
Iotal Assets	70101	61301	69753	72774	54756	57573	58134	62021
Current Liabilities	107971	241077	143531	146467	184295	192513	188410	194907
Total Liabilities Shareholders Fouity	272546	212545	170521	171878	169088	162397	150223	147261

Rockford, Wayne & Co.

Diane J. Green, Sam Houston State University Rhonda Brown, Sam Houston State University William B. Green, Sam Houston State University Paul R. Reed, Sam Houston State University

As Allen Rockford stared down the fairway of the fifth hole, he wondered which club he should use. "Decisions, decisions, I'm always having to make decisions," he muttered to himself. From the moment Allen first seriously began considering starting his own Certified Public Accounting (CPA) firm, he had been faced with one question after another. Initially, it was great being his own boss, being in charge and being the final authority on every issue. But, lately questions had grown increasingly complex, and answers, more evasive.

After twenty plus years of public accounting experience with a Houston CPA firm, Allen decided to start his own business. In September, 1984, Allen Rockford Co. was established in Houston. Initially the firm employed three professionals and two clerical staff. Larry Wayne, a young CPA who had worked with Allen for several years, was one of the three professionals. As the firm grew, more employees were hired. In 1989, Larry Wayne was made a partner in the firm and the company name was changed to Rockford, Wayne & Co.

In the early 1990s, the company acquired the bookkeeping practice of a deceased Houston CPA. Soon thereafter, Rockford, Wayne & Co. announced an association with a local, independent CPA who would merge his practice with the firm and work out of the Rockford, Wayne & Co. office. After the successful integration of these two practices, the partners decided to expand their operations and in February, 1993, purchased the practice of Michaels, James & Co. in Huntsville, Texas.

The move to Huntsville was more than just a professional venture for Allen. He was an alumnus of Sam Houston State University and was excited about opening an office in his old college town. Having grown up in a small East Texas town, Allen felt at home in Huntsville with its slow-paced, rural setting. Larry, on the other hand, was accustomed to the urban, professional world of Houston and did not share Allen's sentiments towards Huntsville.

The opening of the Huntsville office introduced Allen and Larry to a whole new market. Huntsville was unlike Houston. It was soon apparent that the management and operating techniques that worked quite well for the Houston office were not appropriate for Huntsville. Management decided to treat the Huntsville office as an independent operation with its own financial statements, guidelines and operating style.

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In addition to Allen and Larry, the Huntsville office had two professionals and two clerical staff. Neither Allen nor Larry was in the Huntsville office full-time. Allen typically spends two to three days a week in this office, while Larry spends at most only one day a week. Allen is the administrative officer and is the final authority on every issue. Larry is the technical officer. Although Larry makes many decisions on his own, he typically discusses major issues with Allen. As a general rule, all business decisions concerning the Huntsville office are Allen's.

Since the work styles of the two officers differ, employees are careful about the issues they discuss with each partner. Kay is the Office Manager, but has no real authority. She functions more as an organizer or coordinator. When neither Allen nor Larry is in the office, the chain of command is uncertain. The other employees expect Kay to run the office, but she defers to the owners to make most of the decisions. This confusion is the inevitable result of the highly centralized organizational structure: management sets goals, plans strategies, and makes decisions regarding purchases, suppliers, billings, hiring, etc. Employees are encouraged to contribute ideas and information, but management always makes the final decision. Employees do have latitude, however, in decisions regarding their work, such as scheduling or prioritizing jobs.

Rockford, Wayne & Co. has a strong culture that is reflected in the behavior of the employees. Management expects each employee to provide the highest quality service possible, to promote the firm both on and off the job, and to meet individual, as well as company goals. Employees know each other well and think of each other as more than just co-workers. They socialize together at least two or three times a year.

Despite the personal relationships of the employees, individual work styles differ greatly. Management delegates responsibility but not the authority to ensure that work is performed in the most efficient and expedient way possible. Sometimes the work environment is relaxed and harmonious; at other times it is filled with conflict and tension. Priorities between management, accountants, and clerical staff often differ resulting in processing delays. Inconsistencies and miscommunications lead to frustration. The absence of management's presence at certain times provides the opportunity for inefficiency and time abuse. Employees often arrive late, leave early, and/or take extended lunches and breaks. Personal phone calls, which are often lengthy, are made and received during office hours. When the owner/managers are not in the office, there is always the question of who has ultimate authority. Often problems are avoided rather than resolved. Employees are often critical of other employees as well as management. They speculate as to whether management is aware of the various problems or just refuses to deal with them. Each employee seems to have a definite opinion on how operations could be changed and improved.

The management of the company believes in hiring people who will "fit in" with the firm's culture. Whether a prospective employee will "fit in" is weighted more than academic achievement and work experience. Management expects loyalty from its employees and believes this loyalty maximizes work effort. Because they believe employees will follow the example of work ethic that they set, management feels excessive control is unnecessary. Suggestions for improvements, rather than reprimands, is the typical response to problems. Conflicts among employees must be resolved by them. This is difficult however, because no one has the authority to correct another's actions.

Rockford, Wayne & Co. is one of three small CPA firms in Huntsville. In addition, there are several individual practitioners, H&R Block, and Jackson-Hewitt who operates out of the local Wal-Mart Supercenter during the spring. Of all the Huntsville competitors, H&R Block and M.B. Floyd & Co. impact Rockford, Wayne & Co. the most. Many people perceive that the services provided by CPA firms are over-priced. The services offered by the national organization of H&R Block are perceived by many people to be faster and cheaper than that of the CPA firms. This perception bars many potential customers from considering using a CPA firm such as Rockford, Wayne & Co. When the Huntsville office was purchased, the firm had contracts for several large city and county audits. In each of the last three years, the company has been underbid for new contracts and has lost at least one audit per year to M.B. Floyd & Co. Not only does this mean a decrease in revenues, but unbillable, idle time for one staff member who specializes in audit work. Local competition is not the only reason for the loss of clients. Alternative filing methods such as rapid refund, electronic, and phone reduce the demand for tax services of CPA firms. In addition, improvements in recent years in computer software packages tempt many taxpayers to prepare their own tax returns and keep their own books. Another factor contributing to client loss is the death of older clients. The majority of the client base is mostly over the age of fifty, with a high percentage of clients in their

Rockford, Wayne & Co.'s mission is "striving to provide on a timely basis and in a very personal way, the finest auditing, accounting, tax, management advisory services, and any other general business and financial services that the firm believes it can do on a professional basis and in a competent manner." The company provides services in four main areas: accounting and auditing, tax, management advisory engagements, and specialized accounting work. Clients include small and medium sized private businesses, governmental entities, nonprofit organizations and educational institutions as well as corporations, partnerships, individuals and estates. The firm acknowledges that the basic services it provides are not in themselves unique. What makes Rockford, Wayne & Co. unique is the personal attention and service given to each client. Management believes this is what sets them apart from their competitors. They feel responsible for providing more than just basic accounting services. They feel obligated to help clients in times of crisis such as IRS audits. The firm attempts to identify and meet the existing, expanding, unsatisfied and unrecognized needs of present and future clients. The company wants to grow without losing the local identity and the personal relationships it has with its clients. The company is not a risk-taker and is not particularly innovative; it is concerned with stability, internal efficiency and control. Although management states they want to grow and are receptive to new opportunities, their actions focus on maintaining stability by holding on to the current client base.

Management stresses quality as the most important aspect of the services provided. Generally, high quality services are provided on a timely basis. There are instances, however, when things "fall through the cracks." Sometimes clients do not receive their monthly tax reports until the day they are due. This causes client stress due to the time constraint of picking up the report, having it signed, cutting the check to attach, and mailing the report. Although the accountant is blamed when this happened, it is often the fault of the secretary of things "falling through the cracks," occurs when the client's regular accountant, who is

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most familiar with the client, is unavailable and another accountant fills in. Sometimes the substitute accountant ignores the instructions left by the in-charge accountant in an attempt to cut time by utilizing his own methods. Often this results in additional cost due to the mistakes in reports and advice given to client. Because of time constraints, employees sometimes have to make decisions without management's input. Any mistakes due to such decisions may not be discovered until after harm has been done to the client-firm relationship. Clients do not forget such mistakes and their opinion of the firm is affected. Although employees maintain personal relationships with many of the clients, some clients express dissatisfaction with not being able to reach management at all times.

Additionally, backlogs of work occur frequently and job deadlines are sometimes narrowly met. There is a high amount of task interdependency requiring employees to share information. Many times there is more conflict than cooperation between employees because of the significant differences in employees' goals and attitudes. The team concept is supposed to be utilized, but individuals often work independently to accomplish their own goals. Any weakness in the chain of operations causes a ripple effect of inefficiency and frustration. Again, the question of authority arises when management is absent. Rather than problems being corrected and/or resolved, they are simply circumvented and often repeated, resulting in gross inefficiencies in both time and cost to the company.

Management has always believed that business will grow more by expanding services to current clients and obtaining referrals from them than from actively pursuing new clients. Management hopes that the firm's reputation will spread by word-of-mouth and result in new business. The only real advertising done by the company is through newsletters to current clients, yellow-page ads, and sponsoring local events. Prior to the 1996, Allen did a series of radio advertisements. The local country station ran a few thirty second ads for two weeks. Allen was convinced before the advertisements aired that he had wasted both his time and money. And, in fact, there was no response to these advertisements in the form of new customers.

Rockford, Wayne & Co. operates in a complex and unstable environment. The accounting firm must deal with professional organizations that establish accounting rules, clients who demand a variety of services, and regulatory agencies that require compliance with applicable laws and regulations. The accounting profession is very structured as evidenced by the volumes of documented rules, regulations, policies and procedures on services offered. The organizations of the American Institute of Certified Public Accountants (AICPA), the Texas Society of Certified Public Accountants (TSCPA) and the Texas State Board of Public Accountancy each have their own set of rules that accountants are required to adhere to. Additionally, these organizations are constantly issuing new pronouncements as well as changing and updating old pronouncements which affect the accountants' work. Not only does the firm's clients change over time, but the clients change. Clients' expectations and evaluations of services received vary. Additionally, regulatory agencies including the SEC, IRS, and governmental agencies have laws and regulations with which the client must comply. These dissimilar external elements, including the professional organizations, the clients, and the regulatory agencies, are diverse and change frequently and, often, unpredictably.

In recent years, there has been an increasing trend toward smaller businesses due to both downsizing as well as the increased number of new small entrepreneurial businesses. Many

of these small companies will need someone from outside of their organization to perform financial functions such as payroll, receivables, payables and accounting so that they can concentrate on running their businesses. Because of the multitude of complex changes in the federal income tax laws, some businesses are hesitant to risk the consequences of making mistakes when preparing their own return, and accordingly seek professional help. There is, however, increasing support for proposed legislation to reduce the complexity of current tax laws. Any drastic changes in the current tax system, such as a flat tax or consumption tax, could directly impact the company. Additionally, there is currently a proposal for a state income tax. If a state income tax law were enacted, many current tax clients would most likely ask their CPA to prepare the state return in addition to the federal return.

An increasing number of people in today's society, regardless of their financial status, are concerned with their personal finances. These people are seeking professionals to help them not only with income tax planning, but investment planning, estate planning, retirement planning and risk management as well. A 1995 survey showed that CPAs can expect growth potential of 75.2% in computer consulting, 57.1% in personal financial planning, 55.4% in operational audits, 50% in review services, 46.4% in regulatory compliance, and 41% in quality control.2 Rockford, Wayne & Co. currently offers many of these services and has the capability to offer all of them.

CPA firms are required to undergo a peer review every three years to ensure compliance with the professional standards. At its last review, Rockford, Wayne & Co. received an unqualified opinion. This means that there were no exceptions to the established standards and rules and the reviewer found it unnecessary to issue a letter with recommendations on areas needing improvement. Very few firms in the industry are operating at this level of quality. When Allen learned of the positive results, he instructed Kay to advertise the news in the local paper. However, the advertisement was never made: Kay failed to call the newspaper and Allen failed to follow up.

The company's computer system is currently divided into two separate operating systems. There is a network that attaches each computer in the office to a server, from which all programs are run. In 1996, a new personal computer was purchased primarily for use in tax return preparation. After the computer was installed, however, it was discovered that the addition of such advanced technology to the old system resulted in numerous incompatibilities. The new computer does not recognize any of the network programs and its use is therefore limited to tax return preparation and occasional spreadsheet applications. Since tax preparation is seasonal, the computer sits idle most of the year. Also, the addition of the new computer created havoc on the network connections to the printers, as many programs now require the users to go through a convoluted series of commands in order to print. In addition, most of the network programs can only be accessed by one user at a time, and many can only be accessed on certain computers.

The current billing process is a labor intensive, time consuming task. Kay prepares invoices for each client showing the services provided and the time spent. Then Allen and Kay

¹Chesser, Delton. "CPAs as Financial Planners." Journal of Accountancy, October, 1995, 99-102.

What Do Small Businesses Need From CPAs?" Journal of Accountancy, May 1995, 20-24.

Rockford, Wayne & Co.

spend half a day each billing period reviewing each statement, comparing it with that of the previous month, and deciding the appropriate charge. During peak work periods such as tax season, neither Allen nor Kay take the time to keep up with the billing process. In 1996 customers were billed in May and June for services provided the previous December. Many customers questioned these bills feeling that they had already been paid. Since the bills covered several months' work, they were, of course, higher than the usual monthly bill. Clients were not pleased to learn that the billing process was behind several months and that the bills were indeed correct. Since there is no formal fee list for services, most of the employees cannot provide accurate estimates of charges for services for potential customers who call.

Another problem with billings occurs during tax season. Statements are included with the completed tax returns. Clients have the option of paying upon receipt of their return, paying later by mail, or being billed after a month if payment is not received. Many of these clients do not pay these bills for several months, if at all. There are instances where the company has continued providing services to clients who are over two years delinquent and owe as much as \$2,000.

The company's financial statements shown in Appendices A & B reflect the problems Rockford, Wayne & Co. has experienced in recent years. Allen is an expert at reading financial statements and he knows that the company will have more financial difficulty in the future. He knows that changes and improvements are imperative, but he does not know what to do or where to begin. Should he advertise more? Should he go door to door trying to drum up business? Should he expand the services offered or cut back? Should he concentrate more on quality or costs? Should he try to revive the company or cut his losses and get out now? There were so many questions in Allen's mind that he almost didn't hear his golf buddy calling him, "Hey, Allen, you going to tee off today or what?"

Allen shook his head and tried to forget about his problems at work. He grabbed the nearest club from his golf bag and approached the tee thinking, "I'll try this one. Maybe I'll get lucky!" He hit the ball, crossed his fingers and hoped for the best.

APPENDIX A

Rockford, Wayne & Co. Comparative Statement of Assets, Liabilities, and Equity For the Years Ended December 31, 1994, 1995, and 1996

-	1994	1995	1006
Current Assets			1996
Cash	\$ 26,422	\$ 36.604	
Accounts Receivable	55,902	\$ 36,694	\$ 48,971
Inventory		78,279	89,772
	1,057	3,001	<u> </u>
Total Current Assets	83,381	117,974	143,817
Property and Equipment		,	145,017
Fixed Assets	56.000		
Accumulated Depreciation	56,902	65,821	77,418
Depreciation	(36,259)	(46,206)	(61,303)
Net Property and Equipment	20.642	,	**************************************
	20,643	19,615	16,115
Total Assets	\$ 104,024	Ф 1 27 год	
	<u>w 104,024</u>	<u>\$ 137,589</u>	<u>\$ 159,932</u>
Current Liabilities			
Accounts Payable	\$ 9,244	\$ 7.926	
Notes Payable	11,827	+ /,>=0	\$ 7,158
Other Payables	3,972	13,268	10,147
		<u>1,410</u>	1,118
Total Current Liabilities	25,043	22.604	4.6
Yana Mara	25,045	22,604	18,423
Long Term Notes Payable	23,415	_10,147	0
Total Liabilities			0
Total Liabilities	48,458	32,751	18,423
Stockholders' Equity		,,,,,,	10,423
			,
Common Stock	1,000	1.000	
Retained Earnings	_54,566	1,000	1,000
		_ 103,838	140,509
Total Stockholders' Equity	_55,566	104 929	141 500
		104,838	141,509
Total Liabilities and			
Stockholders' Equity	\$104,024	\$137,589	\$159,932
			4137,732

APPENDIX B

Rockford, Wayne & Co. Comparative Statement of Revenues and Expenses For the Twelve Months Ended December 31, 1994, 1995 and 1996

	1994	1995	1996
Sales Cost of Sales	\$442,625 242,444	\$449,817 248,061	\$444,013 _247,227
Gross Profit	200,181	201,756	196,786
General and Admin. Advertising Depreciation Office Expense Other Expenses Rent Salaries Utilities	2,100 3,115 3,429 4,089 18,000 94,365 _3,867	2,620 9,947 4,210 4,603 20,400 95,580 3,947	3,350 15,097 4,429 4,961 21,600 98,990 _4,007
Total General and Admin. Expenses	128,965	141,307	152,434
Net Income before Interest and Taxes	71,216	60,449	44,352
Interest and Taxes Interest Taxes	1,635 _12,395	1,420 <u>9,757</u>	1,210 <u>6,471</u>
Net Income	<u>\$ 57,186</u>	<u>\$ 49,272</u>	<u>\$ 36,671</u>

Great Lakes Gas Corporation: Accounting Issues Related to Mergers and Acquisitions

Barry J. Bryan, The University of Mississippi and Anonymous*

ABSTRACT

Prior to the consummation of a corporate acquisition purchase transaction, a gas utility corporation is faced with two separate accounting issues, which have an effect on the recording of the purchase. Students are required to research the issues and derive solutions based on guidance in the authoritative literature. In doing so, the student should come to an understanding that issues such as the ones presented in the case are not always directly addressed in the literature and that decisions must be derived from related pronouncements.

