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Editorial Policy

The Journal of Applied Case Research (JACR) was established by the Southwest Case Research Association to publish cases and papers dealing with issues in all business-related disciplines that are related to case writing or teaching with cases. *JACR* will publish cases based on field research or research from secondary sources. *JACR* does not accept synthesized or fictional cases. Submissions will be evaluated on the basis of relevance to and adequacy for clearly stated teaching goals. An instructorís manual or teaching note must accompany each submitted case. Teaching notes are not published but are an important aspect of the review process.

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.

Case Format

Cases submitted for review may be single-or double spaced with 1" margins. Papers are to 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 the end of the case. Citations should be included in the text, with bibliographic information restricted 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 address, telephone number, fax number, and email address of the "contact" author should also 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. 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 third issue of *The Journal of Applied Case Research* which contains eight cases. The task of Editor-In-Chief has passed to Professor Leslie Toombs at the University of Texas at Tyler. Five cases that have been accepted have been transferred to Professor Toombs. Thanks to the authors for submitting their work to *JACR* and to the reviewers for their time and efforts in the review process. Manuscripts should be sent to: Professor Leslie Toombs, School of Business, The University of Texas at Tyler, 3900 University Boulevard, Tyler, Texas 75701.

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Contents

Octoberfest

Leslie A. Toombs, The University of Texas at Tyler
Keith Atkinson, Delta State University
Elise D. Jenkins, Delta State University
Elizabeth V. Mulig, Louisiana State University, Shreveport
Kathy Wilder, Delta State University

Bob Hansen, Director of the Cleveland (Mississippi) Chamber of Commerce, sat at his desk reviewing plans for Octoberfest which was just eight weeks away. Cleveland is a rural community with a population of 15, 384, located in the Mississippi delta region. The Chamber of Commerce sponsors Octoberfest annually. Octoberfest offers a variety of attractions to appeal to many different groups. The main attractions of Octoberfest are barbecue competitions, street dancing, arts and crafts exhibitors, car show, main stage entertainment and children's events. The event begins on Friday and lasts two days. Friday evening begins with activities focusing around music by local bands, street dancing and barbecue competitions. Early Saturday morning begins with more barbecue competitions, arts and crafts booths, children's games, a car show and a wide variety of ongoing entertainment presented on the main stage.

Background

Octoberfest has become a much anticipated event by many in the Cleveland community. Bob, however, was concerned about the planning for next year's event. The Chamber's Strategic Planning Committee (SPC) was working on a short timetable and was already in the process of appointing committee membership for the upcoming year. End of the year reports would also be due to the SPC by December 31 so that the group could begin assessing the effectiveness of the Chamber sponsored activities.

As he was recalling bits and pieces of conversations with the various members of the Octoberfest committee, he realized much of the concern revolved around gaining the necessary sponsorships for the event. This year's Octoberfest was being held on the same weekend as the homecoming football game and celebration for Delta State University. This fact could cause the loss of some sponsorships if they were not financially able to support both events. Some committee members felt that having both events in the same weekend would also result in decreased attendance for Octoberfest. Others felt that homecoming and Octoberfest would complement each other. There were also some questions concerning the format of the event. Some members thought that too much emphasis was placed on activities such as the barbecue contest while others believed that the contest needed more emphasis. Also, a couple of the members wanted to shorten the length of the event to Saturday only. These members felt that the event was costing the Chamber too much time and resources for the return generated to the community. Bob believed that if an economic impact study was performed, next year's committee would have better data for planning purposes as well as statistics that would be useful when recruiting sponsorships.

Part A: Planning the Study/Designing the Questionnaire

Meeting with the SBI Director

Bob had attended several training sessions on conducting an economic impact analysis and had participated in the preparation of several projects. He remembered from these past experiences and training there were many different approaches which could be used to conduct such an assessment. Although he knew that the economic impact of Octoberfest should be prepared, at that moment he began wishing he had someone that he could consult with in the preparation of the assessment. He decided to call his friend who teaches business at the local university, Jon Thornhill, to see if he could recommend a consultant for the project. Jon put him in touch with Nikki Greene, Director of the Delta State University's Small Business Institute (SBI).

Bob spoke with Nikki, filled her in on the details, and they set up a meeting to discuss strategies for assessing the economic impact of Octoberfest on the community. Nikki liked the idea of being involved in this project and offered Bob the assistance available through the Small Business Institute program. The timing was perfect since it was the beginning of the fall semester, and Nikki would be able to provide immediate assistance. She explained that business students enrolled in a senior-level consulting course are assigned group projects and work with a local business/organization for a whole semester. These students are usually in the top ten percent of the graduating class and work closely with Nikki and other faculty in the preparation of their projects. She gave him examples of the types of projects which had been done in the past through this program and cited benefits participants had received. Bob quickly accepted her offer and felt this would be a very beneficial relationship for all parties involved.

Bob and Nikki spent the remainder of the meeting in discussion of the possible approaches that could be used in collecting the data necessary to assess the economic impact of Octoberfest. Bob favored the use of intercept surveys because he felt face-to-face surveys would be most suitable for this project as they generally have the lowest non-response rate. Nikki told him she would like to involve the students in the discussion of the methodology to be used and suggested all final decisions be made after he met with the students who were assigned to this project. She planned to use this discussion with the students as an opportunity to explore one of the fundamental concepts of data collection and the linkage between the necessary data and the method used to collect the data. She envisioned this project as an opportunity for the students to plan a study, design a questionnaire, and also to actually conduct the study and analyze the results.

After Bob left her office, Nikki looked over her class roster and pondered which students should be assigned to Octoberfest. The university had close ties with the Chamber of Commerce, and she certainly wanted to select students who possessed the ability and motivation to prepare a thorough analysis. Finally, she chose to assign the project to Adrian Smith's group. Adrian was a marketing major and an "A" student in two of her lower level marketing classes, and Nikki had observed her to be a good leader. Nikki called Adrian and asked if they could schedule a meeting in her office during the first week of school.

Meeting with the Student Group Leader

"Adrian," Nikki said after she briefed her on the details, "this is a great opportunity to apply the skills you've learned in the classroom in the last three years in a real world situation. The community leaders are depending on our SBI to furnish them with accurate, useful information, and you will be a fundamental part of our team."

"It's so scary, though, Dr. Greene," said Adrian, "I don't know if I can handle it."

"Sure you can, Adrian. I have chosen you as a team leader for the project because I have confidence in your abilities and feel we can work well together. I think you'll feel better once we actually begin putting the pen to the paper.' Keep in mind as you begin thinking about the project that the objectives are as follows: (1) to plan the study, (2) to design the questionnaire to be used, (3) to oversee the implementation of the study, and (4) to analyze the results." The two scheduled a conference for the next week where all the team members would be introduced to the project and discuss the group's objectives for the semester. As Adrian sat in Dr. Greene's office wondering how to get started, she decided she should conduct library research to have better information for the team member briefing.

Adrian's Research

"Oh lands! Where do I begin. It's neat Dr. Greene thinks I can do this, but talk about putting the pressure on!" thought Adrian. She decided she had better get started. First stop: the library.

After "spinning her wheels" for hours, Adrian finally focused her search and conducted some serious research. She realized the topic on which she should focus was "economic impact studies." Once she started studying the topic, she was able to find numerous helpful references (Long and Perdue, 1990; Fleming and Toepper, 1990; California Division of Tourism, 1974). She prepared the following synopsis of her findings:

There is a need for economic impact studies which allow communities to clearly evaluate the effect of special events and community festivals. These studies help communities recognize the economic benefits of attracting expenditures from non-residents. They can also assist in determining site selection and help analyze the direct and indirect impact of spending in the town due to the events.

An attempt should be made to distinguish non-residents from residents in order to differentiate between local and non-local spending. Economic impact can also include benefits the town receives from payroll income, jobs, and taxes.

The most common method of data collection is surveying. However, surveys often vary in collection techniques and in the method of selecting the sample. Budget constraints often impact the amount and quality of the information found.

After Adrian had conducted research for the project and reduced her findings to a written synopsis, she felt better prepared to meet the challenge of this project (just as Dr. Greene had predicted!). Armed with her research finding and data synopsis, Adrian had more confidence in her ability to brief the team. From the research she had just summarized, she knew many questions concerning the methodology to be used in conducting the study would have to be addressed and answered by the team. Finding these answers and designing the methodology would be challenging, but she knew Dr. Greene, the other business faculty, and Bob Hansen would be available to assist the team.

The Team Meeting

"Good afternoon, we have a lot to discuss so we should really get started," said Adrian as everyone took their seats. The Octoberfest team included three other members: Jack Valmaine (Economics major), Jill Herron (Management major), and Sarah Day (Finance major). All four of the students were bright and motivated, and Dr. Greene felt the team composition was optimal. Nikki welcomed the team and stated she knew they were going to have a fun and productive semester with this project. After providing a little background information concerning the event and her meeting with Bob Hansen, she excused herself from the meeting and asked the team to submit a written progress report to her next week.

Adrian provided each member with a copy of her summarized library findings and asked for input concerning the direction the team should take to complete this project. The other three members were as apprehensive as Adrian had been during the first meeting with Dr. Greene. Jill decided she might have signed up for the wrong class and pulled out the course schedule to look for another course she could add in place of this one. Sarah had been out at a back-to-school sorority party most of the previous night and was not really prepared to devote her full attention and provide meaningful input after all, school had only been in session for one week! Jack thrived on his major field of economics and immediately started confusing everyone by saying the first thing they needed to do was to worry about the "multiplier effect."

As Adrian watched and listened to their various reactions, she knew she had to do something to pull the team together and move them in the right direction. "I understand we are all worried about the scope of this project and the fact that the Chamber will be reviewing our work. We are under a lot of pressure to perform! I certainly don't have all of the answers at this point, but I hope we can pull together and at least prepare a rough draft of our progress report before this meeting is over today." Adrian paused for a moment to see the reaction of her teammates. At least they were quiet and all looking at her. She continued, "As you can see from the summary sheet I have provided, we should begin by defining exactly what is to be measured and state this in terms of objectives for this project and turn those in to Dr. Greene for approval. Once we have approval of these objectives by Bob Hansen and Dr. Greene, we can plan how we will achieve the objectives.