Background

Great Lakes Gas Corporation's (Great Lakes) principal line of business is the distribution of natural gas as a public utility. Headquartered in Madison, Wisconsin, the corporation serves approximately one million residential, commercial, industrial, and other customers in Wisconsin, Michigan, and Ohio. Great Lakes has recently entered into an agreement to purchase Great Falls Company (GF). GF is headquartered in Buffalo, New York, and serves approximately 200,000 customers in western and northern New York State.

The purchase of GF supports and expands Great Lakes' natural gas sales and capitalizes on its gas energy expertise. The new division, like other distribution divisions of the company, will provide natural gas to residential, industrial, and commercial users. Great Lakes has historically been a market-driven energy company with a management team committed to achieving profitable growth of its natural gas energy businesses in an increasingly competitive environment. Management's strategies for achieving these objectives have consisted of: (1) promoting new markets for natural gas; (2) enhancing financial and operating performance; and, (3) expanding Great Lakes through development of existing systems and selective acquisition of new systems.

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The case is based on an actual corporate acquisition. Names and numbers have been changed to preserve anonymity. In addition, due to current litigation relating to this acquisition, the co-author's (practitioner's) name and position within the company have not been included. This information will be provided upon request only.

On June 1, 1996, Great Lakes and GF entered into a purchase and sale agreement whereby Great Lakes will acquire all of the distribution assets owned by GF. Great Lakes will pay cash at closing based on account balances as of November 30, 1996. The transaction will be accounted for as a purchase. Closing is scheduled for December 31. The acquisition will be financed through the sale of a mixture of debt securities, common stock, and preferred stock. During the course of the acquisition, two major accounting issues have been given serious consideration by management and Great Lakes' independent auditors.

Accounting for Sharing of Revenues

In October, in an effort to quickly settle a State of New York rate filing, Great Lakes and GF entered into a revenue sharing agreement. Under this agreement, Great Lakes and GF share in an incremental revenue increase for the period from the inception of the new rates on November 1, 1996 to the closing of the sale on December 31, 1996. Great Lakes' portion of this revenue increase is estimated to be approximately \$1,000,000, resulting in net income of approximately \$230,000 after Federal, state, and sales taxes, and related costs.

During the purchase negotiating process, GF informed Great Lakes that it was in the midst of a rate increase request with the New York Public Service Commission with respect to its gas distribution operations. In an effort to expedite the resolution of the rate case and to separate the rate case approval from the New York Public Service Commission's approval of the purchase of GF, a quick settlement was reached with the Commission on the revenue increase. Great Lakes and GF "agreed" that an annual revenue increase of approximately \$10 million would be acceptable in lieu of the \$20 million increase originally requested. As a condition to the agreement with the rate settlement, GF agreed to remit to Great Lakes 45 percent of the revenue increase earned from the effective date of the increase through the date of closing.

Great Lakes' auditors are considering the proper accounting treatment for this issue. It has been suggested that this transaction is a "settlement" and should be treated similarly to the proceeds received in legal settlements and recorded as an "other income" item. Additionally, Great Lakes has also agreed to assume certain contingent liabilities that arise prior to the close. In this case, future costs of settlement are charged to the purchase price. Logically, it can be deducted that any credits received should also be recorded as reduction of the cost of the acquisition. GF has already recorded 100% of the rate increase as revenue while the cash disbursement to Great Lakes for the revenue sharing arrangement has been recorded as a reduction of the sales price proceeds. How should Great Lakes account for this transaction?

Accounting for Customer Bad Debt Acquired

In accordance with the purchase agreement, Great Lakes will acquire the customer accounts receivable of GF, net of an allowance for uncollectible accounts. GF has represented and warranted that "all accounts receivable have arisen from bona fide transactions in the ordinary course of business and are collectible in the aggregate balances thereof, subject only to any allowance for doubtful accounts."

Subsequent to the June 1 agreement date, GF settled its rate case effective November 1, 1996. Included in the final order from the New York Public Service Commission was a modi-

fication known as the "Freezing Temperature Program." This clause in the rate order prohibits the discontinuance of gas service to any residential customer, including all residential tenants of an apartment building, for nonpayment of bills where gas is used as the source of heating or to operate the only heating equipment at the residence, from November 1 through March 31, annually, on any day when the National Weather Service local forecast, between 6:00 a.m. and 9:00 a.m. for the following 24 hours, predicts that the temperature will drop below 32 degrees Fahrenheit. For the most part, the temperature during the period November 1 to March 31 generally falls below 32 degrees in GF's service territory. This results in uninterrupted service to customers who do not pay their gas utility bill. The customer may be disconnected after March 31 but will not be reconnected until all past due balances are paid in full or if a payment deferral agreement is signed by the customer.

At the date of close, Great Lakes and GF agreed that an allowance of \$1,000,000 was needed to cover uncollectible accounts as of December 31, 1996. At July 31, 1997, there are now approximately \$2,000,000 in uncollectible accounts receivable with the related provision of only \$1,000,000 recorded earlier at December 31, 1996. Thus, at July 31, 1997, Great Lakes now needs to record additional reserves. No provision has been made for the cost of mandatory future service on the uncollectible accounts due to the requirements of the "Freezing Temperature Program."

Can Great Lakes account for any additional unrecoverable customer accounts receivable due to the effect of the "Freezing Temperature Program" from December 31, 1996 through the end of the "Freezing Temperature Program" on March 31, 1997? In addition, should the additional reserve for uncollectible accounts be recorded as an adjustment of the purchase price or must it be recorded as a period expense?

The Island Food Company Limited (A)

Unique Tasting Cheeses, Butters, & Cream From the Pastures of King Island

Daniel F. Jennings, Texas A&M University
L. Murray Gillin, Swinburne University of Technology
Helen Evans, Swinburne University of Technology
Valerie McDougall, Swinburne University of Technology
Craig Sadler, Swinburne University of Technology

King Island marks the western edge of Bass Strait, halfway between Victoria, Australia and Tasmania. The fortieth parallel (40 degrees south latitude) runs smack through this 58 kilometer by 21 kilometer speck of ground in the Pacific Ocean. The island's coastline has the dubious distinction of being the most treacherous stretch in Australia and the site of its worst civil disaster. Here the ship Cataraqui and her 399 passengers sank in 1845. Eventually, two lighthouses were built and the shipwrecks subsided. Today, "King Island" means quality dairy products to millions of Australians. However, King Island's dairy industry has withstood many financial hardships during its century of existence. For example, the island's largest employer, the King Island Dairy, has been in receivership twice.

History of King Island Dairy

King Island Dairy, started as a farmer's cooperative in 1904, produced cheddar cheese and butter for export to the United Kingdom (UK). By 1975 more than 5,000 cows located on about 60 farms supplied milk to the cooperative. Also in 1975, the cooperative began an

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^{*}Unless otherwise noted, financial data is expressed as Australian dollars.

This case is based on original research conducted by Helen Evans, Valerie McDougall, and Craig Sadler while they were completing their Master of Enterprise Innovation Program at Swinburne's Centre of Innovation and Enterprise. Research supervision was by the centre's director, Professor Murray Gillin. Rewriting of this case for educational purposes plus the gathering of additional information was performed by Professor Daniel Jennings. Swinburne University appreciates the cooperation of The Island Food Corporation and in particular Frank Beaurain, Leo Dwyer, Leonard Lane, Dan O'Brien, Alice Shugg, and Helen Waterworth. This case was prepared as a basis for class discussion rather than to illustrate either effective or ineffective handling of an administrative situation. Copyright, 1996 by Swinburne University of Technology, Centre of Innovation and Enterprise and the first author.

ambitious project to raise capital to produce powdered milk products. Unfortunately, in the late 1970s world commodity prices for milk and related dairy products fell with a resulting decline in Australian dairy exports. The profitability of the cooperative, as well as the incomes of King Island farmers, declined significantly and the powdered milk project was canceled. Bill Kirk purchased the cooperative in 1978 for \$180,000 and turned it into a profitable bulk-curd processing operation with the assistance of a Tasmanian state government loan. However, Kirk had only one customer for his product, the Heinz Corporation, who ended their customer-supplier relationship with King Island Dairy in 1985. After this, Kirk surveyed a number of "trendy" Melbourne delicatessens to determine their market needs. This survey led to the strategy of upgrading King Island Dairy's product-line by producing "double cream," butter, and the development of a specialty cheese—brie. Kirk also acquired a distribution arm, Butterfield Cheese Factors, in 1986. However, Kirk's debt to the manian Development Authority (TDA) increased to \$1 million, with Westpac Banking Corporation holding a \$280,000 first mortgage on the business. TDA called in Touche & Ross as receivers for the King Island Dairy. Mr. Kirk stated that the decision to place King Island Dairy in receivership was politically motivated by Tasmanian State Premier Robin Gray. According to Kirk, King Island Dairy had a 1985 certified value of \$3 million with a projected profit of \$600,000 by 1988. Kirk also stated, "the brands that my wife and I created were worth a fortune—maybe \$10 million or \$15 million. We were taken advantage of and lost the opportunity to reap the rewards." Premier Gray's position was that Kirk's "scheme was not workable and that the more than 100 small creditors of King Island Dairy had to be protected.² The second-board listed firm,³ Transequity, purchased King Island Dairy in late 1986 for \$260,000 and invested an additional \$150,000 into the dairy so that commercial quantities of brie and cream could be developed. Thus, King Island Dairy became Australia's first commercial manufacturer of brie cheese.4

Australian Cheese Market

Cheese is a billion dollar a year business in Australia with consumption growing from a kilo per capita of 2.8 in 1960 to 9.5 in 1996. "Specialty" cheese has been the fastest growing segment of the cheese market in recent years. While specialty cheese is hard to define, it is non-cheddar and generally includes blue and white mould ripened cheese such as brie, blue, or camembert. Specialty cheese now represents 30 percent of the UK market while sales of white mould cheese alone is 20 percent of the French market. Sales of mould ripened cheese in Australia was zero in 1986 and increased to 2087 tons in 1996.5 Mould-ripened cheese sales in Australia has grown at an average compound growth of 8 percent since 1991 while the sale of imported cheese, such as preserved canned products, has declined. Exhibit 1 illustrates the consumption of mould ripened cheese by country.

Exhibit 1 Per Capita Consumption of Mould Ripened Cheese By Country 1996

Country	Per capita consumption (kilos)
Japan	0.68
Australia	6.35
United Kingdom	7.35
France	47.64

Source: 1997 Internal Report, Island Food Company Ltd.

The Island Food Company Limited (A)

Dan O'Brien

Dan O'Brien, a Tasmanian by birth, completed his degree in veterinary medicine in Western Australia in 1979 and was a successful veterinary surgeon with practices in the small Riverina towns of Deniliquin and Finley. In 1984, at age 28, O'Brien headed for Harvard University to obtain a Masters of Business Administration (MBA) degree. During the summer between his two years of study at Harvard, O'Brien worked with McKinsey & Company, a U.S. consulting firm with international offices. During his final year at Harvard, he completed a major study of the fresh milk market in the United States. Returning to Australia in 1986 after receiving an MBA with distinction, O'Brien formed Agricorp Ltd., an agribusiness consultancy, with the backing of three private investors from Melbourne. O'Brien envisaged a brighter future for himself by adding value to agricultural products than he did in caring for ailing animals.

Although the King Island Dairy and its associated distribution arm, Butterfield's, were both underutilized by Transequity, O'Brien perceived a gold mine in the established King Island brand names. Accordingly, in December 1988, Agricorp, O'Brien's firm, acquired Transequity for \$5 million.6

Salmon Farming

In addition to acquiring King Island Dairy and Butterfields, Agricorp also obtained a salmon farming operation from Transequity. Salmon farming had been touted as the "industry of the future" by a government study, and O'Brien's main focus switched to this activity despite his perception of the potential of King Island Dairy's brands. After 12 months of attempting to develop the salmon farm, O'Brien decided there were too many problems, quit salmon farming, and refocused on King Island Dairy.

¹ See the Glossary for a discussion of Australian bankruptcy requirements.

² Andrew Darby, "A Sour Taste on King Island," Sydney Morning Herald, 11 March 1992, pp. 11.

³ See the Glossary for a definition of a "second-board" company.

^{4 &}quot;King Island Dairy," Personal Investments, November 1990, pp. 24.

⁵ Statistics obtained from Island Food Company.

⁶Nigel Austin, "Say Cheese," The Bulletin, 26 November 1991, pp. 100-101.

Helen Waterworth and Alice Shugg

Helen Waterworth and Alice Shugg were two Tasmanian school teachers who joined King Island Dairies in its early years for a supposedly short time but "got caught up in the excitement" and staved much longer. Alice had been at work for a few days when O'Brien asked what she would be doing the next day.

"I don't know, What?" Alice responded.

"Driving a cheese truck," replied O'Brien.

"As long as I can put a bow on it, no worries!" exclaimed Alice.

Alice started driving the cheese truck plus bow which, in essence, was a "cash sales" van. Her task was to phone customers for orders, and after obtaining an order, "pick" the products. The customer's order was then delivered. A "jack-of-all trades" employee, who later became operations manager of the dairy, assisted Alice in her efforts. Most of Alice's job involved selling by telephone. After working for two months "driving the cheese wagon" and selling by telephone, Alice left because of a prior commitment. Later, she returned and worked in sales for King Island Dairy. Now married, Alice lives outside Tasmania but still performs contract work for the dairy.

Helen Waterworth, a school teacher living on King Island, had planned to leave teaching and to move to Melbourne. O'Brien asked her to "help out at the dairy" which she did for several months. Later, Helen informed O'Brien that she was quitting.

"Why?" asked the surprised O'Brien.

"I don't want to be a lackey all of my life," replied Helen.

"Work out a career path and let's talk about it later," responded O'Brien.

The next day, O'Brien informed Helen that Butterfield's promotions manager was leaving and the job was hers. At age 26, Helen took on the task of developing the dairy's brands. She selected the printing and packaging used for the products and also supervised the actual packing of products for sale.7

Developing An Image

Although Butterfield's promotions manager worked to facilitate the distribution process, King Island Dairy had no advertising budget, Helen persuaded O'Brien to spend \$20,000 to hire Australia's leading designer, Ken Cato, to develop a distinctive packaging logo. Cato selected an old-time full masted clipper which captured stories of King Island's heritage. Locals stated that the milk from the Island's cows was special because of the green grass that started growing when mattresses from shipwrecks were washed ashore and that the presentday grass was free from acid rain fallout which produced dairy products with a unique intrinsic taste. Consumers were pushing for "natural" food and King Island Dairy capitalized on the "clean, green" image. Helen ran an advertisement in the Financial Review which contained the logo, a line about a hamper of cheese, and the dairy's telephone number. The dairy began receiving 120-130 calls per day from the ad. Helen also began using well-trained university students to present the dairy's products at wine tasting affairs, art shows, and other

appropriate events. Helen began mailing "packs" of cheeses to members of the media and inviting food journalists to the island for a taste of the "magic." These actions generated a number of positive stories regarding King Island cheeses with little actual advertising dollars being spent. Two years after O'Brien had acquired King Island Dairy, sales from dairy products was nearly \$8 million.8

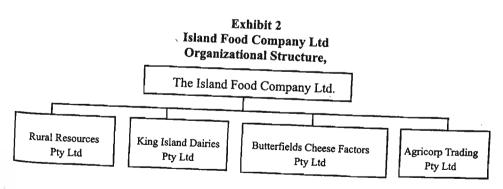
Leo Dwyer

The Island Food Company Limited (A)

Leo Dwyer, O'Brien's roommate at the Harvard Business School, grew up in New York City within sight of the Empire State Building. Despite being trained as an architect, Dwyer had a flair for figures and had worked as a senior associate for Drexel Burnham Lambert. Later, Dwyer had worked on a variety of projects for Agricorp as a consultant. After O'Brien acquired King Island Dairy, he employed Dwyer as a consultant to develop a proposal for raising additional funding for the dairy. Later, Dwyer became a full time executive with King Island Dairy working in the area of developing pro-forma financial statements, and working with investors to raise funds. These activities complemented those of O'Brien.