Sarah and Jill agreed with Adrian, and Jack offered to take notes. As Jill reread Adrian's summary, she offered the suggestion that the team would have to break the results into resident and non-resident expenditures. Sarah questioned why this would be necessary. "Think about it for a moment" said Adrian. "Residents are already in Cleveland during the time of the event and would probably be spending money shopping or some other activity if Octoberfest

wasn't being held. We need to look at expenditures of people who are specifically coming to the community for this event, and those persons would most likely be classified as non-residents. I think this is what the research means in terms of distinguishing between local and non-local spending."

"I agree," said Jack. "Don't we also want to break out the expenditures in terms of people attending the events and those participating in the provision of the various activities?"

"Why would that distinction be necessary?" asked Sarah. "As long as they are all spending money, who cares?"

"Because I think we still need to be able to determine who actually came to the event and spent money without having to be here as a participant, just as we need to distinguish between resident and non-resident spending" said Jack.

"Okay, I see your point. What does everyone else think?" asked Sarah.

Jill and Adrian both agreed with Jack. As the students discussed what to call the groups it was decided that the people who weren't exhibitors at the festival would be classified as patrons. The exhibitors including the barbecue teams, arts and crafts exhibitors, food vendors, and children's booths would be called participants.

"Now we are really making progress!" exclaimed Adrian. "Is there anything else we will want to measure?"

The team members were silent for a moment. Jill had taken a marketing course during the summer in which they discussed measuring the effectiveness of advertising expenditures. "Do we want to look at advertising efforts associated with Octoberfest?" Jill asked. "I mean, would the Chamber like to know which is the best advertising media to use in reaching the patron group?"

"Good idea" said Jack. The others agreed.

"Well, I think we have now determined exactly what we are going to measure. I will prepare our progress report from Jack's notes and turn it into Dr. Greene. If she and Mr. Hansen approve the objectives, we can plan the actual methodology at our next meeting. Why don't we all be thinking how we will be best able to achieve our objectives before we meet again?" asked Adrian.

Jack reviewed his notes with the group to make sure he had gotten everything written down correctly. From this review the objectives agreed upon to be presented to Dr. Greene included:

- To determine the average participant group size and their estimated spending in a number of different categories.
- To estimate the economic impact of each participant groups' expenditures.
- To estimate the expenditures of resident and nonresident patrons at Octoberfest.
- To determine the primary reason for patron groups coming to Cleveland.
- To determine the most effective advertising media used for reaching patrons.

Planning the Methodology

The next team meeting included Dr. Greene and Mr. Hansen. The students came prepared to discuss methodology for conducting the study.

"Well, obviously we will have to use some form of survey for each of the groups identified in the objectives" said Jill. "I would like to suggest that somehow we capture the names and addresses of the participants and patrons and use a mail questionnaire to measure the respondents' input after they have attended Octoberfest."

"Um that would require that we mail out quite a few surveys to make sure we got enough responses to be able to statistically analyze the data" said Sarah. "Also, how would we be able to compile an accurate mailing list?"

"Yeah" said Jack. "How much money are we budgeted to complete this project? Are we operating on a tight schedule to get the results in to you, Mr. Hansen? I once conducted a mail survey, and by the time I identified the non-respondents and sent them another letter requesting their participation and received more input, several months had passed."

"These are all very good questions" observed Mr. Hansen. "When I initially met with Dr. Greene we had a limited discussion along the same line. I suggested that we would probably want to use the intercept technique to capture the data because they generally have the lowest non-response rate. What does the team think about this technique and its application to this project?"

The team discussed this and other issues among themselves for several minutes. "We agree with the intercept concept" said Adrian. "Not only will it provide higher response rates, but intercept surveys usually result in more truthful responses because of the audible and visual contact between the surveyor and the respondent. We also agreed we need to develop two separate questionnaires: one for the participant group and one for the patron group. In the question construction we will build it in a way to distinguish residents from non-residents. Jack pointed out that sampling error could be a problem so we decided we would need to survey a large representative sample. As we design the questionnaires we will want to keep them as short as possible, and test them to make sure they can be quickly administered, easily understood, and are sequenced in a logical order. We will also need several trained interviewers to assist during the actual event so we can administer as many questionnaires as possible. What do you both think about the team's ideas?" Adrian asked Dr. Greene and Mr. Hansen.

"Great" they both exclaimed. Dr. Greene said "The next step is to develop the survey instruments and run them by me. Octoberfest is only three weeks away so let's keep moving forward on this project. Remember as you design the surveys to keep in mind how you are going to code the responses and analyze them. I have some interviewers' names to give you. These are people who I have used before and have had positive results. Your team will need to contact them and hire four to assist you with the project. The cost of hiring them will be paid by the SBI. Once you have selected who you want, hold an orientation session with them to explain the purpose of the study and review the design of the questionnaire. Do you have any additional comments Bob?"

"I want you and the team to know how much I and the Chamber appreciate what you are doing here. I am impressed with the hard work and thought you are putting into the project and look forward to receiving the results. I know the results will assist me and the SPC in planning next year's event. I am available if you need any other assistance with the study design."

Part B: Conducting the Survey/Analyzing and Utilizing the Results

Implementation of the Methodology

The team designed and obtained approval from Mr. Hansen and the SPC for the two questionnaires (see Appendices A and B). They met with the selected interviewers and trained them with Dr. Greene's assistance on conducting intercept surveys. The patrons' surveys were conducted on both Friday night and all day Saturday to assure a representative sample. Patrons were randomly selected as they walked around the event. Interviewers were located near entrance and exit routes. The goal was to complete four hundred patron surveys. Based on prior year attendance at the festival, Dr. Greene judged this to be an appropriate sample size.

The participants' surveys were conducted on both Friday night and all day Saturday. A list of all the participants in each event was provided to assist the interviewers in completing these surveys. All barbecue teams were surveyed on Friday night due to their lack of availability to interviewers during Saturday's competition. The participants in the arts and crafts, children's events, food booths, and car show were surveyed during the day on Saturday. The goal was to complete participants' surveys for all the participants.

After the festival was over, the team met to code and analyze the usable surveys. Basic standards and crosstabs were used to interpret data. Also, the multiplier effect which Jack had stressed during the team's initial meeting was factored into the study results. The study was conducted for October 1997, and regional multipliers were used. (Note that the multipliers presented in this case are not current numbers and should be used for case analysis and discussion only.)

The team compiled the results into formal report format and presented them to Mr. Hansen and Dr. Greene for their review. Appendix C contains the report.

Analysis of Study Findings

Bob was pleased with his decision to seek help from the University in conducting an economic impact assessment of Octoberfest. Dr. Greene and the student team have certainly delivered a professionally prepared analysis which he believed contained valid results. As he reviewed the executive summary he found the following results:

- A total of 406 surveys were completed for the patron groups and 119 surveys were competed for the participant groups.
- The barbecue teams created the most economic impact among the participants. Barbecue teams only accounted for 24.37% of all participants; however, 50% of the total expenditures by participant groups came from the barbecue teams.
- The total expenditure revealed from all the survey results was $84,465. Of this amount, approximately half (43.8%) was brought into the community by non-residents. The individuals who received the money will make more purchases with that money. This will create more spending and therefore multiply the economic impact.

Accounting for the multiplier effect, the economic impact of the surveyed population was $192,701.

- The Chamber of Commerce estimated that approximately 10,000 people attended Octoberfest. Based on this estimate, the projected economic impact of the event was $818,988. This figure also takes into consideration the multiplier effect.

"Not bad results," thought Bob. He continued to read the full report. The actual results for each of the objectives are shown in Appendix C.

Utilization of Study Results

After Bob had read and analyzed the entire report he found himself thinking about specific suggestions he would send forward to the Chamber Strategic Planning Committee based upon the findings. He believed that many of the questions associated with this year's festival could be answered if the new committee used these results for planning purposes.

The SPC was scheduled to meet in one month. Bob found himself wondering "What recommendations should I make?"

Bibliography

Bitta, A.J. and Loudon, D. (Spring 1975) Assessing the economic of short duration tourist events *New England Journal of Business and Economics* 1, 34-45.

Braun, B. (Winter 1992) The economic contribution of conventions: the case of Orlando, Florida *Journal of Travel Research*, 30, 32-37.

California Division of Tourism (1974) "Tourist Employment Study" Sacramento: California Department of Commerce.

Fleming, W. R. and Toepper, L (Summer 1990) Economic impact studies: relating the positive and negative impacts to tourism development *Journal of Travel Research*, 29, 35-42.

Long, P.T. and Perdue, R.R. (Spring 1990) The economic impact of rural festivals and special events: assessing the spatial distribution of expenditures *Journal of Tourism*, 10-14.

Regional Multipliers: A user handbook for the regional input outputmodeling system (RIMS II) (May 1986) U.S. Department of Commerce—Bureau of Economic Analysis. US Government Printing Office, Washington D.C.

APPENDIX A
Exhibitors/Participants Survey

1. Which of the following categories best describes your participation at Octoberfest?
   Arts/Crafts Exhibitor ______ BBQ Team ______
   Food/Beverage Booth______ Children Events______
   Other (please state)____________________

2. Are you a resident of Cleveland?
   Yes______ No______
   If you answered "Yes" go to Question 4; if "No" continue

3. Did you travel more than 30 miles to attend Octoberfest?
   Yes______ No______
4. How many people are in your group?
   One______ Two______ Three______ Four______ Five or more______

5. How long will you stay in Cleveland?
   1 night______ 2 nights______ 3 or more______ none______

6. For each of the following categories, please estimate how much money your group will spend **in Cleveland** as a result of Octoberfest?

   Advertising __________ Supplies for the event__________
   Motel __________ Food __________
   Entertainment __________ Arts and Crafts __________
   (beverages, clubs)
   Transportation__________ Shopping __________
   (van rental, gas, oil, etc.) (clothes, miscellaneous)

If unable to separate expenditures into categories, ask Question 7 & 8

7. What are your total expenditures for Octoberfest? __________

8. Of this total expenditure, what percentage was spent in Cleveland? __________

9. Comments/Recommendations: ______________________________

APPENDIX B
Patron Survey

1. How did you hear about Octoberfest?
   Print______ Radio______ Direct Mail______ T.V.______ WOM______
   Other (please state)_______

2. How many people are in your group?
   One______ Two______ Three______ Four______ Five or more______

3. Are you a resident of Cleveland?
   Yes______ No______
   If yes: 3a. Please estimate how much money your group will spend as a result of Octoberfest? _________

   If "Yes" go to question 9. If "No" continue.

4. Did you travel more than 30 miles to attend Octoberfest?
   Yes______ No______

5. Is Octoberfest your primary reason for coming to Cleveland this weekend?
   Yes______ No______

6. If "Yes" go to question 7, if "No" continue.
   What was your primary reason for coming to Cleveland?
   DSU Homecoming ______ Reunion ______
   Cleveland High Homecoming ______ Other ______

7. How long will you stay in Cleveland?
   Day only______ 1 night______ 2 nights______ Other______

8. For each of the following categories, please estimate how much money your group will spend as a result of Octoberfest?

   Motel _________ Food _________
   Entertainment _________ (beverages, clubs) Arts and Crafts _________
   Transportation_________ (van rental, gas, oil, etc.) Shopping _________ (clothes, miscellaneous)

9. Suggestions/Comments: ______________________________

APPENDIX C
Results

Objective #1.

To determine the average participant group size and their estimated spending in a number of different categories.

The participant groups included the barbecue teams, arts and crafts exhibitors, food and beverage vendors, children events, and car show exhibitors. A total of 119 participant group surveys were completed.

The average size of a participant group was approximately three, with a range of one to fifteen people in a group. The total number of individuals within all these groups was approximately 386.

Forty-five of the participant groups questioned were Cleveland residents. Of the participant groups who came from out of town, the majority came from further than a 30-mile radius. The average length of stay of non-resident participant groups was two nights, with a range of one to three nights.

Approximately, how much money did you spend in Cleveland for the following categories as a result of Octoberfest?

The following table gives spending totals.

Participant Expenditures By Category of Spending

Category of Spending	Total Spent
Advertising	$ 720
Motel	$ 4,081
Entertainment	$ 2,788
Transportation	$ 2,153
Supplies	$ 9,142
Food	$ 4,135
Arts/Crafts	$ 2,805
Shopping	$ 1,206
No break down	$13,740
Total	$40,770

Additional details of spending at the festival are as follows:

Only 7 of the participant groups spent money on advertising for the event. The average amount spent on advertising was $103 and ranged from $20 to $300. The total amount spent on advertising was $720.

Twenty-three of the participant groups stayed in motels. The average amount spent on motel rooms was $177, with a range of $40 to $1,000. The variation in this category is due to the number of nights spent in Cleveland and the group size. The total amount spent on motels was $4,081.

Twenty of the participant groups spent money on entertainment. The average amount spent on entertainment was $139, with a range of $1 to $500 spent. The total amount spent on entertainment was $2,788.

Fifty of the participant groups spent money on transportation. The average amount spent was $43, with a range of $5 to $200. The total amount spent was $2,153.

Forty-four of the participant groups spent money on supplies for the event. The average amount spent on supplies was $208 with a range of $2 to $2,000. The total amount spent was $9,142.

Eighty-two of the participant groups spent money on food. The average amount spent on food was $50 with a range of $3 to $1,000. The total amount spent was $4,135.

Forty-six of the participant groups spent money on arts and crafts. The average amount spent was $61 with a range of $10 to $700. The total amount spent was $2,805.

Nineteen of the participant groups spent money on other miscellaneous shopping in Cleveland. The average amount spent on general shopping was $64 with a range of $1.25 to $300. The total amount spent on general shopping was $1,206.

If you don't know how much you spent in each category, please estimate a total amount of expenditures, and the percentage spent in Cleveland.

Some of the participant groups had difficulty in determining how much they had spent by category.

Twenty-seven of the participant groups gave an approximate dollar amount spent for the event and gave the percentage that was actually spent in Cleveland. The range of expenditures was $21 to $2,000, with a total of approximately $13,740.

Of these amounts, the average spent in Cleveland was 87%.

The total expenditures in Cleveland of all the surveyed participant groups as a result of Octoberfest were approximately $40,770.

Objective #2

To estimate the economic impact of each participant group's expenditures.

The following table shows which groups of participants spent the most money in Cleveland as a result of Octoberfest.

Expenditures By Category of Participants

Category of Participants	# in category	$ spent in Cleveland
Arts/Crafts	64	$ 8,305
Barbecue teams	29	$20,059
Food/beverage	10	$ 7,266
Children events	7	$ 3,730
Other	7	$ 1,410
Total	117	$40,770

Sixty-eight percent (64/94) of the arts and craft exhibitors groups were surveyed. Forty-eight of these exhibitors were not from Cleveland, with most of them coming from further than 30-mile radius. This means there is some leakage of dollars from the Cleveland community. However, these participants did spend money while in the Cleveland area. Of the sixty-four exhibitors, the overall total expenditure in the areas of advertising, motel, food, entertainment, supplies, arts/crafts, and shopping was $8,305.

Thirty-two percent of arts and craft participant groups were not surveyed. Based on the surveyed participants' expenditures, the average expenditures were $129.77. A projected actual spending for all participants is $12,198.

One hundred percent (29/29) of the barbecue teams were surveyed. Of these, 14 of the groups were non-residents.

The barbecue teams' total expenditures for advertising, motels, entertainment, transportation, supplies, food, arts/crafts, and shopping were $20,059. The barbecue teams typically do not sell their food, therefore reducing the potential leakage of dollars from Cleveland.

There were 10 food/beverage vendor groups surveyed. Fifty percent were Cleveland residents. Three of the vendors were non-residents. Therefore, some money could be leaving the Cleveland area. The total food vendor expenditures for advertising, motel, entertainment, transportation, supplies, food, arts/crafts, and shopping were $7,266.

There were 7 children's events exhibitors surveyed. Four of the groups were non-residents. The total expenditures for motel, entertainment, transportation, supplies, food, arts/crafts, and shopping were $3,730.

There were 7 other participant groups surveyed. Three groups were non-residents. The total amount spent on motel, entertainment, transportation, supplies, food, arts/crafts, and shopping was $1,410.

Total expenditures for all participants were $40,770. Fifty percent of the total expenditures by participant groups came from the barbecue teams. This makes a large impact, especially as 50% of the competitors were non-residents.

Nonresident Participants

Sixty-six of the participants surveyed were considered non-residents. This is 56% of the total surveyed. These participants have both positive and negative economic impact on the community. Non-residents spent a total of $16,985 in Cleveland.

The sales amounts were obtained for 25 of the participants totaling $21,723. This could be possibly higher since only some of the total sales figures could be determined. Obtaining this information was dependent on how quickly the participants paid their taxes at the event. Sales amounts for non-residents were $15,094; therefore, money did leave the Cleveland community. The exhibitors who sold goods paid taxes (7%) totaling $1,520.

Participant Sales (Note: Only 25 were available)	Non-Resident Sales at Octoberfest (leakage of $)	Non-Resident Spending While in Cleveland	Taxes Paid On Sales
$21,723	$15,094	$16,985	$1,520

Objective #3

To estimate the expenditures of resident and nonresident patrons at Octoberfest.

A total of 406 patron groups were surveyed. Of these, 162 were surveyed on Friday night and 244 were surveyed on Saturday.

The average size of a patron group was approximately 3. The group size range was one person to five people. The total number of people represented in all groups surveyed was 1,296. Of the 406 patron groups, 243 were Cleveland residents and 163 were from outside of Cleveland. Of the 163 groups from outside Cleveland, 118 groups were considered non-residents (>30 miles).

The following table shows attendance by patron group:

% Attendance by Patron Group

Area	%
Cleveland	59.9
Surrounding area	11.1
>30 miles (non-residents)	29.1

The following table shows expenditures by patron group:

Expenditures by Patron Group

Category of Patron	# in Category	$ Spent in Cleveland
Cleveland Residents	243	$21,801
Surrounding area	45	$ 1,874
>30 miles (non-residents)	118	$20,020
Totals	406	$43,695

Cleveland residents:

All Cleveland residents were asked to "please estimate how much money your group will spend as a result of Octoberfest."

The total spending of Cleveland residents was $21,801. The results were consolidated into groups, to determine how much money the individual groups were actually spending. Groups of Cleveland residents spent anywhere from $0 to $2,000. As shown below, the most common range of spending was $25 to $50.

Dollars Spent By Groups of Cleveland Residents

Total Spent	% of groups
$0-4	8.12%
$5-24	30.26%
$25-50	36.16%
$51-75	2.22%
$76-100	11.07%
$101-2000	12.20%

Residents from surrounding areas (Within 30 miles):

Forty-five of the groups surveyed were not Cleveland residents, but lived within 30 miles. These groups of patrons spent a total of $1,874.

Non-resident patrons:

One hundred and eighteen of the patron groups surveyed were non-residents. The average size of these groups was approximately 3. The total spending for this group of patrons was $20,020. Out of town patrons attending Octoberfest bring money into Cleveland and create a positive economic impact.

Fourteen of the non-resident patron groups spent money for a motel. The average amount spent was $103. The highest amount spent was $200 and smallest amount spent was $30. The total amount spent on motel rooms by non-residents was $1,437.

Sixty-five of the non-residents patron groups spent money on entertainment. The average amount spent was $121, with a range of $2 to $3000. The total non-resident spending for entertainment was $7,583.

Sixty-four of the non-resident patron groups spent money on their vehicle and transportation. The average amount spent was $23, with a range of $3 to $200. The total non-resident spending for transportation was $1,441.

Ninety of the non-resident patron groups spent money on food. The average amount spent was $51, with a range of $5 to $500. The total non-resident spending for food was $4,625.

Fifty-seven of the non-resident patron groups spent money on art and crafts. The average amount spent was $48, with a range of $2 to $200. The total non-resident spending for art and crafts was $2,725.

Twenty-six of the non-resident patron groups spent money on general shopping. The average amount spent was $75, with a range of $7 to $450. The total non-residents spending for general shopping was $1,939.

Non-Resident Patron Expenditures By Category of Spending

Category of Spending	Total spent
Motel	$ 1,437
Entertainment	$ 7,853
Transportation	$ 1,441
Food	$ 4,625
Arts/Crafts	$ 2,725
Shopping	$ 1,939
Total	$20,020

Objective #4:

To determine the primary reason for patron groups coming to Cleveland.