Fund Raising and Revised Organizational Structure

Four years after acquiring King Island Dairy, Dwyer and O'Brien formed an unlisted public holding company, the Island Food Company Limited. As depicted in Exhibit 2, King Island Dairies became one of four subsidiaries of this new holding company which assumed the assets and liabilities of Agricorp.



Rural Resources operates the Kyeema dairy farm and the recently established Boongarra dairy farm, both on leased land in King Island. With 2,100 milking cows, this is one of the five largest dairy farming operations in Australia.

⁷Personal interviews with Helen Waterworth and Alice Shugg.

⁸Personal interviews with Helen Waterworth and Alice Shugg.

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King Island Dairies, the only significant milk processor on King Island, produces specialty cheeses, other milk products, and bulk mozzarella cheese (made from excess lowfat milk).

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Butterfields Cheese Factors is responsible for the distribution of King Island Dairy Products as well as other Island Food Company brands. (Appendix 1 provides a complete listing of all Island Food Company products.) Butterfields markets products to retail customers and food service firms directly in Sydney, Melbourne, and Queensland and through other distributors to the rest of Australia. Butterfields started as two businesses in 1980 (one in Sydney and the other in Melbourne) that merged in 1985 and later acquired by Bill Kirk's King Island Dairy in 1986. Butterfields also distributes, on a non-exclusive basis, other well known brands of Australian dairy products as well as imported brands of cheese.

A private share placement of Island Food Company Ltd's stock yielded \$4.2 million. Dwyer and O'Brien planned to utilize the additional funds to expand the dairy herd, upgrade the cheese-making manufacturing facility, acquire a smallgoods9 business owned by Adolf Hofmann, repay an \$800,000 bank overdraft, and improve the company's balance sheet.¹⁰

Competition

Despite the rapidly growing demand by Australians for specialty cheese, it is a very competitive market. Island Food Company's competitors include both manufacturers of specialty cheeses and distributors. The French-owned Lactos Pty Ltd based in northwest Tasmania is Island Food Company's largest manufacturing competitor. Lactos was started in 1955 by a Czech refuge and dairy technologist whose family had been making cheese for 300 years. Lactos now has annual sales of \$35 million which provides the same rates paid to milk farmers in northwest Tasmania. From time to time, Lactos has announced that it was building a new plant on King Island to compete with Island Foods or that Island Foods was being acquired by Lactos.11

The four largest distributors of specialty cheeses in Melbourne are Butterfields, G.S. Fidler, Lactos Gourmet Cheeses (owned by Lactos Pty Ltd), and Manora International Cheese Distributors. All four distributors carry both Australian and imported specialty cheeses, sell to wholesale and retail businesses, and offer a variety of services including competitive prices to their customers. 12 Recently, Lactos has automated much of its specialty cheese production and pays farmers more for their milk than does Island Food Company. In fact, 19 of Island Food Company's suppliers have organized to the extent that they negotiated a seven year contract with Island Foods.

Protecting the King Island Brand Name

For over 25 years the Hofmann family made a variety of smallgoods on King Island and, in 1987, Adolf Hofmann named his smallgoods butcher shop the King Island Gourmet Meats and Smallgoods. Adolf then began marketing smallgoods to Melbourne using the "new" name of his shop. Many customers linked Adolf's smallgoods business with that of King Island Dairy. Unfortunately, the quality of Adolf's smallgoods varied considerably which caused O'Brien to be concerned about protecting the King Island Dairy brand name. In 1991, Leo Dwyer recommended that King Island Dairy acquire Adolf's smallgood business. "A strategic reason existed in acquiring the business," explained Dwyer. "People associated Adolf's business with our products and we had to take steps to ensure our reputation for quality. Also, we could distribute Adolf's smallgoods through Butterfield's. We thought all we had to do was to put our label on the smallgoods, the quality would improve, and we would be heroes," stated Dwyer. O'Brien began a series of moves to acquire Adolf's business. The first step involved Butterfields becoming the exclusive distributor of Adolf's smallgoods products and placing a King Island Dairy employee in the smallgoods shop to learn the business from Adolf. One year later Island Food Company purchased Adolf's assets for \$500,000, using part of the \$4.2 million private share placement. King Island also spent \$200,000 to construct and equip a smallgoods manufacturing facility adjacent to the dairy.

Expanding the Product Line

Within three years after O'Brien had acquired King Island Dairy; restaurants, caterers, and other customers requested that King Island Dairy sell bulk cheese products. Earlier, Bill Kirk, a former owner, had accused the dairy of false advertising when butter produced by another firm was sold under the King Island brand. King Island Dairy was not cited for any wrongdoing because the butter in question had been labeled "packed for King Island Dairy." However, the resulting publicity created an embarrassment for O'Brien. To avoid any future accusations, O'Brien decided to offer the bulk cheeses under another brand name, South Cape. Also, considerable debate developed over whether King Island Dairy should sell its brands to supermarkets. Prior to this debate, the issue was moot because King Island Dairy cheeses were not capable of a sustained supermarket shelf life. However, the development of a new cheese wrap made the prospect of supermarket sales a reality. One argument against selling to supermarkets was that such sales would require a revision to the way in which the cheese was packaged and distributed and would be expensive. Another argument focused on product pricing. Cheeses sold by King Island Dairy were considered to be "exclusive and difficult to obtain" and were sold at premium prices. Selling to supermarkets could lower King Island Dairy's image of exclusivity. Also, supermarket sales might require additional production capacity and new milk suppliers. Dwyer resolved the supermarket sales issue by stating, "we can be self righteous and not appear in supermarkets, but if we don't we may be a small company on the way to nothing." Dwyer also stated that a pricing problem would be avoided "because prices are based on what the market will bear. Markets determine what the supermarkets will pay so that delicatessens are not undercut."13

⁹ See the Glossary for a definition of a "smallgoods" business.

¹⁰ Interview with Dan O'Brien

¹¹ Interview with Leo Dwyer

¹² Interview with Helen Waterworth

¹³Interview with Leo Dwyer

Growth at Island Foods

Following the attainment of additional funds from the creation of Island Food Company. O'Brien and Dwyer moved quickly to sell King Island cheeses to supermarkets throughout Australia and expanded the dairy herd to provide additional capacity. Both men were also enthusiastic regarding the potential of the smallgoods business acquired from Adolf Hofmann. O'Brien and Dwyer planned a 27 percent volume increase for Adolf's acquired business. At the time of acquiring Adolf's, Island Foods' actual sales were \$13.1 million with an actual operating profit before abnormal items and taxes of \$564,000, O'Brien and Dwyer forecasted that Island Foods' total sales for the next two years would be \$15.7 million and \$21.8 million, respectively. Operating profits before abnormal items and taxes for the next two years were forecasted to be \$1.4 million in the first year and \$2.2 million the next year. Clearly, Island Foods was on a roll.

Problems at Island Foods

Unfortunately, a number of problems developed shortly after the Adolf's acquisition that significantly impacted the performance of Island Foods. Following is a discussion of these problems.

New Product Development. A problem facing King Island Dairy was the growth of new products. The decision whether to offer a new product was sales driven. For example, sales people simply stated that a certain product was needed and it was developed without any analysis of projected sales or increased costs. Dwyer became well aware of this situation and worked to implement a planning program for new product development. However, the following incident described by Helen Waterworth indicated how O'Brien reacted to Dwyer's efforts.

Helen stated that one day O'Brien excitedly rushed into her office carrying a round of cheese which would become a 12-month cured tasty cheddar (an existing product). "Why don't we have a mild cheese?" asked O'Brien. Without waiting for an answer, O'Brien announced that this would be the start of a new line of mild cheese which would be sealed in green wax to distinguish it from the red waxed tasty cheddar. Thus, a new product was developed.\(^{16}\)

The Fire. One year after the Adolf's acquisition, a massive explosion and fire gutted the dairy's coolhouse¹⁷ at King Island. Damages of \$3 million including \$2 million of maturing cheddar cheese were incurred.¹⁸ However, the cheese was insured at cost of goods rather than at its sales price. The \$2 million amount of damaged cheese was at the sales value and the insurance company paid \$1.55 million, the cost of goods. Also, while the coolhouse had a replacement value of \$1 million, it was insured for \$0.45 million. Thus the actual loss of \$3

million was insured for \$2 million. However, Island Foods only received a payment of \$500,000, because the insurance company questioned the accuracy of Island Foods' financial records. The remaining \$1.5 million payment from the insurance company with an additional \$300,000 in earned interest was not received until two years later. Two months after the fire, he coolhouse was rebuilt at a cost of \$1.2 million with \$500,000 coming from the partial insurance settlement and \$700,000 from a bank loan.

Loss of Finished Goods Inventory. The coolhouse fire created unanticipated problems for the Island Food Company. For example, it became difficult to replace the finished goods inventory that had been destroyed and, as a result, certain sales orders could not be completed. Not only did the lack of available inventory create an immediate sales loss but some customers switched to competitive brands when their sales orders could not be completed.

The Smallgoods Business Acquisition. During the first nine months that Island Foods operated Adolf's smallgoods business, serious problems developed. For example, tremendous waste was incurred in obtaining a consistent product quality, and shipping dates were missed. A new manager was appointed and a smallgoods consultant, Otto Wurth, Jr., was retained to review the entire smallgoods operation. Wurth had the reputation of being Australia's best consultant to smallgoods producers. Wurth's report revealed that "an array of people problems and poor manufacturing techniques" existed in Adolf's acquired business. The smallgoods business incurred a loss of nearly \$322,000 on sales of \$474,000. After a year of operation, O'Brien concluded, "it was stupid to continue in the smallgoods business which has more competitors and much lower margins than dairy products." Island Food Company discontinued its smallgoods operation and used its manufacturing facility to make smoked cheddar cheese. Provisions were made to include additional expenses of \$943,000 to discontinue the smallgoods operation.²⁰

Increased Cheese Sales Volume. As a result of the increased cheeses sales demand, expenses began to escalate in both manufacturing and at Butterfields, the distribution division. The Dairy's manufacturing operation was located in a building that was not conducive to efficiently producing cheese products. For example, product flow was not optimal, material handling was excessive, and the process was too labor intensive. A considerable amount of overtime was incurred in producing the increased volume. Furthermore, because the new wrap prolonging cheese shelf life was more expensive than the traditional wrap, the decision was made to use two types of wrap; one type for the supermarket products, and the other for non-supermarket products. This decision required that additional wrapping stations be installed, which contributed to further increased labor costs. Also, considerable flexibility was lost because products wrapped in the "non-supermarket" wrap could not be shipped to supermarkets. Production schedules were frequently changed to solve certain problems and employees complained of difficulties in working with existing supervisors. These difficulties involved conflicts and a lack of communication between supervisors and employees regarding how certain tasks should be performed. The different types of cheese wraps led to a

¹⁴ Interview with Dan O'Brien

¹⁵ Interview with Dan O'Brien

¹⁶ Interview with Helen Waterworth

¹⁷ See the Glossary for the definition of a "coolhouse."

¹⁸ "Coolhouse and Cheeses Destroyed in \$3M Fire," King Island Courtier, 6 May 1991, pp. 1.

¹⁹Leo Dwyer negotiated the \$300,000 interest payment from the insurance company.

²⁰ Interview with Dan O'Brien

double inventory of most of the same products thereby increasing inventory costs. Refrigerated trucks used to transport dairy products were not properly scheduled. Customers complained that their orders were late in being shipped and were often shipped incomplete. In essence, Butterfields had a problem in shipping the right product to the right place at the right time.

Financial Problems. After four years of operation, debt totaled \$6.9 million and interest expense was \$250,000 over budget. As illustrated in Appendix 2, Island Food Company had actual sales of \$11.7 million in its fourth year of operation and \$21.4 million in its fifth year. Appendix 3 describes Island Food Company's Balance Sheet while Appendix 4 depicts a cash flow statement. During the fourth year of operation, sales to supermarkets were \$1.5 million and nearly \$6.4 million in the fifth year. Operating profit before abnormal items and tax was \$915,000 and \$(1,209,000), respectively. In addition, funds were not available to make payment on a \$6.2 million loan agreement from the National Bank of Australia.²¹ If Island Food Company could not make the loan payment on time, then the bank could call for immediate payment.²² O'Brien and Dwyer were faced with many problems and had to react quickly.

Questions

- 1. What is the most important issue facing O'Brien and Dwyer at the end of this case? The most urgent? What recommendations might be offered to O'Brien and Dwyer?
- 2. How did O'Brien manage King Island Dairy when it was first acquired by his firm, Agricorp, and how did he later manage Island Food Company? What managerial strengths were exhibited? What weaknesses?
- 3. O'Brien made a decision to market a mild cheese product based on intuition rather than utilizing Dwyer's planning program for new product development. How might this action affect Dwyer's new product development planning program? What are the implications of intuition in decision making?

- 4. Professor Howard Stevenson of the Harvard Graduate School of Business Administration states that entrepreneurial failure occurs because there is too great a mismatch between the resources controlled by the entrepreneur and those required to successfully pursue the opportunity. Using the following eight functions, describe the skills and resources that were controlled by O'Brien and his group of key employees. How sufficient were these skills and resources?
 - A. Financial
 - B. Marketing and Sales
 - C. Technological
 - D. Production
 - E. Product Development
 - F. Personnel
 - G. Managerial
 - H. Systems
- 5. Discuss the implications of (a) King Island Dairy selling its brands to supermarkets and (b) acquiring Adolf Hofmann's smallgoods business.

²¹ This \$6.2 million bank note included the \$700,000 borrowed to rebuild the coolhouse.

²² Interview with Leo Dwyer

APPENDIX 1

The Island Food Company Ltd

Brands and Products

King Island Dairy Brands (Manufactured at the King Island Dairy using fresh King Island milk and containing no preservatives or additives).

- King Island Cap Wickham Double Brie
- King Island Phoques Cove Camembert
- · King Island Seal Bay Creme de la Creme
- · King Island Tomme Fraiche
- · King Island Surporise Bay Matured Cheddar
- King Island Pure Cream
- King Island Creme Fraiche
- · King Island Bass Strait Blue

South Cape Brand*

- South Cape Brie KI
- South Cape Camembert KI
- South Cape Great Southern Blue
- · South Cape Cloudy Blue Brie
- South Cape Vintage Cheddar
- South Cape Picnic Cheddar
- South Cape Cloth Matured Cheddar
- South Cape 12 Months Vintage Cheddar
- South Cape 16 Month Vintage Cheddar
- South Cape Herb & Garlic Fresh Cheese KI
- South Cape Peppered Fresh Cheese KI
- South Cape Butter
- South Cape Swiss Style Cheese

* KI indicates that the product was manufactured on King Island while the other products are manufactured and packaged by contract manufacturers and shipped to Butterfields.