Approximately 40% of the Octoberfest visitor groups were not from Cleveland. This accounted for 163 visitor groups. One hundred (61%) of these visitor groups stated their primary purpose for being in Cleveland was Octoberfest. The other visitor groups' main reason for coming to Cleveland varied, but the groups also attended Octoberfest. Other reasons included: Delta State Homecoming (28%), class reunion (2%), and other reasons.

Non-Residents Reasons for being in Cleveland

Reason	% of patrons
Octoberfest	61.3%
DSU Homecoming	28.0%
Reunion	1.9%
Other	8.7%

Objective #5:

To determine the most effective advertising media used for reaching patrons.

A variety of media were used to inform the Delta area residents about Octoberfest. A research objective was to determine what type of advertising was most effective. The media used to reach patrons included print, television, word of mouth, radio, direct mail and other. Some patrons stated they had seen or heard multiple forms of advertising. The following results illustrate the percentage of respondents who saw/heard advertising: Print(7.6%), Radio(15.8%), Direct mail(1%), Television(7.1%), Word of Mouth(26.6%), Other (24.6%) and multiple sources(17.2%). While word of mouth appears to be the most remembered form of communications, radio and multiple sources were often mentioned.

Advertising Seen/Heard by Patrons

Type of Advertising	% of Patrons
Word of Mouth	26.63%
TV	7.11%
Direct mail	1.00%
Radio	15.82%
Print	7.61%
Multiple Sources	17.22%
Other	24.62%

Summary

Economic impact:

From the results previously stated an estimated total expenditure figure for the event from each spending category can be derived. The resulting expenditure total (patron and participants) was approximately $84,465. Of this total expenditure figure, approximately $37,005 has been brought into the community by non-residents. These figures represent the totals spent for the sample surveyed. There were patrons and a few participants who were not included in the study.

The Chamber of Commerce estimates that 8 times as many people attended Octoberfest as were reached in the patron survey. Therefore, the total expenditures for patrons can be estimated as approximately $349,560 ($43,695 times 8).

The total expenditures stated above do not exemplify the entire economic impact of the event. In turn, the individuals will make more purchases themselves with that money. This will create more spending and therefore multiply the economic impact. When the multiplier effect is considered, the economic impact is more significant.

The following tables illustrate the effects of the multipliers. The multipliers were based on Mississippi multipliers published by the U.S. Department of Commerce-Bureau of Economic Analysis. (Note: These multipliers are not current numbers and should be used for case analysis and discussion only.)

Projected Economic Impact—Participants

Type of Expenditures	Participant Expenditures	Multiplier	Economic Impact	*Projected Impact
Advertising	$ 720	1.915	$ 1,379	$ 1,724
Motel	$ 4,081	1.945	$ 7,937	$ 9,922
Entertainment	$ 2,788	2.148	$ 5,989	$ 7,486
Transportation	$ 2,153	2.204	$ 4,745	$ 5,932
Supplies	$ 9,142	1.9	$17,370	$ 21,712
Food	$ 4,135	2.148	$ 8,882	$ 11,102
Arts/Crafts	$ 2,805	1.9	$ 5,330	$ 6,662
Shopping	$ 1,206	1.9	$ 2,291	$ 2,864
Miscellaneous	$13,740	1.9	$26,106	$ 32,632
Total	$40,770		$80,029	$100,036
Grand total				

*Project economic impact: This is based on 149 participant groups. Of these, 119 were actually surveyed.

Projected Economic Impact—Patrons

Type of Expenditures	Patron Expenditures	Multiplier	Economic Impact	*Projected Impact
Motel	$ 1,437	1.945	$ 2,795	$ 22,361
Entertainment	$ 7,853	2.148	$16,868	$134,949
Transportation	$ 1,441	2.204	$ 3,176	$ 25,409
Food	$ 4,625	2.148	$ 9,935	$ 79,477
Arts/Crafts	$ 2,725	1.9	$ 5,178	$ 41,421
Shopping	$ 1,939	1.9	$ 3,684	$ 29,474
Miscellaneous	$23,675	1.9	$44,983	$359,861
Total	$43,695		$86,619	$692,952

*Project economic impact: This is based on the Chamber of Commerce's estimated number of people who attended Octoberfest. Approximately one-eighth of this number (1,296) were represented in the groups surveyed.

The Chamber of Commerce's total expenses for the event were $19,241.58. Most of the expenditures were within the Cleveland area. The out-of-town expenses totaled $5,528.90.

These expenses (to the extent that they were spent in Cleveland) are also subject to the multiplier effect. The projected economic impact of these expenditures is approximately $26,000.

Epilogue

The information was used as a public relations tool to emphasize the value of Octoberfest to the town. The economic impact figures accentuated the positive financial aspect of the Chamber hosting the event. This information was provided to potential sponsors in order influence their decision to sponsor the event.

The Octoberfest Barbecue Chairperson continued to recruit more barbecue participants. The available space is, at this time, fully utilized, so the Chairperson is concentrating on retaining the participants rather than conducting additional recruiting.

The following year the Chamber chose not to have the event coincide with homecoming due to conflicting schedules between the two events. People were drawn away from each event rather than the events serving to complement and reinforce one another. There were logistical problems as well, in holding the events on the same weekend. Examples included parking difficulties and the availability of supplies (such as ice). This decision each year, however, will also be influenced by Delta State University's selection of a homecoming date.

Advertising for Octoberfest has specifically been geared to more radio advertising. There continues, however, to be a multi-media campaign.

Systems Automation F.A. Pte Ltd (Singapore)*

Daniel F. Jennings, Texas A&M University
L. Murray Gillin, Swinburne University of Technology
Tan Ping Fee, Swinburne University of Technology
Joshua Loke, Swinburne University of Technology
Jim Sim, Swinburne University of Technology

As G.N. Chew walked to System Automation's meeting room to review the third quarter results for 1993, many thoughts occupied his mind. He was concerned that the unprofitable results for the third quarter were an indication that Systems Automation was headed for its third straight year of losses. Chew had several questions for Kasuo Tanii, General Manager of Systems Automation. However, Tanii began the meeting by stating that he would leave the company when his contract expired in April 1994.

"One more problem,"stated Chew as he wondered where System Automation had gone wrong.

"However," Chew announced to the startled employees who were in attendance at the meeting, "we started well as a company. While it may seem as if we are now in a crisis, these events are really opportunities for us."

Chew's Background

After receiving an engineering degree, Chew was employed by a British trading house based in Singapore, and became the head of its technical department. An opportunity developed when Itoh Japan began looking for a local agent in Singapore to represent their range of products which included air compressors, programmable logic controllers, frequency inverters, circuit breakers, sensors, electrical testing equipment, and other automatic

This case is based on original research conducted by Tan Ping Fee, Joshua Loke, and Jim Sim while they were completing their Master of Enterprise Innovation Program at Swinburneís Centre of Innovation and Enterprise. Research supervision was by the centreís 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 Systems Automation and in particular C.N. Chew and Dick Chang. This case was prepared as a basis for class discussion rather than to illustrate either effective or ineffective handling of an administrative situation.

*Financial data expressed as Singapore dollars.

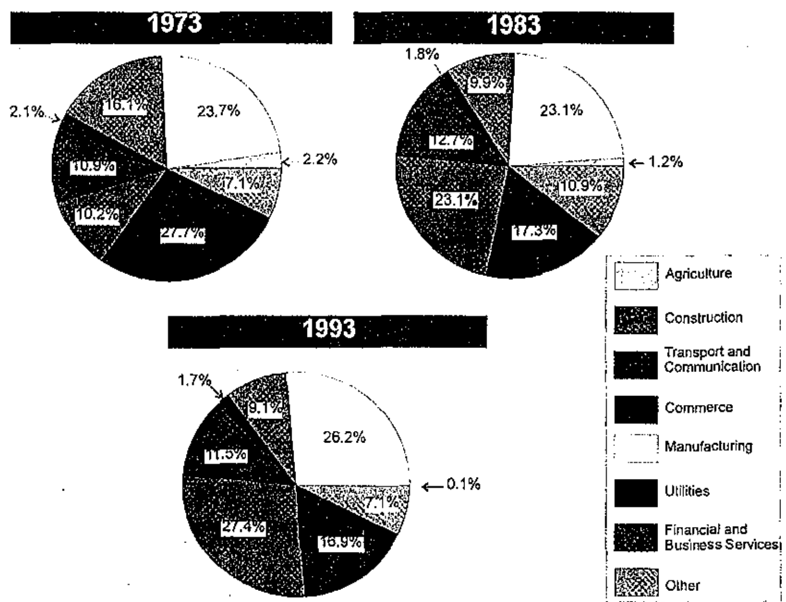
components. Chew resigned his job with the British firm and with several other partners founded SAM Pte Ltd becoming Itoh's only agent in Singapore. Chew added a line of industrial chemicals and quickly SAM Pte Ltd expanded to seven branch locations in Singapore, Hong Kong, Indonesia, and Malaysia. The strength of the company was its wide range of products and its distribution system.

Singapore's Manufacturing Sector

Manufacturing has been an important aspect of Singapore's economy for 20 years. For example, Singapore's economy has matured since 1973 without a sharp decline in manufacturing which has occurred in other developed countries. As illustrated in Exhibit 1, manufacturing as a percent of gross domestic product (GDP) has been rather consistent which in 1973 was 23.7 percent, followed by 23.1 percent in 1983 and 26.2 percent in 1993.

The profitability of Singapore's manufacturing facility is slightly ahead of the United States while its growth in industrial output is nearly 2.5 times that of the United States. As an example, in 1993 the aggregated after tax profit of industrial firms in the United States was 15 percent of net sales while Singapore's industrial firms earned 16 percent during the same time period. Industrial output of firms in the United States grew at a rate of just over 4 percent from 1992 to 1993 while Singapore's industrial output grew at a rate of 9.8 percent from 1992 to 1993.

Exhibit 1
Singapore Manufacturing As A Percent of Gross Domestic Product



	1973	1983	1993
Agriculture	2.2	1.2	0.1
Manufacturing	23.7	23.1	26.2
Construction	16.1	9.9	9.1
Utilities	2.1	1.8	1.7
Transportation & Communication	10.9	12.7	11.5
Financial & Business Services	10.2	23.1	27.4
Commerce	27.7	17.3	16.9
Other	7.1	10.9	7.1

Just as firms in the United States have reduced their workforce to remain competitive, employment in the manufacturing sector of Singapore, as depicted in Exhibit 2, has declined from 36.3 percent of the total workforce in 1973 to 26.9 percent in 1993.[1]

Exhibit 2
Singapore—Employment by Sector

Sector	Percent of Total Workforce 1973	1983	1993
Agriculture	0.7	1.4	0.4
Manufacturing	36.3	27.8	26.9
Construction	6.1	7.2	6.4
Utilities	2.6	0.7	0.5
Transportation & Communication	9.2	11.3	10.5
Financial & Business Services	6.3	8.1	10.9
Commerce	21.1	22.7	22.8
Other	17.7	20.8	21.6

A major concern of the government of Singapore is that its industries will be displaced by foreign competitors causing a loss in jobs and a decline in GDP. While certain industries such as textiles and garments have moved from Singapore to Batram, China, and Malaysia, manufacture of electronic products and chemicals have remained in Singapore. Also, Singapore's proprietary electronic companies have established an international reputation for their low manufacturing costs and high-quality products despite pressures from low-cost, quality producing firms in other Asian countries. The strategy of Singapore companies has been to become less labor intensive through capital investments. These investments have generated large improvements in labor productivity allowing Singapore firms to move up the technology ladder.[2]

[1] Statistics for this section were developed from "Manufacturing in Singapore," research publication prepared by Hewitt Associates, New York City (USA), June 1994. Yu Sing Ong, "An Analysis of Singapore's Manufacturing Sector," Economic Development Board Publication, Singapore, August 1994.

[2] Chia Yew Nguan, "How Singapore Industries Are Staying Competitive," research report prepared by Credit Lyonnais, Singapore, September 1994.

The Strategic Alliance

By 1987, annual sales of SAM Pte Ltd had reached nearly S$2.5 million with a profit before tax of approximately S$200,000. SAM Pte Ltd had remained the only distributor of Itoh Japan's products in Singapore and continued to distribute the line of chemical products. In early 1988, Itoh Japan approached Chew and his partners about forming a joint-venture in Singapore with a Japanese company, Toyo Engineering Company. The joint venture company would undertake projects on a turnkey basis that would automate the production of electronic products by providing the design, fabrication, installation, and testing of material handling equipment including conveyor systems and robotics. Toyo Engineering had an established track record in the material handling industry and was a major engineering design firm in Japan specifying Itoh products. Chew and his associates believed that such a venture with Toyo Engineering would provide important automation technology skills which would add additional value to SAM's product line and would also complement its existing distribution business.

After several discussions with Toyo Engineering's top management team, the decision was made to name the joint venture "Systems Automation"and in November 1988, Systems Automation FA Pte Ltd was registered as a Singapore company. Exhibit 3 describes the joint venture's capital structure.

Exhibit 3
Capital Structure of Systems Automation FA Pte Ltd

Authorized Capital - S$500,000
Paid-Up Capital - S$275,000

Partners	Shares Owned*	Percent Equity
SAM Pte Ltd	140,250	51
Toyo Engineering Co.	134,750	49

*Shares issued at S$1 per share

Chew and his associates would operate the distribution business, SAM Pte Ltd, as a separate company. Toyo Engineering would be responsible for the start-up of Systems Automation which would involve (1) securing a location large enough so that the designed systems could be assembled and tested—fabrication of the systems would be performed by sub-contractors on their premises, (2) staffing the business with individuals having the necessary engineering and design skills, and (3) generating sales. Also, SAM Pte Ltd would have the opportunity to supply Systems Automation with all of the required components.

The Start-Up of Systems Automation

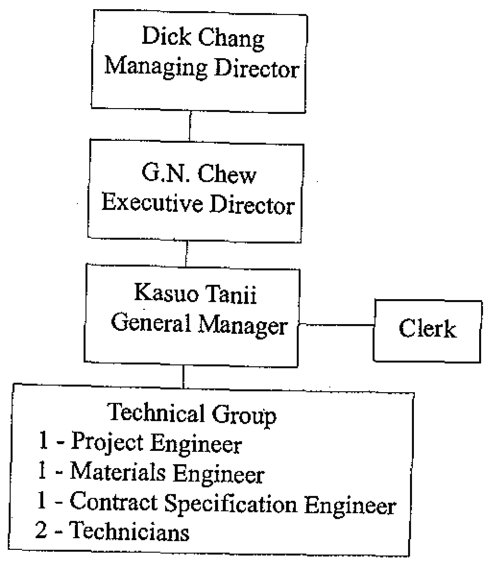
1989 was an unprofitable year for Systems Automation. A significant amount of expenses were incurred in acquiring a suitable location, providing the necessary infrastructure, and staffing. Sales were difficult to obtain for a variety of reasons. For example, electronic product manufacturing firms in Singapore are sensitive to their process and technology secrets and prefer to use trusted suppliers. Newcomers are viewed with suspicion. It was also important that the projects developed by Systems Automation be delivered on time and have excellent quality. Unfortunately, the quality and deliverability of Systems Automation's services were unknown. Also, the individual responsible for generating sales lacked the necessary marketing and sales skills.

In 1990, Chew took on the task of developing sales for Systems Automation and generated revenues in excess of S$3.5 million with a pretax profit of S$362,000. In 1991, Toyo Engineering transferred Kasuo Tanii from its Tokyo headquarters to manage Systems Automation. Mr. Tanii was a long-time engineering employee with Toyo and had considerable experience in selling projects to large Japanese companies in both Japan and Singapore. Mr. Chew returned to SAM Pte Ltd and had no involvement with the activities of Systems Automation.

Problems At Systems Automation

In 1991, sales of Systems Automation declined to less than S$1.2 million with a pretax loss of S$102,000. Following this decline in earnings, Toyo Engineering offered to sell their investment in Systems Automation to SAM Pte Ltd. Chew together with Dick Chang, a major stockholder of SAM Pte Ltd purchased Toyo's investment. Chew reorganized Systems Automation as illustrated in Exhibit 4.

Exhibit 4
Organizational Structure - Systems Automation F.A. Pte Ltd



Although Chang was the managing director (Chief Executive Officer) of Systems Automation, he was not involved in any activities relating to Systems Automation nor did he perform any tasks. Chew's responsibility was to evaluate Tanii's performance and Chew was not involved in developing or implementing any strategies nor was he involved in the day-to-day operations of Systems Automation. Tanii's task was literally to operate the business. He was responsible for developing project sales, supervising the design and installation of the systems, coordinating the activities of the technical group, hiring subcontractors and ensuring that they met agreed upon schedules, delivery and installation of designed systems, and maintaining customer and supplier relationships. The five employees in the Technical Group were responsible for designing and installing the various material handling systems. All five were Chinese, natives of Singapore, and held engineering diplomas. They were responsible for performing mechanical, electrical, and project engineering assignments. The two technicians were skilled in electrical, instrumentation and mechanical tasks. All five employees were approximately the same age and according to Tanii had the same social background. The pay of these five employees was based on three components: (1) base salary, (2) fixed year-end bonus, and (3) a variable bonus. The base pay had been determined by Tanii and was based on market rates. The three engineers earned the same base salary while the two technicians had lower but similar salaries. The fixed year-end bonus was equal to two months salary and was awarded to all employees with at least one year of employment. The variable bonus was based on the firm's pretax profit and could range as high as 25 percent of an employee's base salary. Variable bonuses had not been paid since 1990. The clerk was a female who performed a variety of clerical duties for Tanii and she also was eligible to receive the year-end and variable bonuses. All five employees in the technical group were males.

An Analysis

In October 1993 when Tanii announced his intentions to resign in April 1994, Chew was unable to become involved in any of the operations of Systems Automation because of his commitment to SAM Pte Ltd. However, from time to time, during the fourth quarter of 1993, Chew would make unannounced visits to Systems Automation's facilities. During these visits Chew noticed that the engineers and technicians seemed to be spending considerable time going through random piles of parts and components as they assembled the material handling systems. Work assignments were made personally by Tanii and Chew observed on certain visits that very little work was being performed. When Chew asked one of the engineers why he was idle, the engineer informed Chew that Tanii was late in assigning work.[3] On several visits, Chew observed heated discussions between subcontractors and members of the technical group regarding the omission of required information. During one visit, Chew noticed an announcement on the plant bulletin board that a certain engineer was leaving Systems Automation and that this engineer would not be available for any work assignments two weeks prior to his scheduled last date of employment. Tanii indicated to Chew that the engineer would be paid for the two weeks.

[3] Tanii's office is located above the factory floor and Tanii does not have a clear view of the technical group's activities.

In December 1993, Chew learned that one of the engineers, Peng Song, in the technical group had taken a course in financial analysis at a local university. Chew had not utilized financial analysis in the past believing instead that a business requires a high liquidity and significant amounts of cash to be successful. Chew also viewed interest expense as a cost to be avoided. Chew asked Song to prepare a financial analysis of Systems Automation and to make any recommendations. Appendix 1 and 2 contain a profit and loss statement and a balance sheet, while Appendix 3 explains operating expenses for Systems Automation. Appendix 4 describes financial ratios prepared by Song. Although Song did not make any comments regarding the calculation of financial ratios, he did offer the following:

1. Tanii was a competent engineer but employees had difficulties working for him.
2. Systems Automation should market smaller scale, off-the-shelf automation systems rather than the present turnkey material handling and conveyor systems.
3. Systems Automation should hire additional technical employees to reduce project bottlenecks which presently affect delivery schedules.

Chew's Response

By January 1994, Chew had taken the necessary steps so that he could devote full time to the management of Systems Automation. As Chew considered his options for managing full time, he believed that he should spend all of his time obtaining sales. Yet he was concerned about the operating problems he had seen during his unannounced fourth quarter visits. Furthermore, a number of local, United States, and European customers of SAM Pte Ltd have expressed concerns regarding the use of Systems Automation to design their material handling equipment because of a perceived close association with Itoh Japan, a major competitor. Chew also is aware that nearly all of the present sales obtained by Tanii are from Japanese firms doing business in Singapore.