APPENDIX 2

The Island Food Company Ltd Profit and Loss Account For the Year Ended 30 June

	Fifth Operating Year - \$	Fourth Operating Year - \$
Revenue	21,413,119	11,721,123
Operating profit/(loss) before abnormal items and tax	(1,209,090)	
Abnormal items before income tax	(1,205,050)	915,089
		452,296
Operating profit/(loss) before income tax	(1,209,090)	1,367,385
Income tax attributable to operating profit/(loss)		
	(49,191)	157,109
Operating profit/(loss) after income tax	(1,159,899)	1,210,276
Profit/(loss) on extraordinary item before tax	(603,027)	
Income tax attributable to profit/(loss) on		
extraordinary item		
Profit/(Loss) on extraordinary item after tax	(603,027)	
Operating profit/(loss) and extraordinary item		
arter income tax	(1,762,926)	1,210,276
Retained profits/(accumulated losses) at the		
beginning of the financial year	4,878,002	4,967,726
Retained profits/(accumulated losses) available for appropriation Dividend provided and paid	3,115,076	6,178,002
	-	1,300,000
Retained profits/(accumulated losses) at the end of the financial year	3,115,076	4,878,002

APPENDIX 3

The Island Food Company Ltd Balance Sheet For the Year Ended 30 June

	Fifth Year \$	Fourth Year
CURRENT ASSETS		
Cash	64,922	158,468
Receivables	2,357,444	1,136,976
Inventories	3,474,467	2,239,135
Other	_390,870	144,428
TOTAL CURRENT ASSETS	6,287,703	3,679,007
NON-CURRENT ASSETS		
Receivables	815,002	2
Investments	1,998	101,989
Property, Plant & Equipment	11,848,991	7,377,989
Intangibles	3,400,000	3,400,000
Other	909,832	928,234
TOTAL NON-CURRENT ASSETS	16,975,823	11,808,223
TOTAL ASSETS	23,263,526	15,287,230
NON-CURRENT LIABILITIES		
Creditors and borrowings	6,745,127	3,434,266
Provisions	4,011	185,111
TOTAL NON-CURRENT LIABILITIES	6,749,138	3,619,377
TOTAL LIABILITIES	13,161,597	8,384,271
NET ASSETS	10,101,929	7,102,959
SHAREHOLDERS' EQUITY		
Share capital	3,649,000	300,000
Reserves	3,337,853	1,924,957
Retained Profits/(Accumulated Loss)	<u>3,115,076</u>	4,878,002
TOTAL SHAREHOLDERS' EQUITY	10,101,929	7,102,959

APPENDIX 4

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The Island Food Company Ltd Statement of Cash Flows For the Year Ended 30 June

Cash flows from operating activities	5th Year Inflows (Outflows) \$	4th Year Inflows (Outflows) \$
Receipts from customers Payments to suppliers and employees Subtotal	21,443,263 (24,058,808) (2,615,545)	11,726,303 (11,671,002) 55,301
Interest received Interest and other costs of finance paid Income taxes paid Subtotal	127,083 (742,561) (615,478)	28,303 (624,535) (1,969) (598,201)
Net cash inflow/(Outflow) from operating Activities Subtotal	(3,231,023)	(542,900)
Cash flows from investing activities Payment for purchase of controlled	(Stand stone)	(374,200)
entity, net of cash acquired Payment for property, plant and equipment Guaranteed Funds Loans to related parties	(400,000) (2,861,342) 	(196,211) (915,198) (187,048) (2,500,000)
Proceeds from sale of property, plant and Equipment Proceeds from insurance settlement Repayment of loans by related parties	107,390 500,000	488,290 (108,223)
Net cash outflow from investing activities	(2,653,952)	(3,418,390)
Cash flows from financing activities Proceeds from shares issued Proceeds from borrowings Repayment from borrowings Repayment of lease liabilities Proceeds from related parties Net cash inflow (outflow) from financing activities	3,946,896 2,830,000 (300,000) (759,952) 300,000 6.016,944	2,500,000 (150,000) (390,909) 544,991 2,504,082
Net increase (decrease) in cash held Cash at the beginning of the financial year	131,969 (1,316,427)	(1,457,208) <u>140,781</u>
Cash at the end of the financial year	(<u>1,184,458)</u>	(1,316,427)

APPENDIX-GLOSSARY

Coolhouse: A refrigerated facility.

Double cream: Cream with a very high butterfat content (many times as high as 50 percent). The taste is excellent.

Receivership: Australian bankruptcy laws do not contain a provision similar to that of the U.S. Chapter 11 Bankruptcy Code in which firms protect their value as a going concern. A U.S. Chapter 11 bankruptcy involves the filing of a reorganization plan. After a reorganization plan has been filed, a hearing is held before the bankruptcy court to determine if the reorganization plan will be confirmed. If the plan is confirmed, payment terms on the firm's accounts and notes receivable are not affected by bankruptcy and can still be collected. An "automatic stay" is placed on the firm's unsecured liabilities (the firm is not required to pay this debt or even accrue interest on it until after the firm emerges from Chapter 11.23 In essence, the purpose of the U.S. Chapter 11 Bankruptcy Regulation is to preserve a distressed entity and its value as a going concern. Profitable U.S. firms have filed Chapter 11 bankruptcy for a variety of reasons. A classic example is the Johns-Manville Corporation (J-M) that faced 16,000 asbestos-related health suits in 1982 with the expectation that the number of lawsuits would multiply as individuals who had been exposed to asbestos began to develop asbestos-related diseases. Moreover, J-M's insurance providers had disclaimed any liability to J-M on policies written for that purpose. On August 6, 1982, J-M filed for protection under Chapter 11 of the Bankruptcy Code, stating that the settlement amount for these lawsuits approached US\$ 1billion with additional suits for damages to school buildings of US\$ 1.5 billion. Despite four separate motions from others to dismiss J-M's petition, the bankruptcy court ruled that "the economic reality of J-M's dangerous financial situation, due to its crushing real debt, required that its petition for bankruptcy be sustained.²⁴ Subsequent studies indicate that J-M benefited from this decision. For example, as specified under Chapter 11 provisions, J-M collected payments from its accounts and notes receivables but did not make payments to its creditors. J-M's cash and marketable securities increased from US\$ 200 million in December 1982 to US\$ 716 million in December 1988. Foregoing interest payments on its debt was estimated to be in excess of US\$ 100 million for this same time period. In its reorganization plan, J-M (1) changed its name to Manyille Corporation, (2) created a trust that would be responsible for the payment of asbestos-related claims, and (3) formed business units whose assets were shielded from asbestos liabilities. J-M transferred

US\$ 150 million to the trust with semi-annual payments of US\$ 37.5 million to be made for 25 years. However, these payments were subordinated to those of Manville's creditors.²⁵

Second-board companies: During the 1980s, many Australian companies could not meet the regulatory requirements to be listed on the Australian stock exchange. Yet, these companies badly needed funds. To allow these companies to offer their stock to the public, a "second-board" was created on the Australian exchange to "list" these firms. For a variety of reasons, the second-board was a failure and has been discontinued.

Smallgoods business: In Australia, a business that involves the preparation of salami, sausages, bologna, and smoked meats. In this case, Adolf Hofman prepared these products on King Island and distributed them to retail shops in Melbourne that sold the smallgoods, cheeses, and wine.

Types of ownership: In Australia, a "Limited" company is one in which the company and not its owners are liable for the debts contracted by the company. An audited financial statement must be published at least once per year. A "Pty Ltd" is a limited propriectorship. The company and not its owners are liable for the debts contracted by the company, but the limited proprietorship's financial statements are not required to be audited or published.

²³ For an expanded discussion of U.S. bankruptcy laws, see R. Mann and B. Roberts, Essentials of Business Law and the Legal Environment, 5th Ed. (Minneapolis, MN: West Publishing, 1995).

²⁴ Johns-Manville Corporation, 36 BR 727.

²⁵ For an expanded discussion see, "Healthy Manville Immune From Suits—Victims Trust Works To Solve Payment Problems," Asbestos Watch, November-December, 1998, pp. 3-4. Arthur Sharplin, "Manville Corporation-1989," in Fred David's Strategic Management 4th Ed. (New York: Macmillan Publishing, 1993).

The Island Food Company Limited (B)

Unique Tasting Cheeses, Butters, & Cream From the Pastures of King Island

Daniel F. Jennings, Texas A&M University
L. Murray Gillin, Swinburne University of Technology
Helen Evans, Swinburne University of Technology
Valerie McDougall, Swinburne University of Technology
Craig Sadler, Swinburne University of Technology

As described in Island Food Company (A), the firm experienced a number of problems in its fourth and fifthe year of operation. These included a coolhouse fire which destroyed needed product inventory, an acquired smallgoods business which experienced excessive costs, and the decision to offer branded products to supermarkets which caused increased costs in distribution and production. In addition, funds were not available to make payment on a \$6.2 million loan agreement from the National Bank of Australia due in the fifth year. Exhibit 1 compares the difference between actual and budgeted performance for the fourth and fifth years.

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This case is based on original research conducted by Helen Evans, Valerie McDougall, and Craig Sadler while they were completing their Master of Enterprise Innovation Program at Swinburne's Centre of Innovation and Enterprise. Research supervision was by the centre's director, Professor Murray Gillin. Rewriting of this case for education purposes plus the gathering of additional information was performed by Professor Daniel Jennings. Swinburne University appreciates the cooperation of The Island Food Corporation and in particular Frank Beaurain, Leo Dwyer, Leonard Lane, Dan O'Brien, Alice Shugg, and Helen Waterworth. This case was prepared as a basis for class discussion rather than to illustrate either effective or ineffective handling of an administrative situation. Copyright, 1996 by Swinburne University of Technology, Centre of Innovation and Enterprise and the first author.

^{*}Unless otherwise noted, financial data is expressed as Australian dollars.

Exhibit 1 Island Food Company Ltd **Actual Versus Budgeted Performance** Year Ended 30 June **\$Million**

	Fift <u>Actual</u>	h Year <u>Budget</u>	Fourt <u>Actual</u>	h Year <u>Budget</u>
Sales	21.4	21.8	11.7	15.7
Operating Profit Before Abnormal Items and Taxes	(1.2)	2.2	0.9	1.4

Facing The Dilemma

In April of the fifth year, Dan O'Brien, Managing Director of Island Foods, stated, "it is clear that our rapid growth has put unforeseen pressure on the company's financial systems and on the overall management team." O'Brien also hired a consultant with many years of experience in a variety of marketing and management positions in the distribution of food products, Gordon Robinson. Shortly after being hired as a consultant, Robinson recommended that all growth plans be put "on hold" and that each operation should be reviewed with a focus on improving its performance. Exhibit 2 describes an action plan that was developed by Robinson and approved by Island Foods' senior management.

Exhibit 2 **Island Food Company Operations Improvement Plan**

- Add a group general manager of finance and administration
- Add a group general manager of manufacturing
- Add a general manager and national sales manager to the Butterfield distribution unit.
- Install an integrated on-line computer system with an emphasis on financial management.
- Hire a consultant to review and analyze the firm's various market segments.
- Review the performance of Island Foods' fleet of 48 refrigerated trucks.
- Develop an extensive training program for Butterfield employees with an emphasis on improving customer service.
- Develop a training program for management that involves the techniques of how to empower employees.
- Secure funding to modernize the production facility.
- Use the same "wrap" for both supermarket and non-supermarket products.

Source: Island Food Company Report

Providing Additional Funds

Island Foods' board of directors, described in Appendix 1, contacted the National Bank of Australia and reached an agreement in which the bank (a) would not call the loan and (b) would provide additional time to Island Foods to make its loan payment. In June of the fifth year, each of the five members of Island Foods' board of directors loaned \$60,000 to the company at commercial interest rates to provide needed short-term funds. In September, 1993, fourteen months after previously raising funds from a stock offering, Island Foods asked its shareholders for additional funds. Five shareholders, depicted in Appendix 2, purchased shares at \$1.85 per share in a one-for-four rights issue (Appendix 3 describes the largest shareholders of Island Foods). This issue generated \$2.3 million in new funds which were used to make a partial loan payment to the bank and to begin a production modernization program. Also, in September 1993, Island Foods received \$1.5 million from an insurance firm for an earlier coolhouse fire plus an additional \$300,000 as interest expense for a total payment of \$1.8 million.² Thus, Island Foods had \$4.1 million (2.3 + 1.8) in new funds for its use beginning in September of the fifth year.

A New Managing Director

The following year, Dan O'Brien announced that he was resigning as managing director of Island Foods stating "a different set of skills is needed for the company's next phase of operation." Some employees cried when he made the announcement. Gordon Robinson, the consultant who had recently been appointed as general manager of Butterfields, was named managing director to replace O'Brien. Leo Dwyer became the group general manager of finance and administration and Helen Waterworth retained her position as national publicity and promotion manager.5

The Future

When King Island Dairy under Bill Kirk's ownership went into receivership in 1986, the second town on King Island, Grassy, folded. Grassy first emerged as a town when a tungsten mine opened in the early 1950s. Later, in 1982, when the mine closed nearly 600 people left Grassy overnight. The remaining residents left when the dairy operation closed in 1986. Now Grassy is a ghost town owned by developers with plans to turn it into a tourist village. While sea views abound, the soul-less streets are lined with small empty houses that fail to take advantage of the landscape. In deserted schoolrooms, children's paintings are slowly fading.

^{1 &}quot;Island Foods Successful at Raising Funds," The Australian. A one-for-four rights issue involves granting one additional share at no cost for the purchase of four shares. Thus, by purchasing four shares, one receives five shares.

² The coolhouse fire and insurance payment for fire losses are described in the (A) Case. Leo Dwyer negotiated the interest payment from the insurance company because of their late payment.

³ "King Island Dairy's Success not a Happy One," Sydney Morning Herald.

Interview with Helen Waterworth

⁵ Interview with Leo Dwyer

The Island Food Company Limited (B)

The future success of Island Food Company has significance not only for its employees and shareholders, but for the Island's dairy farms as well. A 1994 company publication stated: Island Foods has a great potential to develop into a profitable, vertically integrated specialty food company. Significant time has been spent by the Board of Directors and senior management in researching potential markets and planning the future of the company."6

Questions

- 1. Comment on Consultant Gordon Robinson's recommendations with respect to (a) putting growth plans on hold and (b) his action plan. Are there any inconsistencies between Robinson's action plan and top management's 1994 statement regarding spending considerable time in researching potential markets?
- 2. Does Island Food Company have a competitive advantage? If so, is it sustainable?
- 3. Comment on Dwyer's appointment as group general manager of finance and administration.
- 4. How would you rate Dan O'Brien as a manager? As an entrepreneur?

APPENDIX 1 **Island Food Company Board of Directors** Fifth Operating year

- W.J. CONN, chairman, Investment banker and a director of Village Roadshow Ltd and McIntosh Securities Ltd. Former chief executive and chairman of Potter Warburg Ltd and member of the Australian Stock Exchange.
- T.G. KLINGER, deputy chairman, stockbroker, investment banker and a director of Eagle Bay Resources NL and Agricorp Ltd. Formerly chief executive officer of McIntosh Hamson Hoare Govett Ltd and deputy chairman of McIntosh Securities.
- S.M. SKALA, solicitor and alternate director of The Ten Group and a director of Nova Corp. Australia Pty Ltd. As a commercial solicitor, he specializes in banking and finance law and has substantial experience in mergers and acquisitions.
- G.F. (Dan) O'BRIEN, former managing director of Island Foods and currently managing director of Bentala Holdings, Ltd. Director for all group companies of Island Foods.⁷
- L.D. DWYER, production group general manager for Island Foods. Also director for all group companies of Island Foods.

APPENDIX 2 Island Food Company Five Shareholders Purchasing New One-For-Four Rights Issue Fifth Operating year

Total	\$2,300,000
Mr. C.J. Smith	\$330,000
Pacific Agribusiness Investment Pty Ltd	\$569,800
	\$330,000
Mr. S.M. Skala	,
Mr. T.G. Klinger	\$500,400
Mr. W.J. Conn	\$569,800

APPENDIX 3 Island Food Company Substantial Shareholders Fifth Operating Year

Name	# Shares Held	% Of Issued Capital
Pacific Agribusiness Investment Pty Ltd	885,327	12.29
Clevedon Proprietary Ltd	861,950	11.97
W.J. Conn	624,354	8.67
T.G. Klinger	522,366	7.26
S.M. Skala	510,742	7.09
Cartos Pty Ltd	502,703	6.98
Merion Holdings Pty Ltd	467,354	6.48
G.F. O'Brien	432,282	6.01
Woobinda Nominees Pty Ltd	422,366	5.87
Mutual Trust Pty Ltd	382,389	5.32
Subtotal	5,611,833	77.94
28 other investors	1,588,167	22.06
Total	7,200,000	100.00

⁶ Island Food Annual Report Supplement, 1994.

⁷ Group companies of Island Foods are described in the (A) Case and include Rural Resources, King Island Dairies, Butterfields Cheese Factors, and Agricorp Trading.

Mid-South Baptist College: Managerial Accounting Issues In A Nonprofit Entity

John B. Duncan, The University of Louisiana at Monroe K. Michael Casey, Henderson State University

Introduction

Dr. Patrick Stinson sat in his office completely perplexed and frustrated. He was the vice-president in charge of operating a branch of Mid-South Baptist College (MSBC). Earlier in the day Dr. Stinson had received a financial report showing the results of operations of his campus for the first half of the fiscal year. The report showed that his campus was losing so much money that the administration of the college was recommending that the campus be closed. The only way that the branch would remain open was if it could show a drastic improvement in the financial results of operations in the next few months.

Dr. Stinson did not know what to do. A financial report prepared by the controller of the college showed that his campus had lost almost \$250,000 during the current academic year and the year was only half over. At this rate the campus would show a loss of about \$500,000 by the end of the fiscal year. He knew that he could not significantly reduce the operating costs of the campus this year. He also knew that the enrollment of the campus had declined slightly during the past two years and no one expected an increase in enrollment during the second half of the year.

He sat behind his desk feeling numb and defeated. He knew that his campus met needs that no other academic institution was meeting in the region. He also knew the large amounts of time, money and effort that had gone into establishing and developing the campus. His faculty and staff were dedicated to their programs and had made great sacrifices to make the campus successful. Now he feared that they would lose their jobs after all their hard work.

As Dr. Stinson sat and pondered his own future as well as the future of his campus, Dr. Bob Mickel walked by his office door. Dr. Mickel was a young accounting professor at MSBC and Dr. Stinson had great respect for his expertise. Dr. Mickel had only been on the faculty of MSBC for a few months, so Dr. Stinson realized that Dr. Mickel would be a somewhat objective soundboard. Dr. Stinson asked Dr. Mickel to come into his office. Dr. Mickel sat down and Dr. Stinson began to show him the financial report that he had been examining.

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¹ This is a disguised case. Mid-South Baptist College is a fictitious name, but the events described in this case are factual.

Background

Mid-South Baptist College is a small, private, liberal arts college owned by the Alabama Baptist Convention and operated by a Board of Trustees elected by the Convention. The College offers undergraduate degrees in eight major fields and graduate degrees in education and business. The main campus of the college is in Montgomery, Alabama. This campus has about 1,000 undergraduate students and 200 graduate students. Most of the undergraduate students on the main campus are full-time students, but the graduate programs only service part-time students. MSBC also has a branch in Gulf Shores, Alabama. The Gulf Coast campus has about 400 undergraduate students and 200 graduate students. Almost all of the students on the Gulf Coast campus, both undergraduate and graduate, are part-time students.

The college first opened at the Montgomery campus in 1916 as a college for women. The current administration building was the first building on the Montgomery campus. Several of the buildings on the Montgomery campus are more than 50 years old and in poor condition. The surrounding neighborhood is declining as well. The leaders of MSBC have wanted to move the campus for several years, but the College is not in a financial position to consider building a new campus. In fact, MSBC has been forced to postpone basic repairs and maintenance through the years at the Montgomery campus because of the financial position of the college. The Gulf Coast campus is located on 25 acres of beachfront property. The buildings on this campus are also in need of repairs that have been postponed in recent years for financial reasons.

Dr. Stinson had been on the faculty of MSBC for only one year when he was promoted to his current position as the director of the Gulf Coast campus of Mid-South Baptist College. He has been the director of the Gulf Coast campus for the past six months. Dr. Stinson is an artist who originally came to the college to be Dean of the School of Arts and Humanities. He has no formal training in finance or accounting, therefore, he often relies on the opinions and suggestions of other administrators when he makes decisions.

MSBC has been struggling financially for many years. Because the college has almost no endowment, MSBC is very dependent on tuition revenue. A slight decrease in enrollment greatly affects the financial position of the college. The previous president of MSBC, Dr. James Williams, held a Ph.D. in finance and always managed to keep the college operating "in the black." Dr. Williams believed that the Gulf Coast campus had greater potential for growth than the Montgomery campus. He promoted Dr. Stinson to director of the campus just before announcing his retirement during the summer about eight months ago. Dr. Dwight Johnson is currently serving as Interim President of MSBC while the Board of Trustees conducts a search for a new president of the College. Dr. Johnson is a former pastor from Alabama whom Dr. Williams hired to be Dean of the School of Religious Studies about seven years ago. Dr. Johnson also has no formal training in business and relies heavily on the controller of the college, Andrew Wiley, for most of the financial advice that he receives.

Dr. Johnson's only experience in higher education has been his tenure as Dean of the School of Religious Studies. About 20 percent of the undergraduate student population of the Montgomery campus are undergraduates majoring in Religious Studies. When Dr. Johnson came to MSBC there were only about 50 students majoring in Religious Studies. Now there are about 200 students majoring in Religious Studies. This tremendous growth was due to the

hard work of Dr. Johnson as well as Dr. Williams' willingness to provide significant scholarships for students who choose to major in Religious Studies.

MSBC expects to receive \$2 million this academic year from the Alabama Baptist Convention. This represents about 20 percent of the annual receipts for MSBC. The Alabama Baptist Convention supports several Baptist colleges. Their funding of Baptist colleges and universities for the current year is based on the following five-part apportionment:

- 1. \$335,000 per institution
- 2. \$15,000 per campus site
- 3. \$50 per student who is a member of an Alabama Baptist church
- 4. \$750 per ministerial student
- 5. \$10 per credit hour taught

Almost all of the ministerial students at MSBC major in Religious Studies and attend the Montgomery campus. There are currently 190 ministerial students at the Montgomery campus and 10 ministerial students on the Gulf Coast campus. MSBC has a total of 1,000 students who are members of Alabama Baptist churches, with 850 of these being at the Montgomery campus. MSBC expects to teach a total of 143,500 credit hours this academic year, with 80 percent of these hours being taught in Montgomery.

The Discussion between Dr. Stinson and Dr. Mickel

Dr. Mickel walked into Dr. Stinson's office and closed the door behind him. "What's up?" asked Dr. Mickel. Dr. Stinson replied, "I need someone to talk with, but what we discuss can't leave this room." Dr. Mickel replied, "I'm all ears. You know you can trust me."

Dr. Stinson then said, "I've been going over this financial report of the Gulf Coast campus and things aren't looking very good. I've been told that if we can't show a drastic improvement before the end of the year, this campus may be closed. You know that Dr. Johnson mentions the financial position of the college every time we talk. I'm afraid that he is serious about shutting us down."

"Close the campus?" asked Dr. Mickel. "I just moved my family here nine months ago. Things can't be that bad, can they?"

"I'm afraid they are," replied Dr. Stinson. "I got these numbers from Montgomery this morning and we've lost \$240,000 so far this year." He handed the financial statement to Dr. Mickel for him to examine. (This financial report is presented in Figure 1.)

"Do you mind if I make a copy of this statement and look at it for a while?" asked Dr. Mickel. "No," replied Dr. Stinson. "In fact, I would like for you to explain the numbers to me."

After looking at the report for a minute Dr. Mickel said, "I'm going to need to talk with someone in Montgomery to get the information that I need to make sense out of this report. Whom can I talk to up there?"

Dr. Stinson said, "Andrew Wiley, the controller of the college, is the one that prepared this report. I'll call him in a few minutes and tell him to give you whatever information you need to help me interpret his report." "Thanks," said Dr. Mickel. "I'll talk with Mr. Wiley this afternoon and look at this report tonight. I'll try to explain the numbers to you in the morning."

Bob Mickel's Conversation with Andrew Wiley

Dr. Mickel called Mr. Wiley that afternoon to ask some questions about the financial report. Dr. Mickel was unfamiliar with many of the financial aspects of the college, so he needed some explanations before he could explain the results of operations to Dr. Stinson. Andrew Wiley proved to be quite helpful and he answered all of Dr. Mickel's questions.

One thing Dr. Mickel did not understand was how much total revenue was received from the Alabama Baptist Convention each year. He knew that MSBC received a critical portion of their operating budget from them, but he did not know how the amount they received was calculated. Andrew Wiley explained to Dr. Mickel the five-part apportionment formula (described in a previous section of the case). Andrew Wiley also explained that the scholarships which were shown as an expense were not a cash expense. The tuition revenue presented on the financial statement included the total amount of potential revenue based on the number of credit hours taught. The scholarships represented fee waivers given to students. When the scholarships are subtracted from total potential revenue, the net amount of tuition revenue is properly presented in the financial statements. Mr. Wiley explained that all universities account for scholarships in this manner.

Dr. Mickel also learned that MSBC planned to operate on a total budget of about \$10 million for the academic year. About 70 percent of this amount should come from tuition revenue. The money received from the Alabama Baptist Convention amounted to 20 percent of the expected total revenue. The College also expected undesignated gifts in the amount of \$400,000 and income from endowments in the amount of \$600,000. Undesignated gifts and endowment income are used to fund current operations of the College.

As Dr. Mickel had suspected, all of the expenses on the financial report in the column labeled "6 Month Actual," including the amount to cover debt service, were directly associated with the Gulf Coast campus. Dr. Mickel had some questions about the allocation of indirect costs. Andrew Wiley explained that these indirect costs were allocated from the Montgomery campus to the Gulf Coast campus, because the Gulf Coast campus benefited from these costs. The indirect costs (overhead) had been allocated to the Gulf Coast campus based on credit hours generated. Andrew Wiley told Dr. Mickel that the Gulf Coast campus had generated 14,350 credit hours in the first half of the fiscal year and the Montgomery campus had generated 57,400 credit hours for that same time period. Therefore, 71,750 total credit hours had been generated by MSBC. Because the Gulf Coast campus had generated 20 percent of the total credit hours, 20 percent of the overhead for several areas had been allocated to the Gulf Coast campus.

Andrew Wiley explained that the administrators who were located on the Montgomery campus were responsible for the operations of the college as a whole. He explained that it was only fair to allocate a portion of their salaries to the Gulf Coast campus.

Mr. Wiley explained that student services included functions such as the departments of financial aid and the registrar, as well as the athletic director. Because the office of financial aid and the office of the registrar process information for both campuses, and because there are four athletic teams located on the Gulf Coast campus, a portion of the costs of student services should be allocated to the Gulf Coast campus.

As for maintenance and repairs, the director of the maintenance department and the assistant director oversee maintenance and repairs on both campuses. Both the director and the

assistant director of maintenance are located on the Montgomery campus. The \$20,000 allocated to the Gulf Coast campus for maintenance and repairs represents 20 percent of the salaries of these two individuals.

The bookstore on the Montgomery campus has three full-time workers. Although most textbooks used at the Gulf Coast campus are shipped directly to the Coast bookstore, the employees of the Montgomery bookstore place the book orders for the Gulf Coast campus. Twenty percent of the salaries of the employees in the Montgomery bookstore had been allocated to the Gulf Coast campus.

Dr. Mickel asked about the number of employees in all of these areas. The Gulf Coast campus operated with only a skeleton staff. He wondered if the Montgomery campus had more employees than were necessary. Andrew Wiley informed Dr. Mickel that all of the employees in student services and the maintenance department, as well as all of the administrators in Montgomery were absolutely essential to the operation of the College and would be retained even if the Gulf Coast campus were to be closed. Mr. Wiley did say, however, that the Montgomery campus could probably reduce one of the three bookstore workers to a part-time status if they did not have to process book orders for the Gulf Coast campus. This would reduce that bookstore employee's annual compensation package from \$10,000 to \$5,000.

Bob Mickel's Analysis

After his phone conversation with Andrew Wiley, Dr. Mickel rushed home to eat dinner with his wife and two children. After dinner Dr. Mickel retreated to his home office to analyze the profit and loss worksheet for the Gulf Coast Campus. The information which Andrew Wiley provided that afternoon enabled Dr. Mickel to realize that some of the accounting procedures used to prepare this report violated basic principles that should be applied when making tactical managerial decisions. Dr. Mickel sat down to prepare a revised report to evaluate whether to close the Gulf Coast campus. His report, however, would use only relevant financial information. Dr. Mickel knew that there were some problems with the manner in which indirect costs had been allocated to the Gulf Coast campus. He also wanted to examine the amount of revenue from the Alabama Baptist Convention that had been allocated to the Gulf Coast campus.

Andrew Wiley's report allocated indirect costs from the Montgomery campus to the Gulf Coast campus, but no costs were allocated from the Gulf Coast campus to the Montgomery campus. Dr. Mickel knew that the Director of the MBA Program and the Vice-President for Institutional Effectiveness were both part of the Gulf Coast faculty. Under Andrew Wiley's approach, a portion of the salaries of these individuals should have been allocated to the Montgomery campus. Dr. Mickel thought there were probably other examples of costs incurred on the Gulf Coast campus that benefited the Montgomery campus.

Dr. Mickel had learned from Andrew Wiley that about \$1 million of the College's operating revenue came from unrestricted gifts and endowment income. The profit and loss worksheet prepared by Andrew Wiley did not allocate any of this revenue to the Gulf Coast campus.

Dr. Johnson and Mr. Wiley believed that a buyer could be found for the 25 acres of beachfront property occupied by the Gulf Coast campus. Several groups of investors were trying to acquire property in the vicinity of the Gulf Coast campus. However, the investors who would offer the most for beachfront property wanted to open businesses that most

Baptists would find offensive. The Board of Trustees of Mid-South Baptist College is not willing to sell property to investors who would operate businesses that were offensive to most Alabama Baptists. Therefore, the anticipated proceeds from the sale of the Gulf Coast property would not be significantly more than the debt associated with that property. The expected proceeds from selling the Gulf Coast campus would eliminate the debt with no additional funds remaining to subsidize Montgomery operations.

Dr. Mickel knew that the administrators of the college had an important decision to make. If the Gulf Coast campus were indeed unprofitable, the top administrators would be inclined to close the campus. Dr. Mickel knew that his findings might help determine the fate of the Gulf Coast campus of MSBC. He hoped that he could provide Dr. Stinson with objective information that could be used in this decision making process.

Discussion Questions

- 1. Based on the information presented in the case, prepare a revised Profit and Loss Worksheet that more accurately reflects the performance of the Gulf Coast Campus of Mid-South Baptist College.
- 2. What would be the effect on the college's profits if the campus were to be closed?
- 3. What qualitative factors are important to this decision?
- 4. Should the Gulf Coast Campus of MSBC be closed? Why or why not?

Figure 1 Mid-South Baptist College Gulf Coast Campus Profit and Loss Worksheet For the Six Month Period Ended December 31, 1997

	6 Month Actual	Indirect Costs	Total
Revenue			
Tuition Revenue	\$ 1,508,000		\$ 1,508,000
Bookstore	260,000		260,000
Alabama Baptist Convention			
(based on credit hours generated)	<u>143,500</u>		_143,500
Total Revenue	1,911,500		1,911,500
Expenses			
Faculty Salaries	790,000		790,000
Institutional Supplies	36,000		36,000
Student Services	145,000	85,000	230,000
Administrative Salaries	162,000	120,000	282,000
Maintenance and Repairs	115,000	20,000	135,000
Scholarships	318,000		318,000
Bookstore	230,000	10,000	240,000
Total Expenses	1,796,000	235,000	2,031,000
Income from Operations	115,500		(119,500)
Less: Debt Service	_120,500		120,500
Net Income (Loss)	(5,000)		<u>(240,000</u>)

Denton's Grocery, Inc.

Gary D. Burkette, East Tennessee State University John F. Nash, East Tennessee State University

Abstract

Denton's Grocery, Inc., a 16-store grocery chain in the Tampa, Florida, area, is trying to survive in a fiercely competitive environment. Management's efforts to create a "neighborhood-friendly" image have been only partially successful, and the company has an uneasy relationship with factions in Tampa's immigrant community and even with an advocacy group for the handicapped.

Still more worrisome are a series of events which have drawn attention to internal control weaknesses. Shoplifting is a perennial problem, exacerbated by a poor conviction rate and ineffective, wrist-slapping penalties. Recent headaches include alleged money laundering, give-aways, a cash-for-food stamps scheme, and an elaborate fraud involving payments to fictitious employees and vendors.

A task force has been established to consider the establishment of an internal audit function. However, even if the internal audit function is set up, it faces possible credibility problems because Denton's controller wants it to be part of her empire. Denton's CPA firm has now been retained to assist the task force in defining the responsibilities, authority, and lines of reporting of an internal audit group and suggest improvements in internal control.

Company Background

William Denton started his grocery business in Tampa, Florida, soon after his discharge from military service at the end of World War II. He had spent four years as a marine in the Pacific theater and, although partially disabled from a war injury, was glad to be alive. His savings and veterans' benefits provided startup funding.

The company began with one store in inner-city Tampa. Three years later, Denton moved to a better downtown location and opened a second store in the Hyde Park suburb. By the early 1970s, when he retired and turned operations over to his two children, Denton's Grocery had grown to six stores. William "Billy" Denton, Jr., and Clarissa Denton Wood jointly managed the company and added three more stores. When William Denton, Sr., died in 1985, ownership of the company passed to the children and their mother. Mrs. Denton was confined to a residential care facility for Alzheimer's patients in West Palm Beach.