Questions

1. Should Chew have made the unannounced visits to the factory? Explain.
2. What cultural dynamics might be at work regarding Systems Automation?
3. Discuss the strengths and weaknesses of the strategic alliance formed between SAM Pte Ltd and Toyo Engineering.
4. What operational management changes, if any, should Chew develop and implement?
5. What action should Chew take to return Systems Automation to a level of profitability?
6. What tasks should Chew attempt to perform as he manages Systems Automation?
7. What organizational structure would be best for Systems Automation? Explain.
8. What are the implications regarding the resignation of Kasuo Tanii?
9. Comment on Peng Song's ratio analysis.
10. Has Systems Automation been a success? Explain.

APPENDIX 1

Systems Automation F.A. Pte Ltd (Singapore)
Profit and Loss Statement
Year Ending December 31

	1993 S$	1992 S$	1991 S$	1990 S$
Sales	$2,338,687	$2,816,420	$1,192,232	$3,591,425
Less: Opening Stock	$10,810	$72,635	$25,923	$20,642
Purchases	$1,845,939	$2,088,892	$636,094	$2,379.950
Transport & Freight charges	$6,566	$111	$156	$7,535
Discount Receive	($20,089)	$0	$0	($26,087)
	$0	$0	$0	$0
Cost of Sales	$1,843,225	$2,161,638	$662,173	$2,382,040
Less: Closing Stock	$6,659	$10,810	$72,635	$25,923
	$1,836,566	$2,150,829	$589,537	$2,356,117
Gross Profit	$502,121	$665,591	$602,694	$1,235,308
Less:				
Total Operating Expenses	*$778,286*	*$726,119*	*$726,502*	*$893,423*
Net Operating Profit (Loss)	($276,165)	($60,528)	($123,808)	$341,885
Add: Other Income:				
Gain in Sales of Vehicle	$0	$45,144	$0	$0
Interest Received	$191	$4,400	$21,501	$20,799
Sundry Income	$165	$2,035	$0	$0
Gain in Foreign Exchange	$742	$97	$0	$0
Other Income Total	$1,098	$51,676	$21,501	$20,799
Net Profit (Loss) Before Taxation	($275,067)	($8,852)	($102,307)	$362,684

APPENDIX 2

Systems Automation F.A. Ptd Ltd (Singapore)
Balance Sheet
Year Ending December 31

	1993 S$	1992 S$	1991 S$	1990 S$
Assets				
Fixed Assets				
Plant & Equipment	$141,512	$35,058	$78,305	$110,399
Current Assets				
Stock	$6,659	$10,810	$72,635	$25,923
Trade Debtors	$356,817	$533,513	$124,835	$178,934
Other Debtors (L.C.S.)	$4,747	$0	$0	$0
Deposit	$2,585	$0	$303,267	$443,661
Prepayment	$3,347	$3,346	$3,346	$3,346
Cash at bank	$61,360	$165,000	$96,058	$441,548
Cash in hand	$377	$575	$418	$275
Total Current Assets	$435,892	$713,244	$600,558	$1,093,686
Total Assets	$577,404	$738,303	$678,863	$1,204,085
Liabilities and Shareholders Equity				
Current Liabilities				
Amount owing to Holding Co	$74,520	$53,051	$12,223	$62,246
Amount owing to Shareholder	$9,032	$0	$0	$0
Orix Leasing Singapore Ltd	$35,851	$0	5,492	$37,267
Trade Creditors	$180,877	$244,692	$201,736	$419,350
Accrued Charges	$103,829	$0	$0	$18,975
Income Tax Payable	$0	$0	$0	$104,500
Proposed Dividend	$0	$0	$0	$18,975
Total Liabilities	$404,110	$297,743	$219,451	$642,337
Shareholders' Equity:				
Shareholders' Equity	$275,000	$275,000	$275,000	$275,000
Retain Earnings (Loss)	($101,708)	$175,560	$184,412	$286,748
Total Equity	$173,293	$450,560	$459,412	$561,748
	$577,404	$748,303	$678,863	$1,204,085

APPENDIX 3

Systems Automation F.A. Pte Ltd (Singapore)
Operating Expenses
Year Ending December 31

	1993	1992	1991	1990
Directors Fees	$9,900	$23,100	$23,100	$23,100
Directors Remuneration	$121,440	$121,440	$168,709	$229,324
Salaries & Allowances	176,433	$120,117	$107,960	$106,524
CPF	$54,047	$41,096	$32,387	$34,087
Printing & Stationery	$4,616	$4,786	$5,082	$5,918
Postage & Stamp	$845	$393	$592	$723
Telephone & Telex	$13,673	$7,374	$5,925	$9,331
Advertisement	$8,280	$7,795	$8,280	$10,819
Insurance Premium	$3,207	$1,880	$1,848	$1,810
Bank Charges	$604	$536	$587	$482
Transport	$60,667	$41,788	$45,797	$48,194
Traveling	$9,518	$21,290	$23,814	$28,047
Replacement & Repair & Maint.	$429	$1,466	$1,408	$1,579
Maintenance of Vehicle	$7,706	$9,516	$10,516	$10,252
Entertainment	$11,775	$28,719	$32,758	$39,380
Rental	$141,900	$107,800	$107,800	$107,800
Bonus	$34,783	$29,116	$20,541	$20,239
Newspapers	$440	$405	$405	$440
Subscriptions	$825	$528	$528	$572
Hire Purchase Interest	$1,940	$43	$0	$0
Staff Welfare	$515	$1,498	$1,274	$3,498
General Expenses	$6,711	$4,901	$6,463	$7,194
Accounting Charges	$1,650	$1,595	$1,650	$1,650
Secretarial Fees	$1,650	$1,650	$1,650	$1,650
Auditor's Remuneration	$4,730	$4,290	$4,290	$4,400
Depreciation of Fixed Assets	$39,677	$10,458	$32,639	$32,695
Technical Royalty Fees	$58,467	$70,410	$29,806	$89,777
Staff Training	$28	$55	$0	$275
Penalty	$80	$0	$0	$0
Sundry Debit	$22	$0	$0	$0
Medical	$1,123	$1,012	$963	$1,126
Refreshment	$132	$119	$165	$204
Professional Charges	$33	$66	$66	$66
	$0	$0	$0	$0
Doubtful Debt	$0	$59,338	$49,500	$72,270
Donation	$0	$1,100	$0	$0
Rental of Office Equipment	$440	$440	$0	$0

APPENDIX 4

Systems Automation F.A. Pte Ltd (Singapore)
Ratio Analysis*
Year Ending December 31

	1993	1992	1991	1990
Return on Assets	-41.66%	-8.48%	-13.15%	28.39%
Net Profit Margin	-11.81%	-2.15%	-10.38%	9.52%
Gross Profit Margin	21.47%	23.63%	50.55%	34.40%
Expense Ratio	33.28%	25.78%	60.94%	24.88%
Asset Turnover	3.53	3.95	1.27	2.98

Analysis of Liquidity

	1993	1992	1991	1990
Current Ratio	1.08	2.40	2.74	1.70
Quick Ratio	1.24	2.86	2.53	1.83
Debt-Equity Ratio	147%	108%	80%	234%
Debt Ratio	70%	40%	32%	53%

*Ratio analysis prepared by Peng Song, employee of Systems Automation

Meyer Mobile Homes Corporation*

Faye S. McIntyre, State University of West Georgia
James L. Thomas, Jr., Jacksonville State University
James E. McIntyre, Jr., Jacksonville State University

In July 1993, Richard Boswell, vice president of operations for Meyer Mobile Homes Corp. (MMHC), was examining the sales report for the second quarter of the year. MMHC seemed to have recovered nicely from the effects of the recent recession, yet Boswell knew that the company president, Walter Meyer, would not be pleased with the report. Although overall company sales were in good shape, one of the firm's four manufactured housing retail locations (known as "lots" in the industry) had experienced a steady decline in sales recently, and sales revenue was now less than half the level three years ago.

Meyer would be expecting recommendations concerning operations, specifically if the company should close Dixie Land Homes, the lot in question. Despite the fact that its sales have dropped dramatically, closing this lot would have a dramatic impact on the firm. Dixie Land was located in an ideal location with a very favorable long-term lease, and it carried a large inventory of homes. Furthermore, the lot manager, Ray Farmer, was an experienced "mobile home man" and quite valuable to the firm. Boswell was unsure if Farmer would accept a transfer to another lot, whether as manager or salesman.

Moreover, Boswell wondered if the question wasn't more complex than just whether or not to keep Dixie Land open based on sales figures and personnel decisions. MMHC is one of Mississippi's largest retailers of manufactured homes. Would closing the lot hurt the company's image with consumers? Would keeping it open help ensure the company's market position in the future? Boswell knew that Meyer would expect answers and a well-developed plan of action at their next executive meeting, two weeks away.

Company and Industry Background

Walter Meyer established MMHC in 1972 as a single proprietorship. It began operations with one manufactured housing retail location (Meyer Mobile Homes) in Tupelo, a town with population just under 40,000 in northeast Mississippi. The company is now a multi-million dollar company with four lots: 1) Meyer Mobile Homes in Tupelo; 2) Dixie Land Homes, about two miles away from MMH in Tupelo; 3) Pontotoc Mobile Homes in Pontotoc, approximately 25 miles west of Tupelo; and 4) Shannon Mobile Homes in Shannon, approximately 20 miles south of Tupelo. Operating four locations provides MMHC with a distinctive advantage over competitors, most of who operate only one lot.

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* Data contained in this case are based on an actual case. Names and locations have been disguised at the request of the owner.

In addition to Meyer and Boswell, MMHC now employs one manager and three salespersons at the main lot (MMH), one manager (acting as salesperson) and one secretary for each of the three outlying lots, an office manager and three secretaries at the main lot, an installation/service manager and ten installation/service personnel, also based at the main lot. Although the display space on each lot is about the same, the main lot has more storage facilities and office space than the other three lots.

The image of manufactured homes, and thus the level of their acceptability to consumers, has improved considerably over the past two decades. A major contributing factor is the requirement that all manufactured homes built after June 1976 meet or exceed the National Manufactured Home Construction Safety Standards (the HUD code). In addition, all manufactured home buyers are now protected by a manufacturer's written one-year warranty.