Following the founder's death, the Dentons faced some hard choices. Many family-owned grocery stores were being forced out of business by fast-growing supermarket chains, like

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Kroger and Food City. With profit margins as low as 1 or 2 percent, high volume was crucial to profitability. Industry data showed that 15-20 stores was about the minimum size for survival. That meant doubling the size of Denton's Grocery, and the family did not have the wherewithal for expansion on such a scale. The Dentons decided to incorporate the business and raise capital through a stock offering. Early in 1986, outside investors paid \$11 million for 45 percent of the newly issued stock. Billy and Clarissa Denton retained 40 percent, and other family members bought the remaining 15 percent.

Aided by the new capital and retained earnings, Denton's Grocery, Inc., grew to 16 stores by the beginning of 1995. Two more stores were in the planning stage. The company operated its own warehouse facility and owned a fleet of trucks to deliver goods to the stores. Sales for 1994 were nearly \$500 million. Comparative income statements and balance sheets are provided in Exhibit 1.

Management

When Denton's Grocery was incorporated, three external investors were appointed to serve on the newly established board of directors. As the largest stockholders, the founder's children retained control of the company. Clarissa Wood was elected board chairperson, and Billy Denton, now president, was given a permanent board seat. Denton's organization chart is shown in Exhibit 2.

With the company's continued growth, Denton and Wood gradually turned over day-to-day management to nonfamily members. August Whitmore was appointed General Manager, with responsibility for operations and supervisory authority over the store managers. Whitmore, now in his late forties, had worked hard to escape the grinding poverty of his childhood in a black neighborhood of St. Petersburg. Starting as a bag boy in one of Denton's first stores, he pulled himself up by his bootstraps and now understood the grocery business as well as anybody in the company. Whitmore was energetic, respected by his employees, and popular among the long-standing customers. He spent most of his time rotating among the three largest stores. If his other duties permitted, he liked to stand near the checkout counters greeting customers as they left the store. And somehow he found time to visit local schools, radio stations, and sports events to show his support for the community.

Whitmore's congenial style and accessibility did much to promote Denton's Grocery's customer orientation. The company could not afford to be a price leader. But good customer service and the claim that it was "locally owned and operated" enabled the company to compete against the huge, faceless, national grocery chains. Also, management was astute enough the recognize and cater to the demand for ethnic products from Tampa's diverse customer base.

Problems

Denton's Grocery, Inc., was profitable and seemed assured of survival for the foreseeable future. Nevertheless, Denton and Wood were concerned about several problems that plagued the company.

Two of Denton's Grocery's oldest stores were in Ybor City and West Tampa, low-income neighborhoods which had a relatively high incidence of theft and vandalism. The stores were

in disrepair, but management had been reluctant to invest in improvements at those locations. In fact, other grocery chains deserted the neighborhoods altogether. Despite Denton's continued presence, *El Diario de Tampa*, a Spanish-language newspaper seized upon the store disrepair to argue that the firm treated Hispanic customers as second-class citizens. No other minorities were mentioned. The editors charged that prices were systematically higher at the two stores and that damaged goods that would be unsaleable in well-to-do white neighborhoods such as Temple Terrace were dumped on the local stores.

Earlier, management had a dispute with *El Diario* over Denton's Grocery's advertisements. Full-page advertisements had been poorly placed in the newspaper, and, on more than one occasion, time-sensitive promotional material had been omitted from the Sunday edition. Whitmore tried to intervene with the newspaper's owners, but his authority was hurt by heightening ethnic tensions between Tampa's black and Hispanic communities.

Denton's Grocery had a policy of hiring a few trainees from a local center for the mentally retarded. These employees were bussed to the stores each day and performed simple tasks, such as stocking shelves and janitorial work. Their productivity was typically about 40 percent of nonhandicapped employees. Hiring these trainees fulfilled management's desire to help disadvantaged people, and it qualified Denton's for small state grants that partially subsidized the trainees' wages. In August 1994, an activist group for the handicapped reviewed the situation and concluded that work conditions violated the employees' rights under the Americans with Disabilities Act. The group filed suit against the company, and the matter is still in litigation.

Shoplifting had always been a problem in retail stores, and Denton's Grocery had its share of theft by both customers and employees. Surveillance cameras were installed in the stores, and some plain-clothes security personnel had been hired. Some employees were fired for theft, and a few customers were charged with shoplifting.

Unfortunately, as the shoplifting problem was addressed, a more serious problem arose. Early in 1994, three checkout clerks at the College Hill store were charged in a "give-away" scam. The scam started in a small way when the clerks "overlooked" goods in friends' grocery carts. Later, the clerks were alleged to have offered similar arrangements to unrelated parties in exchange for kickbacks. Apparently, they evaded detection by pretending to scan high-priced merchandise but actually scanning cheaper items. The clerks' sleight of hand even deceived security personnel standing nearby.

Eventually, the loss of revenue amounted to hundreds of thousands of dollars per week. The store manager began to notice an odd decline in revenue compared with the level of inventory usage, particularly during a certain shift. He mounted a sting operation, and three checkout clerks offered to bag free wine and cigars for an undercover agent in exchange for cash kickbacks. The conversations were recorded, and the three clerks now faced criminal charges. Under questioning, one of the clerks claimed that give-aways were common in all of Denton's Grocery's stores, but she declined to name any other perpetrators.

Even some managers engaged in irregularities and illegal activities. One manager was discovered to be selling crack cocaine from the back of his store. Two others were charged with redeeming food stamps for cash. The manager would pay cash equal to 50-60 percent of the face value of the stamps and then collect the gross amount from the federal welfare authorities. Under federal law, food stamps can only be redeemed for foodstuffs and a few

other prescribed types of merchandise, and they must be redeemed for the full face value. One of the managers was initially charged with using food stamps to launder drug money, but the district attorney dropped the charge for lack of evidence.

The most serious problem involved Sonny Miller, manager of the Palma Scia store. Miller organized an elaborate fraud scheme that included fictitious employees and vendors. By the time he was discovered, Miller's store "employed" 50 percent more people than actually worked there. Extensive personnel records had been invented for the fictitious employees. Signed time cards were submitted to the Payroll Department, and Miller was collecting their paychecks. Some of the "employees" were even drawing sick pay and other benefits, and one was recorded as being on jury duty.

Fabricating the phony vendors was more difficult because most goods were ordered centrally and shipped from Denton's Grocery's warehouse. Moreover, all payments to vendors were made by the central Accounts Payable department. But managers had the authority to order ethnic products that might be sold in an individual store. Miller used this loophole to create a number of nonexistent ethnic-product vendors. Vouchers were prepared for millions of dollars worth of fictitious purchases and sent to Accounts Payable for payment. Miller had set up mailing addresses where he could collect the checks. His scheme only came to light when a payroll clerk noticed that several employees had the same address and drew the matter to her supervisor's attention. It then emerged that a vendor also shared this address. An investigation revealed that the address was a disused storefront in Ybor City. The whole block had been burned during riots a few years earlier.

The Call For Action

Billy Denton stressed that effective action must be taken to bring to an end the series of embarrassing incidents that had exposed weaknesses in internal control. Denton Grocery's controller, Antonia Garcia, had long recommended the establishment of an internal audit group. Over the years, she had pressed for several new positions in her department, and Billy Denton generally discounted much of what she asked for. However, the idea of an internal audit function started to make a lot of sense. An internal auditor, Garcia suggested, could investigate suspected irregularities. Moreover, the mere presence of internal auditors might deter irregularities. Additionally, she could assign the internal auditors elsewhere in the company when there were no irregularities to be investigated. Denton decided to set up a task force to prepare a formal proposal for consideration by the board of directors. He appointed Garcia and a long-time store manager to the task force and asked Richard Wallace, a partner from the company's CPA firm and old friend of Billy's, to act as chair.

The task force was to consider establishment of an internal audit function, including its make-up and reporting responsibilities. The task force was also to consider the deficiencies in internal control. In addition to specific weaknesses, the task force was to investigate enhancements that could be implemented to improve internal control and the control environment at Denton's.

Requirements:

- 1. Prepare a proposal to provide the services requested.
- 2. Prepare an engagement letter for the client's signature.
- 3. Develop a charter for the internal audit department. Your charter should address such issues as the group's mission, goals, responsibilities, policies, and procedures, as well as the group's administrative and reporting responsibilities.
- 4. Develop job descriptions for the Director of Internal Audit and any other senior staff positions in the internal audit department.
- Identify internal control weaknesses and possible enhancements to controls and/or the control environment.

Exhibit 1

Financial Statements

(a) Income Statements

Denton's Grocery, Inc. Comparative Income Statements For the Years Ended December 31, 1994 and 1993

	1994	1993
Net Sales	\$498,234,946	\$476,934,279
Cost of Goods Sold	387,132,083	368,716,329
Gross Profit	111,102,863	108,217,950
Operating Expenses:		
Wages and Salaries	42,724,643	41,844,783
Vehicle Operation	10,331,400	10,118,638
Utilities	8,717,119	8,537,601
Depreciation	11,515,206	11,278,065
Maintenance	6,672,362	6,534,953
Promotion and Selling	11,299,969	11,067,260
Other Operating Expenses	16,358,050	16,021,176
Total Operating Expenses	107,618,749	105,402,476
Income Before Taxes	\$ 3,484,114	\$ 2,815,474

Exhibit 1 (continued)

(b) Balance Sheets

Denton's Grocery, Inc. Comparative Balance Sheets December 31, 1994 and 1993

	1994	1993
ASSETS:		
Current Assets:		
Cash and Equivalents	\$ 8,591,746	\$ 8,607,293
Trade Receivables, net	4,677,729	4,348,014
Inventory	26,980,390	24,903,691
Other Current Assets	2,195,669	2,129,640
Total Current Assets	42,445,534	39,988,638
Fixed Assets	35,798,944	32,210,800
Intangibles, net	7,386,596	7,129,640
Other Non-current Assets	<u>9,832,777</u>	<u>9,405,909</u>
Total Assets	<u>\$ 95,463,851</u>	<u>\$ 88,734,987</u>
LIABILITIES AND EQUITY:		
Current Liabilities:		
Notes Payable	\$ 5,536,903	\$ 4,348,014
Current Maturities - LTD	5,059,584	4,259,279
Trade Payables	21,851,740	22,456,877
Income Taxes Payable	1,487,519	354,940
Other Current Liabilities	5,259,994	4,074,885
Total Current Liabilities	39,195,740	35,493,995
Long-Term Debt	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	13,579,572
12,804,891		
Deferred Taxes	477,319	443,675
Other Non-Current Liabilities	2,768,452	2,573,315
Total Liabilities	56,021,083	51,315,876
Total Equity	39,442,768	37,419,111
Total Liabilities and Net Worth	\$95,463,851	\$88,734,987

Exhibit 2
Organization Chart

Board of Directors

President

VP-Administration

Warehouse Store Purchasing Human Res Manager Manager Controller

Dakota, Minnesota & Eastern Railroad - 1997

Paul R. Reed, Sam Houston State University Carol J. Cumber, South Dakota State University

Kevin V. Schieffer caught himself shaking his head as he thought back over his first six months as President and Chief Executive Officer of the Dakota, Minnesota & Eastern Railroad (DM&E). Replacing J. C. "Pete" McIntyre who had led the railroad through the first ten years of its existence was a tough job. Pete had indicated early in 1996 that he wanted to step down before the end of the year. The changeover occurred on November 7th with Pete agreeing to serve as Chairman of the Board for the next two years.

The year ended on a somewhat favorable note with 1996 revenues reaching a record \$56.6 million, although net income fell to \$3.0 million versus \$3.4 million in 1995. The new year came in like the proverbial lion with record low temperatures and the worst blizzards in memory. This was followed by massive spring melt off and torrential rain. The effect on the DM&E was disastrous. The railroad was literally shut down for most of January and various portions closed intermittently through the next four months. The important lines to Aberdeen and Mansfield South Dakota, remained under water and might not reopen until late in the year. The financial impact of all of this placed the DM&E in a fairly precarious position. Revenues were down while operating expenses including snow removal and flood damage were up dramatically. Kevin knew that the next several months would be all important to the DM&E. Some remedial steps had already been taken, but much remained. When and how the railroad would right itself would occupy Kevin's thoughts for some time.

The Beginnings

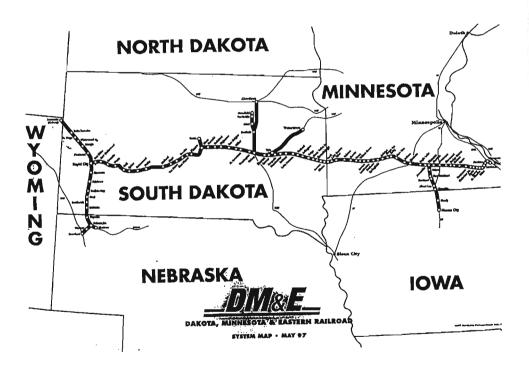
During the 1970s, 1980s and well into the 1990s, the railroad industry in the upper Midwest had felt drastic changes stemming from the deregulation of both trucking and railroads, the decline of heavy industry, the loss of local railroad business, the growth of coal traffic, and mergers. During this period, many lines merged, were downsized, or disappeared with pieces purchased by former competitors, short line railroad holding companies or, in many cases, entrepreneurs desiring to operate their own railroad.

Most of the trackage of what is now the DM&E (Map A) had been unprofitable for the Chicago and Northwestern Railroad (C&NW) for several years. In 1983 and again in 1985 the C&NW petitioned to abandon the line from five miles west of Pierre to Rapid City. This action would leave South Dakota with no centrally located east-west rail transportation. C&NW's request was met with unusually strong opposition from the State and U.S. Senator Larry Pressler, R-South Dakota. Realizing that abandonment was no longer a wise move, the

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C&NW came to a sales agreement with a group of investors in September 1986. The \$26 million purchase gave the buyers 826 miles of badly worn track and permission to operate over an additional 139 miles. Included were 18 locomotives averaging 35 years old and maintenance and repair equipment. No freight cars were included in the sale. In fact, the DM&E would pay monetary penalties unless 89 percent of its originated traffic was loaded in C&NW freight cars. In addition the C&NW retained ownership of the tracks at the DM&E's main traffic interchanges at Winona and Mankato, MN, Mason City, IA and Rapid City, SD. These restrictions took years of negotiating to remove.

Map A



Internal Environment

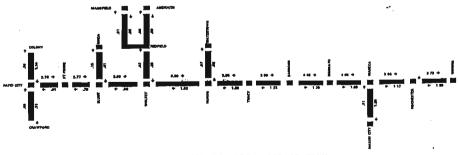
Description of the Railroad

The 1,105 mile DM&E is headquartered in Brookings, SD and operates mainly in South Dakota and Minnesota. A 69-mile branch line serves Mason City, Iowa. The 203 mile north-south running "Colony Line" purchased in May 1996 gives the railroad a few miles of track in Wyoming and Nebraska. Map B shows the Winona-Rapid City main line and branch lines to Colony and Mason City carry the greatest freight tonnage. It also indicates that most traffic is east-bound. West-bound trains consist mostly of empty cars being returned for loading. Track conditions on most of the line prevent freight train speeds in excess of 25 mph. There is a 94 mile section of completely rebuilt track that can support speeds of 49 mph. Approximately 220 miles of track is limited to speeds of 10 mph.

The DM&E serves the main line with a minimum six day per week commercial (scheduled) train service between Rapid City and Winona. A similar schedule handles freight between Waseca and Albert Lea, MN and Rapid City-Belle Fourche SD. During peak months (June-October) one or two grain trains per seven day week are often scheduled. Branch lines see trains on an as needed basis. Local freights provide service to many on-line customers, thus relieving commercial trains from making numerous stops between Rapid City and Winona.

Freight cars are sorted and blocked at division points at Waseca, MN, Huron and Rapid City, SD. The DM&E turns over much of its traffic to the Union Pacific (UP) at Mankato, Albert Lea and Winona. Increasing amounts of interchange business is done with Canadian Pacific near Winona. Burlington Northern Santa Fe (BNSF) participates with the DM&E on considerable business at Wolsey, SD and Crawford, NE. Table 1 indicates the size of the largest cities (1990 Census) along the DM&E route and the ownership of the trackage.

Map B



DM&E RAILROAD CORPORATION

1996 FREIGHT DENSITY MAP SHOWN IN

MILLION GROSS TONS PER MILE

NO SCALE

Table 1
Largest Cities and Track Ownership

State	City	Size	Track Ownership
Minnesota	Winona	47,828	DM&E & UP
	Rochester	70,745	DM&E
	Owatonna	19,386	UP
	Waseca	18,079	DM&E
	Mankato	31,477	UP
Iowa	Mason City	29,040	UP
South Dakota	Brookings	16,270	DM&E
	Huron	12,448	BNSF & DM&E
	Watertown	17,592	BNSF & DM&E
	Aberdeen	24,927	BNSF & DM&E
	Pierre	12,926	DM&E
	Rapid City	54,523	DM&E

SOURCE: U.S. Government—1990 Census

The company owns and operates a major car and locomotive repair facility at Huron. Major repairs and overhauls are performed on the road's 70 locomotives. Similar services are provided to freight cars at Huron, Rapid City and Waseca. All active locomotives have been rebuilt or received major overhaul since start-up. The availability rate for locomotives is over 90 percent and approaches 100 percent during the winter months when many units are stored due to lower traffic requirements. During the Summer-Fall season, the DM&E is occasionally required to lease a few locomotives to handle increased traffic.

Grain and grain-derived products make up 43.5 percent of the DM&E's carloads. Grain shipments include South Dakota wheat, corn and soybeans from eastern South Dakota and the western two-thirds of Minnesota. The second major item of traffic is bentonite clay (used in foundry operations, oil drilling, iron ore pelletizing and cat litter). Other major traffic sources include cement, wood chips, lumber and kaolin clay (manufacturing of cement). Table 2 shows the traffic mix.

Table 2
Historical Carloading by Category
(1991-1996)

Categories of Traffic	1991	1992	1993	1994	1995	1996
XX71	10.522	0.002	11 210	10.050	2.22	44.44
Wheat	10,532	9,883	11,319	10,353	9,085	11,338
Bentonite	9,054	9,666	9,545	10,737	10,729	12,554
Woodchips	3,232	3,353	2,369	2,359	2,466	2,406
Corn	8,045	8,469	4,281	4,601	7,894	8,561
Cement	2,171	2,853	2,581	2,514	1,993	3,344
Industrial Sand	2,369	3,407	3,040	3,276	2,338	766
Lumber/Boards	656	546	458	454	647	691
Soybeans	2,766	2,973	1,921	2,275	2,133	3,436
Kaolin Clay	1,036	1,295	2,321	466	2,144	2,220
Soybean Oil	1,969	1,971	2,231	2,005	1,756	1,826
Wheat Flour	974	930	891	1,124	1,301	1,169
All Others	<u>8,658</u>	<u>9,814</u>	9,813	<u>10,429</u>	10,721	12,085
Totals	51,462	55,160	51,040	50,593	53,207	60,396

SOURCE: Company records

Mission

The mission of the DM&E is to meet customers' expectations with scheduled freight service that is consistent and reliable, to achieve timely turnaround of equipment, to improve the safety and quality of the workplace for employees, and to develop growth opportunities for the company, its employees and customers.

Senior Management

The DM&E maintains a lean organization throughout its entire structure. Half of senior management is relatively new to DM&E and, as a group, appears fairly young, well qualified and highly motivated.

Kevin V. Schieffer, President and Chief Executive Officer. A lawyer by profession, he has had a long association with the DM&E. As a member of U.S. Senator Pressler's staff he was involved on the spin-off of the DM&E from the C&NW and later was active in getting bentonite and other "Colony Line" traffic rerouted to the DM&E. Entering private practice in 1993 he became the DM&E's attorney and was instrumental in renegotiating many of the onerous restrictions made during DM&E's inception. In 1995-96 he negotiated the purchase of the "Colony Line" and related agreements to include elimination of the requirements to use C&NW (UP) freight cars.

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Soybeans	2,766	2,973	1,921	2,275	2,133	3,436
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Lynn A. Anderson; Vice-President Marketing, Strategic Planning, and Public Affairs. Is responsible for marketing, pricing and sales. Serves as liaison to various federal, state, and local governments. Spent 15 years with the C&NW rising to the position of general manager of grain marketing and pricing. He was directly involved in the formation of the DM&E in 1986.

Kurt V. Feaster; Vice-President Finance. Is responsible for all accounting and financial matters, including implementing budget policies and financial planning for all departments. Before joining DM&E in 1992, he was chief financial officer at Montana Rail Link and later, the Wheeling and Lake Erie Railway.

Vernon L. Colbert; Chief Transportation Officer. Has responsibility for scheduling, car utilization, customer service center, train operations, dispatching, personnel (engineers, conductors and brakemen) and division point operations. Colbert spent 32 years with BNSF where he worked his way up from station agent to superintendent of operations. He joined the DM&E in January 1997.

Douglas G. DeBerg; Chief Engineer. Is responsible for upgrading and maintaining the ailroad infrastructure including: track, bridges, signal, and buildings. Has spent over 30 years working in various engineering capacities for five different railroads. He joined the DM&E n July 1995.

Daniel L. Goodwin, Chief Mechanical Officer. Oversees operational maintenance and najor rebuild and repair for locomotive and freight cars so that the DM&E can meet projected traffic levels and customer service requirements. He has spent over 26 years with hree different railroads, last serving as superintendent of motive power for the Wheeling and Lake Erie Railway. He joined the DM&E in January 1997.

Corporate Philosophy

DM&E has made a long-term commitment to provide consistent and reliable freight service and not diversify into nonrail efforts. Overall, DM&E believes in strengthening its position as a rail freight carrier in the upper Midwest by making its existing system more efficient and better serving its present territory. Accordingly, DM&E increased revenues by inlarging its market share of freight shipped by existing customers, by regaining customers who had shifted to trucks when the railroad was operated by previous owners, by serving new shippers in its territory, and by improving relations with other railroads. At present, the raiload continues to employ a strategy of strengthening its existing traffic base and increasing ts market share within the territory it serves rather than expanding much beyond South Dakota and Minnesota. The DM&E has also shown great interest in better controlling its nain traffic interchanges. The "Colony Line" purchased in May 1996 eliminated Rapid City is an interchange problem and allowed DM&E direct access to approximately 20 thousand originated cars a year to DM&E for delivery. Problems with UP interchanges have been reatly alleviated. A long term goal is ownership of UP's Winona freight yard which would permit direct interchange with Mississippi River barge traffic and improve interchange with he CP.

Marketing

The DM&E has aggressively sought traffic from both large and small shippers. It has initiated long-term agreements with large shippers to stabilize its traffic base and given eight or 10 percent discounts to grain shippers to make unit train shipments of 25 cars or more. Agricultural customers have been enticed by the DM&E's pricing and service packages that provide them access to markets in Texas, the Eastern United States, the Pacific west coast and the gulf coast via the Mississippi River. A computerized Customer Service Center has enabled the DM&E to better communicate with customers on car supply, transit times, loss or damage, billing, car tracing, switching, weighing and diversion issues.

Lynn Anderson's department continually looks for new customers and markets for current ones. The DM&E took advantage of the Winona end of track on the Mississippi River by developing a rail-barge service that opened up new markets to shippers and receivers at prices that took advantage of cheaper barge rates. Going in the opposite direction, DM&E has been dispatching unit grain trains of 54 or 108 cars to the Pacific Northwest via the BNSF. DM&E ships wheat trains to flour mills across the nation. The DM&E has also been successful in gaining some new industry along its lines. For example, a new soybean processing facility in Volga, SD is generating over 1,500 cars per year and plans to increase output by 50 percent.

DM&E's innovative efforts, however, are often offset by nature. The wet Spring of 1995 reduced wheat production resulting in DM&E moving 1,200 fewer carloads of wheat, while corn and soybean production were not affected. A "mild" winter of 1995-1996 and a favorable spring resulted in an excellent year for all crops. High production along with record or near record prices for corn and wheat resulted in the DM&E moving 4,200 more carloads of grain than in 1995. The harsh weather conditions in winter-spring 1996-97 have caused winter wheat production to be down 29 percent from the previous year. Wheat business is expected to be down in 1997, attributed to late planting due to spring flooding and lower prices paid to farmers. In spite of some hail damage, the outlook for corn and beans remains good.¹

Transportation

Providing accident free, consistent and reliable service that meets customer needs is a never ending challenge to the DM&E. Poor track, lack of adequate passing sidings to permit train meets, locomotive and train crew shortages, lack of training and rail knowledge, failure to follow rules, and the weather have too often equated to slow transit time, high operating costs, train accidents, unsatisfied customers, and low employee morale.

The DM&E inherited trackage that, in the main, had not received adequate maintenance in 20 to 30 years. A great portion of the line west of Pierre, for example, is the original 72 pound (per yard) rail laid in the early 1900s. Eighty odd years of pounding have made the track and the supporting grade increasingly unable to support 100 ton railcars moving at speeds much above 10 mph.

¹ "Business Trails '96 Pace," DM&E Enroute, July 1997, p. 3.

Lack of adequate sidings (6,000 ft.) often causes one DM&E train to wait several hours for a meet with a train coming from the opposite direction. Additional time is lost when there is a shortage of rested train crews or a lack of locomotives.

Inadequate operating and safety training, lack of rules and compliance with those that exist have caused derailment, personal injury and unnecessary operating expense.

The weather adds its toll. Winter may cause trains to average in excess of 100 hours to make the Rapid City-Winona trip rather than the ideal 60 hours. Heavy rains result in unstable track and, coupled with deferred or improper maintenance, ultimately causes a high percent of the derailments that have cost the DM&E \$3.5 million annually for the past three years.

The above factors cause train crew overtime, extra crews, higher freight car rental expenses, accident costs, and increased locomotive fuel and maintenance expenses. These items can add several million dollars to operating expenses. Chief Transportation Officer Vern Colbert and his Transportation Department continually fight to improve service while lowering costs. Actions implemented since his arrival in January 1997 include the following:

- 1) The formation of cross functional quality circle type teams to open lines of communication throughout the railroad. Teams meet monthly to identify and solve problems. Day to day issues to be solved locally and big ticket items to be presented by a team member to department heads on a regular basis. Teams receive adoption-rejection feedback from management with full explanation.
- 2) The institution of drug and alcohol testing and DM&E policy testing (rules knowledge and adherence).
- 3) Improvement in reporting of and accountability for accidents. This includes studying of locomotive recorders (similar to flight recorders) to determine crew actions prior to and the time of derailments. Thorough investigation will be the rule and people will be held accountable.
- 4) Increased supervision of crew performance along with retraining when needed. The emphasis here is developmental rather than punitive.

Colbert has placed all trains on a schedule in an effort to improve consistency and reliability. It is hoped that this will improve customer satisfaction while enabling the DM&E's marketing, engineering and mechanical departments to better plan and coordinate activities. Through May the main line commercial trains had been on time approximately 15 percent of the time. All departments are working to reach Kevin Schieffer's consistency goal of 90 percent.

One of the major products of faster train service is the reduction of the average car cycle (the number of days that cars are on the DM&E rails from when they are received empty from another railroad to where they are returned as a load to a connecting line). The average time through May was approximately 12 days. For every one of those days the DM&E was paying car hire expense (\$18 a day) for cars from other railroads, or lease, capital cost and interest on its own 3,000 cars).² For example, DM&E has monthly payments on its lease cars of \$1 million and unutilized cars contribute nothing to paying this expense.

Colbert leads a team of 84 locomotive engineers and 70 conductors plus a management and operational staff of 24. The DM&E trains its own conductors and has a 70 day cross-training program, in conjunction with the CP railroad, where senior conductors are qualified as engineers. This dual qualification has added job stability by permitting conductors to serve as engineers during peak season and return to their former duties during slack time. An increased number of operating crews and the addition of newer and more powerful locomotives should give the DM&E needed flexibility in train makeup and scheduling.

Engineering

This department has the Herculean task of maintaining track, bridges, and other physical plant in a safe condition commensurate with DM&E requirements. This charge includes: cross-tie replacement, rail replacement, rock ballasting, surfacing (cleaning, leveling and smoothing of track), sub-grade and bridge improvements.

As mentioned earlier, the DM&E inherited a poorly maintained railroad. Added to these woes was the discovery that the native clay (Pierre shale) subgrade on the Pierre Rapid City (PRC) section would prove very unstable during periods of heavy rain. In effect, the water becomes trapped between wet clay and track structure and the wet clay itself often proves unable to support the weight of heavy 100 ton car trains. The end result frequently is that water, clay, ballast, etc., are squeezed to both sides of the railbed thus causing the track to sink. Some of these soft spot areas extend for 500 feet. Unseasonably wet weather in four of the last five years has played havoc on the PRC section. The DM&E has tried many methods throughout the years to correct this problem and has experienced varying degrees of success. The installation of 35 miles of waterproof fabric between ballast and clay was deemed a failure. The installation of perforated lateral or longitudinal drain pipe to remove trapped pockets of water met with success provided there was natural drainage away from the track structure. In cases where there wasn't, the trapped water created new soft spot areas. Doug DeBerg has been experimenting with a composition of lime and fly ash (coal ashes) mixed with earth to strengthen unstable soils. Early results are encouraging.

The DM&E had spent in excess of \$88 million on track and bridge-related capital projects by the end of 1996. Over 72 percent of this was from cash generated from operations and the remainder came from federal and state loans and grants plus loans from customers. The DM&E also performs normal maintenance and maintenance-support activities that are not included in capital expenditures. Table 3 shows capital expenditures for 1987-1996.

Budgeted capital track expenditures for 1997 approximate \$10 million. Included are: installation of 70,000 cross ties, rock ballasting and surfacing 450 miles of track, upgrading bridges, and replacing several wooden bridges with culvert and earthen fill. Other projects involve building up and smoothing rail ends and joints, continuing rail testing and replacement and upgrading of rail yards. Also added was the initiation of a "trailer" vehicle operated by a track inspector, that follows trains looking for damage to track or structure. Deficiencies noted are reported by radio so men and material can be dispatched to the scene for repairs. This program has prevented many likely derailments.

The Engineering department is staffed with 33 section personnel who are equally spread along the 11 sections of 1,105 mile rail. Each three-man section is responsible for maintaining a safe railroad across its section. The department's other 37 non-management personnel

² "Employee Meeting Highlights," DM&E Enroute, February 1997, P. 4a.

Table 3 October Minnesota & Fastern Railroad Corporation	Capital Expenditures	(\$,000\$)
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	Total	\$20,867 43,380 \$64,247	24.128 \$88,375 15,695 8.398 8.112,468	861	3,887 21,114 865	7,650	1,119	3,704 7,195	1,963 64,110 \$112,468
	1996	\$2,852 26,536 \$29,388	\$30,703 990 2,196 \$33,889	0	455 21,114 289	0	0	232	386 11.413 \$33,889
	1995	\$3,066 3,220 \$6,286	\$8,632 6,220 1.855 \$16,707	0	155 0 106	0	0	309	301 15.836 \$16,707
	1994	\$2,019 2,216 \$4,235	4.350 \$8,585 2,869 934 \$12,388	99	401 0 0	0	55	439 1,229	200 9.998 \$12,388
	1993	\$1,421 797 \$2,218	3.811 \$6,029 1,430 850 \$8,309	80	184	0	969	172	361 4.983 \$8,309
	1992	\$2,221 1,120 \$3,341	\$5,054 1,055 399 \$6,508	68	567 0 76	0	49	509	40 5.178 \$6,508
	1991	\$955 21 <u>9</u> \$1,174	\$2,548 719 548 \$3.815	0	278 0 48	09	21	334	3.069 \$3.815
,	1990	\$2,614 3,429 \$6,043	\$9,012 \$9,012 996 414 \$10,422	0	345 0 0	2,720	70	408	210 5.702 \$10.422
	1989	\$3,099 2,768 \$5,867	\$6,559 \$6,559 \$38 \$8.087	0	374 0 50	4,870	19	235	129 2.147 \$8,087
	1988	\$464 713 \$1,177	4.721 \$5,898 431 612 \$6.941	0	676 0 296	0	209	709	336 1.817 \$6,941
	1987	\$2,156 2,362 \$4,518	\$5,355 47 0 \$5,402	626	452 0 omers 0	SD 0	0	357 0	0 3.967 \$5,402
		Capital Expenditures: SD Track-West of Pierre SD Track-East of Pierre Total SD Track	MN Track Total All Track Locomotive All Other Total	Funded By: FRA* Grant for track improvements in SD	FRA Grant for SD Road Crossings & Signals SD Bond/RECD Loan Funds Secured from SD Customers	FRA Loan for track improvements expended in SD	FRA Grant for track improvements in MN	FRA Grant for MN Road Crossings & Signals MN State Loan	Funds Secured from MN Customers DM&E Cash Total

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install and maintain signals, repair bridges, inspect track and operate a variety of equipment. This base work force is augmented by temporary hires during the spring and summer. Also, the railroad uses contractors for all major capital projects, such as the state financially supported rebuilding of 94 miles of track between Wolsey and Pierre, SD, with new 115 lb. continuously welded rail.