Nationally, industry analysts expect sales of manufactured homes to maintain a firm base of approximately 225,000 annually well into the 1990s.[2] Sales in the South, however, are stronger than in the national market, 9 percent higher than the national average in 1987.[3] In Mississippi, there are 125 retail dealerships, and 1992 sales of new manufactured homes were approximately 5,100.[4]

Although industry analysts have tried to define a "typical manufactured homeowner," there is no simple definition.[5] Exhibits 1 through 3 provide demographic breakdowns of buyers by occupation, age and income.

In order to meet the needs and desires of such a diverse group of customers, manufacturers and retailers of these homes have a wide variety of products available. Homes are available in various widths and lengths, a myriad of exterior treatments and architectural designs, and floor plans that can include up to 2,500 square feet of living space.

Since retail dealers receive exclusive rights to a manufacturer's brand within a 50-mile radius, building a healthy manufacturer-retailer relationship is important to both parties. An essential element of this relationship is up-front payment for all homes shipped to dealers. The costs of full payment by the retailer, however, can be prohibitive when large inventories are maintained. Thus, most dealers use the services of finance companies that pay the wholesale invoice cost to manufacturers; in return, retailers typically pay a finance fee of prime rate (currently 6%) plus 1.5% based on the wholesale invoice cost of each home. The finance fee (also called a floor-planning fee) is prorated on a monthly basis while the home remains on the lot.

The Current Situation

MMHC has experienced a period of overall growth in sales since 1989, though sales at the four lots have fluctuated. Exhibit 4 details sales for the past four fiscal years of three size homes (14-ft., 16-ft., and doublewide) which MMHC sells at each lot. Although selling price to consumers is negotiable, retail prices typically approximate a 20% markup on wholesale cost. Average retail prices are provided in Exhibit 5, along with average installation costs for each size home.

Historically, each of the outlying lots has carried an inventory of roughly 10 homes in each of the three sizes, while the main lot has carried an inventory of 15 14-ft., 15 16-ft., and 10 double wide homes. Salesmen are compensated 25% of net profit (retail price less wholesale cost, installation cost, and floor planning fee) with a minimum commission of $200 per home. Unfortunately, floor-planning fees have been paid in one lump sum for all four lots. Boswell is concerned that, as sales at Dixie Land have declined, carrying costs have eroded net profit and, thus, the ability to cover fixed costs. Exhibit 6 provides Boswell's estimates of direct fixed costs for the four lots for the 1992-93 fiscal year.

As Boswell began a more detailed examination of the sales report, he realized this would not be an easy decision to make. Whatever he recommended would have direct implications for the firm's growth potential.

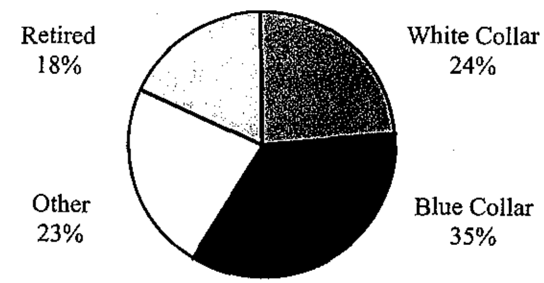
[2] Gerry Donohue (1989), "Manufactured Housing Has its Work Cut Out," Builder, 12 (February), 58.

[3] Karen E. Lahey, Barry A. Diskin and V. Michael Lahey (1989), "Manufactured Housing: An Alternative to Site-Built Homes," Real Estate Appraiser & Analyst, 55 (Winter), 26.

[4] Mississippi Manufactured Housing Association (1993), Fact Sheet.

[5] Richard J. DiGeronimo (1989), "A Solution to Affordable Housing: Manufactured Homes," Real Estate Appraiser & Analyst, 55 (Winter), 18.

Exhibit 1
Occupation of Manufactured Home Buyers



Source: Manufactured Housing Institute

Exhibit 2
Age of Household Head of Manufactured Home buyers

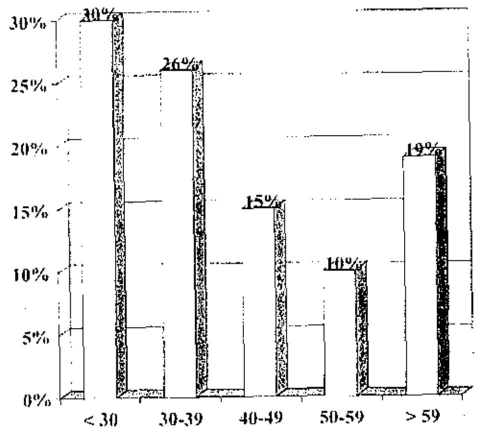


Exhibit 3
Annual Household Income of Manufactured Home Buyers

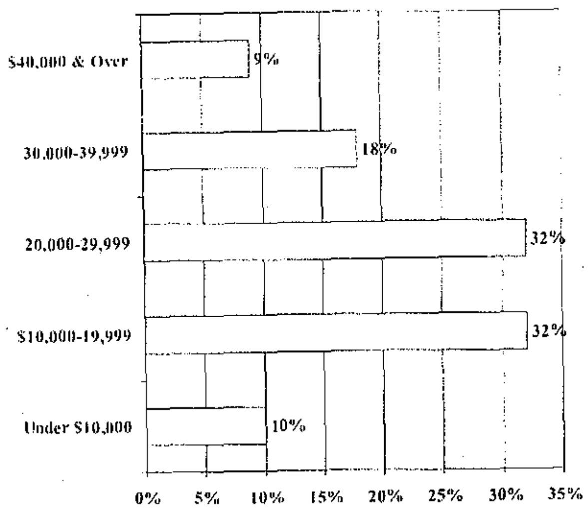


Exhibit 4
Unit Sales for Fiscal Years 1989-1993

July 1989-June 1990

	MMH	DLH	PMH	SMH
14-ft.	30	22	30	7
16-ft	30	11	6	4
DW	15	24	11	6

July 1990-June 1991

	MMH	DLH	PMH	SMH
14-ft	24	13	21	10
16-ft	32	8	12	20
DW	21	10	9	16

July 1991-June 1992

	MMH	DLH	PMH	SMH
14-ft.	48	4	23	12
16-ft.	46	5	15	27
DW	24	17	6	12

July 1992-June 1993

	MMH	DLH	PMH	SMH
14-ft.	83	9	29	20
16-ft.	53	4	13	14
DW	36	11	9	15

Exhibit 5
MMHC Average Prices and Installation Cost

Size	Average Retail Price	Average Installation Cost
14-ft.	$14,700	$550
16-ft.	$18,950	$650
DW	$34,450	$1300

Exhibit 6
1992-93 Direct Fixed Costs*

MMH	DLH	PMH	SMH
$103,032	$49,758	$49,758	$49,758

* Includes lot rent, utilities, telephone, secretarial wages, advertising expense and misc. government fees (FICA, workman's compensation, etc.).

Islamic Center of Long Island

Mamdouh Farid, Hofstra University

Mr. Nazir Mir, the president of Executive Committee (EC) of the Islamic Center of Long Island (ICLI), glances at his desk calendar and notices that he has only few days before meeting with the committee to discuss the current situation of the Islamic school and its future expansion. ICLI operates as a nonprofit religious organization established under the provisions of the Religious Corporation Law. Mr. Mir admits to himself that emergent problems have taken most of the attention of the committee away from long range planning for the future of the ICLI. He knows that the committee's role should be both tactical and strategic one (the center does not have a long range planning committee). The ICLI constantly battling an image problem regarding how Islam and Muslims are portrayed in the media. Continuous occupation with this urgent issue has distracted energy and resources from important issues that serve ICLI primary purpose.

Now several other concerns are pressing the center to plan for the future. He has been reading that the American Muslim population is growing fast with an estimate of more than six million, with roughly half of American Muslims born here. According to published information, more people are turned to religions. All of this represents an opportunity for the Islamic center to expand.

Mr. Mir also knows that there are other 13 mosques (a masjid of Allah or house of God) and Islamic centers in Long Island but it seems that many of them do not provide sufficient or effective religious and cultural services and programs to meet the demand of the growing needs of the Muslim community. On a positive note, the ICLI is managed and run by middle class Muslim volunteers, e.g., physicians and engineers, instead of the traditional Muslim clergymen. This has brought a professional managerial style to the center and created enriching educational environment that motivates many members to visit the center often not just one time in the weekly Friday ("Gomma") prayer. The center published reports and activities are showing the commitment to deal with religious and cultural diversity with openness and freedom. The ICLI has been credited as one of the most successful Islamic centers in North America. Table 1 shows typical cultural and social activities provided by the center.

Although the center has made an obvious expansion since its inception, this progress itself becomes a controversy among the Muslim community in LI. Muslims with the traditional view of Islam, especially senior members, consider ICLI as too liberal (see Appendix A for a brief discussion of some relevant principles of Islam). This group is also concerned that continuous expansion and addition of new programs may distract the center from its primary purpose.

At present, the center's physical facilities and grounds are not adequate for future growth. In fact, the current services and programs have already grown beyond what its physical facilities can provide for. The center has run out of room for educational classes and worship services. The center has a need for more Sunday school classes but has no room to expand in its existing facility. ICLI already plans to construct a new three-story building to house the school and a library. Can the center succeed in that? ICLI is already receiving complaints from its neighbors regarding parking in the surrounding streets especially in prayer and holiday times.

Mr. Mir cannot help but thinks backs to 1989 when the construction of the present center began and how it has grown steadily since the time.

Background

The idea of ICLI grew out of the concerns of a small group of middle class immigrant Muslim families, who settled in Nassau County in the late 1960's and early 1970's. The need to preserve their religious identity, culture heritage, and the desire to educate their offspring drew these families together. Fund raising effort followed and the property, where the Islamic center now stands, was thus bought. The ICLI incorporated as a nonprofit religious organization in April 1982. In the following months interest and attendance grew, and the idea of a new building developed. Construction of the current center began in July 1989 and was completed in 1991 at a cost of two million dollars. The center comprises of a mosque with its prayer room featuring traditional Islamic architecture set in modern American context, a multipurpose room, classrooms, library, and offices on an area of about 10,000 square feet.