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Mechanical

This department is tasked with repairing and maintaining DM&E's 70 locomotives, 3.000 freight cars (up from 59 and 300 respectively in 1995) and repairing cars owned by other railroads that are on DM&E track. Dan Goodwin's department has the equipment and expertise to perform almost any type of repair or maintenance requirement. The fact that locomotive availability remains 95 percent or higher with units averaging 30 years in age is a testament in itself. Dan has emphasized purchasing newer and more powerful locomotives so eventually most trains can be pulled, at speed, by two locomotives. He is a relations type leader and is a strong advocate of the recently adopted quality circle program.

Human Resources

The Human Resource Department (HR) led by Jan Todd is relatively new. Hiring and training are done at the department level, while pay, benefits, performance appraisal, and administrative record keeping are performed by HR. Human Resources take a back seat to no functions on the DM&E. President Schieffer continually stresses the importance of all employees both as people and as the real cause of the railroads success. Most key managers seem to echo this philosophy, though a few seem to have difficulty adjusting from the too typical railroad confrontational leadership style.

Communications—Schieffer and his principal staff make every effort to spend as much time out on the line as possible. Agenda items include quality of life issues and the four operational goals of: improved transit times, consistency and reliability, car cycle times and safety.3 The institution of cross-functional quality circles is one of many empowerment activities that are being utilized to improve communications, employee involvement and team spirit. Face-to-face communication is supplemented by a quarterly newsletter DM&E Enroute, which keeps employees, customers and supporters informed of current operations and future plans. There is an open invitation to employees to phone Schieffer direct, or in his absence, leave a message. A growing number of employees have a positive attitude towards these efforts, although some feel they need more one-to-one contact, another group wonders if they are really listened to and others say that quality circles is just another program bound to fail.

Stable Work Force—The DM&E recognizes the importance of job security to employee moral, turnover, and possible increased productivity. The use of temporary employees and contract labor serve to greatly minimize layoffs in the seasonal transportation, engineering and mechanical departments. In addition, cross training affords flexibility needed to efficiently move employees where needed.

³ Ibid, p. 4a.

Pay—The DM&E pays its craft, clerical, and non-union employees very competitively versus local rates. The DM&E has admitted from the beginning that it could not match the train crew pay of unionized Class I railroads. Rates of pay are 15 to 25 percent below comparable wages on the BNSF. Extensive overtime on the DM&E plus profit sharing for non-union personnel and year-round (Class I railroads often have winter layoffs) employment undoubtedly narrows this gap. The DM&E also has used bonus and merit pay to further reward non-union employees. Bonuses in 1995 and 1996 averaged three percent.

Benefits—The benefit package offered DM&E employees equals or exceeds those provided by the major union railroads. Table 4 gives a sample comparison.

Unions—The DM&E remained non-union until June 1990 when train crew, railcar repairmen and electricians began being represented by the United Transportation Union (UTU). Unions tried to organize train dispatchers in 1991, mechanical employees in 1995 and engineering employees in 1997. The unions lost all three elections, although the engineering election has been rescheduled due to a technical error on the part of the National Labor Relations Board.

Table 4
Sample Benefit Comparison

Benefit	DM&E	Unionized Railroad Plan
Life Insurance	\$50,000	\$10,000
Accidental AD&D	\$50,000	\$8,000
401(K)	Yes	Not Provided
Profit Sharing	Yes	Not Provided
Maximum Medical	\$1,000,000	\$500,000
Deductible	\$100-each individual	\$100-each individual
Maximum out- of pocket	\$500-individual \$1,000-family	\$2,000 each person covered

SOURCE: DM&E Benefit Brochures

Summary of Financial Performance 1995-1997

The DM&E has continued to improve its operating revenue since start-up and particularly from 1992 to date. The railroad generated 45.7 million in operating revenues in 1995, while traffic volume was 53.2 thousand carloads. Operating revenues for 1996 were \$55.6 million and traffic volume 60.4 thousand carloads, a 23.7 percent increase in revenues and a 13.5 percent increase in carloads. During the first five months of 1997, operating revenues were \$4.3 million under budget due primarily to extremely harsh winter weather and spring flooding problems.

Revenues—Traffic volume during 1995-1996 decreased in three of 12 commodity groups with an overall increase of 8.3 percent. The largest increases were in bentonite clay, wheat, cement, corn, and soybeans. Decreases in wheat flour and wood chips were attributable to weather and market conditions. A major carload loss in low revenue producing industrial sand was due to competition.

Operating Expenses—These expenses rose 27.7 percent between 1995 and 1996. Increased traffic and related activities increased expenses in seven of eight categories. The decrease in accident damage, injury and insurance category was an encouraging sign. Expenses during the first five months of 1997 exceeded budget by \$2.6 million. This resulted in a \$3.1 million operating loss for the period. Appendix A presents income statement data for years 1995-1996.

Liquidity and Capital Resources—Cash generated from operations is the DM&E's primary source of liquidity and is used principally to fund working capital for debt service and capital expenditures. This latter category includes cost of track improvements, locomotive and railcar purchase, technology enhancement, motor vehicles and other equipment purchase. See Appendix B for cash flow data for years 1995-1996.

Liabilities—The DM&E was highly levered at start-up and has been forced to continually ask for federal, state and local financing to assist in roadbed maintenance and major construction. Long term debt includes loans for Wolsey-Pierre S.D. rail replacement, purchase of the "Colony Line," track rehabilitation and to pay off older, more expensive debt. Major off balance sheet commitments are for operating leases on locomotives, freight cars and other equipment. These commitments total over \$120 million. Debt covenants require that certain financial ratios be maintained. Due to severe weather, the DM&E was in technical violation of certain covenants at March 31, 1997. A major portion of a private equity placement of \$7.0 million to existing share holders increased liquidity sufficiently to satisfy a major lender concern and to cure the technical default. Other covenant violations were temporarily waived or amended and the railroad feels it will be able to maintain compliance through the remainder of 1997. See Appendix C for balance sheet information for 1995 & 1996.

External Environment

Competition

The DM&E's operations are subject to competition from railroads and trucks.

Rail—There are several short line and three major railroads that have lines that connect with or are near the DM&E service area.

Canadian Pacific Railroad (CP)—Is deemed to be friendly. The only connection with the DM&E is near Winona, MN. Interchange traffic has grown from a few cars two years ago to several thousand cars annually.

Union Pacific (UP)—Is more friendly than its C&NW predecessor. It strives to be more cooperative with interchange traffic at Mankato, Albert Lea & Winona, MN. It also owns the freight yard in Winona where much of DM&E traffic originates and terminates. The DM&E has an ongoing offer to purchase this freight yard but UP has shown no interest.

Burlington Northern Santa Fe (BNSF)—This railroad has played a sort of Jekyll and Hyde role with the DM&E. It has been very cooperative in providing DM&E grain traffic with direct access to the Gulf, the Pacific Northwest and the Midwest. On the other hand, it has offered below cost rates to try to siphon bentonite traffic from the DM&E to its parallel line farther west (see Map A). The DM&E responded by lowering its own rates and increasing service. BNSF has made minimal effort to repair the joint DM&E-BNSF line running between Wolsey and Aberdeen S.D. which is still under water. The DM&E is blocked from the south while BNSF can directly service or provide near access from the north.

Short Lines—The short line railroads in the area provide no impact on the DM&E.

Trucks—This mode of transportation carries a greater share of intercity traffic than do railroads. Their innate flexibility, relatively low capital requirements and huge network of tax-supported highways gives them great advantage in smaller volume and under 500-mile shipments. Railroads are very competitive in bulk shipments over long distances. Intermodal shipments (truck or container on rail flatcar) often offers the advantages of both modes to shippers. Although the DM&E has considered intermodal shipments in the past, management feels that the slow track speed over much of their line limits the economic feasibility of this mode of transportation. The DM&E faces the strongest truck competition in Minnesota.

Weather—DM&E's location in the upper Midwest will always subject the railroad to weather extremes. While the "flood of 1993" caused extensive crop damage, the moderate temperatures and rainfall in 1994 resulted in bumper crops in both South Dakota and Minnesota. The Spring of 1995 was the wettest on record for South Dakota. The winter of 1996-97 was called the worst ever by veteran railroaders. North and South Dakota and Western Minnesota were all declared federal disaster areas. The DM&E suffered through substantial snowfall and bitterly cold temperatures that sent wind chills as low as 80 degrees below zero and caused drifts of 20 feet or higher, with several over a half-mile long. The severe winter weather combined with the washouts in the spring cost the railroad more than \$3 million. This estimate breaks down to \$1.8 million for snow removal and \$1.3 million for flood-elated damage. The DM&E is anticipating approximately \$1.9 million in federal aid to assist n the repair of flood-damaged rail lines.

Legal/Political

Both South Dakota and Minnesota have a history of support for the rail industry in genral and the DM&E in particular. A glance at Table 3 shows that the DM&E has been a ecipient of \$48.3 million in grants or loans either directly from both states or indirectly hrough state influenced FRA grants. State governors and legislators have been instrumental n getting federal disaster assistance to help repair damage caused by the elements. South Dakota government was heavily involved in the formation of the DM&E, its purchase of the Colony Line" and the financing, along with a federal agency, of \$21 million to rebuild 94 niles of track between Wolsey and Pierre, S.D.

'lanning the Future

Kevin Schieffer's day was soon filled with the normal business of a busy executive. He pent several hours gathering and dispersing information, making decisions and checking on

the progress of previous ones. It was late afternoon before he got back to his earlier thoughts of the railroad's near and long term future. The railroad had been following basically a market penetration strategy since start up. Lynn Anderson and his marketing people also had developed some innovative services during that time. First priority, in the short run, had to be getting back on track. What could be done to improve the steps taken already? Had they overlooked anything? In the background was the desire to buy UP's Winona rail yard. BNSF's lease of the South Dakota owned Sioux City-Aberdeen line would be up in four or five years. Even if all these possibilities came to fruition, would the DM&E future be guaranteed? Maybe a more daring option was in order? The rich, low sulfur coal fields of Wyoming lay 200 or so miles west of the "Colony Line." Extending DM&E's tracks to those mines, plus rebuilding the current main line to hold heavy coal trains would cost in the 10 figures! The UP and BNSF would undoubtedly be furious at someone breaking their transportation monopoly. Yet, the DM&E would offer the shortest route to Chicago and the upper Midwest and coal shipped by barge down the Mississippi was also an option. "Well, Rome wasn't built in a day," Kevin muttered to himself as he reached for his briefcase and car keys.

APPENDIX A

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Dakota, Minnesota & Eastern Railroad Corporation Statements of Income and Retained Earnings Years Ended December 31, 1996 and 1995

	1996	1995
Revenue		
Freight	\$55,648,725	\$44,782,303
Other	<u>913,832</u>	<u>944,115</u>
Total Revenue	56,562,557	45,726,418
Operating Expenses		
Transportation		
Car Hire	9,134,599	5,734,443
Fuel	5,769,317	4,006,205
Salaries, Benefits, Rent, and Other	<u>10,274,690</u>	<u>7,513,630</u>
	25,178,606	17,254,278
Accident Damage, Injury, and Insurance	3,870,039	4,323,784
Maintenance of Equipment	3,474,778	2,282,938
Maintenance of Way	5,276,503	4,174,736
General and Administrative	4,189,941	4,016,464
Depreciation and Amortization	5,455,831	5,075,024
Total Operating Expenses	47,445,698	37,127,224
	- 44 6 0 - 0	0.500.104
Operating Income	9,116,859	8,599,194
Other Income, Net	1,214,643	619,023
Interest Expense	(5,760,438)	(3,794,587)
Income Before Income Tax Expense	4,571,064	5,423,630
Income Tax Expense	1,746,120	2,033,861
Net Income	2,824,944	3,389,769
Performed Constant	(112,000)	(112,000)
Preferred Stock Dividend	(112,000)	(112,000)
Increase in Preferred Stock Value	(75,000)	(75,000)
Retained Earnings at Beginning of Year	15,875,694	12,672,925
Retained Earnings at End of Year	<u>\$18,513,638</u>	\$15,875,694

APPENDIX B

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Dakota, Minnesota & Eastern Railroad Corporation Statements of Cash Flows Years Ended December 31, 1996 and 1995

	1996	1995
Cash Flows From Operating Activities	A2 224 244	22 222 762
Net Income	\$2,824,944	\$3,389,769
Adjustments to Reconcile Net Income to Net Cash Provided by Operating Activities		
Depreciation and Amortization	5,455,831	5,075,024
(Gain) Loss on Sale of Assets	(207,080)	35,138
Deferred Income Taxes	1,547,102	2,069,801
Deferred Interest on Debt	116,836	122,838
Changes in Current Assets and Liabilities		
Accounts Receivable	2,236,433	(2,188,122)
Other Current Assets	(12,028,789)	(4,528,531)
Accounts and Notes Payable	1,920,673	719,865
Accrued Expenses and Income Taxes Payable	(1,486,498)	3,966,514
Changes in Other Liabilities	(193,710)	(61,146)
Net Cash Provided by Operating Activities	185,742	8,601,150
Cash Flows From Investing Activities		
Capital Expenditures	(17,929,156)	(16,707,492)
Colony Line Acquisition	(10,453,313)	
Restricted Cash	(3,927,065)	
Proceeds From Sale of Land and Property	3,873,343	332,004
Deferred Costs	(557.442)	
Net Cash Used in Investing Activities	(28,993,633	(16,375,488)
Cash Flows From Financing Activities		
Borrowings on Revolving Loan Facility	25,470,000	5,169,069
Repayments on Revolving Loan Facility	(29,399,069)	(3,890,000)
Proceeds From Issuance of Long-Term Debt	37,863,569	4,060,500
Repayments of Long-Term Debt	(7,498,291)	(1,042,167)
Government Grants	1,222,521	1,845,433
Exercise of Stock Warrants	86,250	
Deferred Costs	(1,815,009)	<u>(421,496)</u>
Net Cash Provided by Financing Activities	25.929.971	<u>5,721,339</u>
Net Decrease in Cash and Cash Equivalents	(2,877,920)	(2,052,999)
Cash and Cash Equivalents at Beginning of Year	3,263,499	5.316,498
Cash and Cash Equivalents at End of Year	\$385,579	<u>\$3,263,499</u>

APPENDIX C

Dakota, Minnesota, & Eastern Railroad Corporation Balance Sheets December 31, 1996 and 1995

	1996	1995
Assets		
Current Assets		
Cash and Cash Equivalents	\$385,579	\$3,263,499
Accounts Receivable	6,936,246	9,172,679
Incurance Claims and Other Receivables	2,106,974	1,976,999
Materials and Supplies	2,790,726	5,634,284
Prepaid Expenses	840,828	690,204
Tax Refund Receivable	466,180	139,198
Deferred Income Taxes	<u>581,500</u>	<u>376,247</u>
Total Current Assets	14,108,033	21,253,110
Property, Plant, and Equipment, Net	106,283,187	73,242,973
Restricted Cash	3,927,065	
Deferred Costs	4,338,446	<u>2,237,409</u>
	\$128,656,731	\$96,733,492
Liabilities and Shareholders' Equity		
Current Liabilities		
Accounts Payable	\$3,929,602	\$1,804,689
Revolving Loan Facility		3,929,069
Note Payable	178,084	382,324
Accrued Expenses	11,458,870	12,479,188
Current Maturities of Long-Term Debt	1,160,559	1,282,186
Total Current Liabilities	16,727,115	19,877,456
		42,710,717
Long-Term Debt, Excluding Current Maturities	73,197,622	273,507
Other Liabilities	196,633	12,819,662
Deferred Income Taxes	14,572,017	
Total Liabilities	104,693,387	75,681,342
Commitments and Contingencies		
Shareholders' Equity Redeemable Series A Preferred Stock - \$1.00 Par		
Value, 10,000 Shares Authorized and Outstanding	2,773,000	2,586,000
	2,773,000	2,500,000
Common Stock - \$0.01 Par Value, 1,000,000 Shares		
Authorized and 750,000 and 725,000 Shares	7,500	7,250
Outstanding Respectively	2,836,426	2,750,426
Paid-in-Capital - Common Stock	18,513,638	15,875,694
Retained Earnings	• •	(167,220)
Treasury Stock - At Cost, 24,000 Shares	(167,220) 23,963,344	21,052,150
Total Shareholders' Equity		\$96,733,492
	<u>\$128.656,731</u>	<u>370,/33,492</u>

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