Mission and Philosophy

There are four principals that have guided behavior and decision making in the ICLI. First, the center deals with religious and cultural diversity with openness and freedom. Second, the role of the mosque is broader than just being a place for prayer. The mosque should be viewed as a center for people education and development. American Muslims from different national origins should have equal access to the center's social and educational life. Third, specific culture or ethnicity must not color Islam. Islam should be portrayed as a universal religion. English language is used in all communication and activities in the center. The center preaches Islam in a way that all Muslim nationalities (Asians, Africans, Arabs, Europeans, and American-born, . . .etc) can agree on. Fourth, the role of women in the Muslim community and in the management of the center should be equal to men. Women are permitted to the Board of Trustees and to various committees.

The mission, as formally stated in the congregation book, says that AICLI strives to impart religious education for all children and adults based on the Qur'an (Muslims holy book) and the Sunnah (says and conduct of prophet Muhammad, peace be upon him), irrespective of ethnic or social background and gender. The center reflects the diversity of the Muslim community and its unity in adherence to the teachings of the Qur'an and examples of the prophet. ICLI's activities are organized under the Islamic principle that learning is a lifelong process for Muslim men and women and is best accomplished in an environment of freedom and openness. ICLI also provides a forum for open exchange of diverse viewpoints of Islamic way of life and different school of thought. ICLI has also established an outreach program at Westbury High School by bringing distinguished visitors who serve as role models. Visits by students to local professional organizations are arranged in order to widen their perspectives about opportunities available to them. Furthermore, ICLI aims at providing financial, spiritual, material, and social help to the deserving, locally or abroad, irrespective of ethnic, social or cultural background. Finally, ICLI aims at dispelling the myth of fundamentalism, fanaticism and intolerance about Muslims as they are portrayed in newspapers, television and other media. ICLI strives to present a fair and accurate view of Islam and Muslims≅.

Governance

ICLI operates under bylaws initially developed in 1988 and modified in 1995 and 1997. The Board of Trustees and the Executive Committee (EC) are the governing entity of ICLI. They are guided by the ICLI's bylaws and mission statement. The center runs predominantly by volunteers. While for-profit board members receive compensation for their services, nonprofit board members are volunteers. Nonprofit organizations are required to have voluntary board in order to be chartered by the state and to qualify for tax exempt.

The board functions as a policy maker and delegates much of the implementation to the EC. The board oversees the EC, which by its turn oversees other committees that run the day to day activities in the center. In reality, however, policy and administration in the center are interconnected since many board members are active in committees. The board meets at least twice a year to initiate change or new activities, to follow up and assess of different programs, to approve management decisions, and to approve the budget. The Chairman of the Board leads the center and presides over all board meetings. Minutes of the board meeting show that small detail of current operations, especially when discussing the budget is usually subject to examination.

The board composes of life members, mainly founding individuals, and term members, mainly from contributing and elected individuals and immediate past president of the executive committee. While the center does not have a nominating committee for identifying and selecting desirable characteristics to be added to the board, the idea of bringing outsiders, as term members, should also increase the board strength. Many board members are committed and active in the center. However, there was some problem in getting everybody commitment to participate in committees. The media has interviewed some senior members and the coverage has shown a positive Islamic image.

Like majority of mosques and Islamic centers (about 15,000) in U.S.A., the ICLI does not report to any authoritative national Islamic bodies in U.S.A. (One of these national institutions is the Ash-Shura Counsel . Shura is a political decision making procedure, required by the Qur'an, through representative consultation.) But in some respect, there are channels of communication and mutual moral support especially in times of crises.

The Executive Committee is elected every two years and consists of a president, vice-president, treasurer, secretary, and president elect. It is responsible for managing the center through different committees. Each key committee has a member of the EC acting as a liaison. EC also oversees a paid staff consists of Administrative Director, Director of Interfaith and Communication, Administrative Assistant, Caretaker, and Imam (clergyman). (The three essential requirements to be Imam are 1) mastering the Arabic language so the person can recite and read the Qur'an, 2) possessing in-depth knowledge of the "Sunna" and the meaning of verses in the Qur'an, and 3) being able to lead the prayer. However Imam is not a priest-like position. Many professional Muslim laymen who meet these requirements can play the role of Imam. Some Islamic centers function without a formal Imam.) Staff is paid low salaries, but they are committed and there is no turnover.

The EC meets regularly and reports to the Board of Trustees. Table 2 depicts the organizational chart of the center. The chart does not show the Islamic school (Sunday school and Crescent School).

Committees

Member volunteers staff fourteen committees with various responsibilities found to be essential for day-to-day operation. Heads of committees are appointed by the BOT. Committees recommendations are submitted to the EC and then reported to the board for discussion and approval. Each committee has specific area of responsibility and programs. The following is a list of committees and their function.

Capital Program and Development Committee. This committee is responsible for planning and construction of physical facilities. One immediate issue that should be solved is the need for more spaces for parking facility.

Community Medical Services Committee. The committee supports local community health projects and sponsors blood drives and health fairs. It arranges to have at least one physician available on Sundays to provide medical consultations to members as well as to the neighborhood community.

Cultural Committee. The committee mission is to dispel all barriers of race, color, gender, and culture among the center members.

Dáwa Committee. The committee is responsible for propagating the principles of Islam to the non-Muslim community at large.

Educational Committee. It is responsible for all educational programs, including the religious school and lectures in the center.

Endowment Committee. Its objective is to help in providing a long term financial stability for the center through managing and investing the endowment fund. So far the donors of these funds have not specified restrictions on spending of principals and their earnings for operating purposes. The governing board, however, imposes what is known as "board-designated endowment" as a binding for the usage of this fund.

Family Services Committee. It includes two subcommittees: the Domestic Harmony and Youth and Children. They provide legal, social and psychological counseling and workshops to individuals and groups in the Muslim community. It undertakes domestic harmony surveys and it has an emergency hot line for crisis intervention.

Fund Raising Committee. It seeks Muslim community financial support. The commitment of the founding group (the Board of Trustees) still represents a major source of finance.

Funeral Services Committee. To provide these services, burial sites were bought at Washington Memorial Park in Suffolk County.

Internal Communications Committee. It issues newsletters and oversees publications and media Internet and audio video activities.

Interfaith and Communications Committee. A major objective of this committee is to promote interfaith tolerance and understanding between Islam and other major religions by means of establishing a continuous dialogues and exchanging lectures with similar Christian and Jewish organizations. The Director of Interfaith and Communication, a full time staff, is very active in exchanging visits with these organizations.

Muslim Relief Committee. Its objective is to provide material help to Muslim and non-Muslim needy in and outside US. It also participates in interfaith tolerance workshops, civil rights programs, and local environmental projects.

Social and Youth Committee. This committee aims at providing an open forum for healthy discussions of differing viewpoints and interests of Muslim youth.

Zakat Committee. It collects Zakat (an obligatory, yearly donation by all Muslims to the needy in the amount of 2.5% of one's asset not used for over a year) and distributes it to the needy.

Outreach Programs

The center has targeted younger generation through developing several outreach programs that designed to attract young families and teenagers. Unfortunately, there is only one youth committee and the ICLI did not capitalize on its close proximity to colleges (two in the village of Uniondale and two in the village of Westbury) to outreach college students.

External Environment

ICLI is located on Westbury, Long Island, New York. The location exists on a local road approximately a mile south of major highways in Long Island. The location is in a very close proximity to business, residential and colleges areas.

There are 13 mosques and Islamic culture centers in Long Island, New York. The majority of Muslim members and prayers do not live in the surrounding areas and are scattered in many geographic areas with limited concentration in communities. In most of cases, the site of an Islamic center is chosen because of real estate price and accessibility from major highways. This physical separation of Islamic centers and their followers represents permanent pressures on centers to strive for acceptance by the surrounding neighborhood. Islamic centers must behave like a diplomat in order to institute neighborhood sentiment. Management should play many outreach information and communication roles to various civic, religious, and government entities.

The economic condition and social and political roles of the Muslim community appear to be growing slightly especially with the growing number of second generation. The Muslim immigrants were mostly politically and socially passive. The majority of Muslim immigrants came from countries where political activism is suspected. The second generation is more active and involved in politics and human rights.

Competition among Islamic centers occurs in two areas. One is competition for donation and financial support from other parties than members. Another area of competition exists in the market for attracting members, Friday prayer speakers, qualified staff, and volunteers.

There is a shortage of good Immams and speakers. Islamic centers must provide competitive inducement in order to attract effective ones.

Finance and Fund Raising

The Fundraising Committee, and the Endowment Committee direct the ICLI's financial affairs. The center's bylaws states that financial and investment decisions should follow the principles of Islam. Tables 3-8 show financial information over a number of years.

While membership and Sunday school dues and Friday, the Muslim holy day, communal prayers provide a major source of funding; the largest source comes from fund raising events. Two major fundraising events provide the major bulk of funds. Till present, without ongoing fund raising efforts, ICLI would be unable to grow.

While nonprofit organizations are permitted to issue bonds and to acquire bank loans, the center is avoiding these sources of finance because of the controversy among Muslims regarding the acceptance, from the Islamic view point, of debt finance (see Appendix A). However, as shown in the financial statements, ICLI does not take same strong position toward opening an account in a regular commercial bank or investing in mutual funds. Classical Islamic law is more rigid toward these investments.

There is still some alternative source of finance that meets the Islamic requirements. For example in the U.S.A. there are a number of Islamic banks (e.g., The United Bank of Kuwait, New York) and American investment firms (MSI Financial Services in Houston, Texas) that attempt to meet these requirements. (Also the following financial incorporations have Islamic banks worldwide: Citibank, Dresdner Kleinwort Benson, ANZ, and Deutsche Moegan Grenfell.)

Marketing

Marketing efforts are done to serve the mission of the center especially the aim of educating the general public and Muslim community about Islamic religious and issues. It consists of participation, on occasional basis, on TV programs, newspaper advertisements of social services (e.g., a weekly announcement of "Free Medical Consultation at the ICLI" in the Westburry Times), an Internet website, mail distribution of a calendar contains lists of dates of Islamic events and services, and an outreach program at Westbury High School. Currently, management feels that the center reaches its capacity for additional members and participants.

On the other hand, marketing programs to educate the general public (e.g., educational advertisements) and to fight Muslim stereotyping is severely limited. For example, there was not any published advertisement in national paper to condemn terrorist attacks by radical individual Muslims on civilians (e.g., the attack on the World Trade Center in New York City) or aggressions on civilian Muslims (e.g., the 1998 U.S. government's attack on civilian targets in Sudan). The problem with advertising in national newspapers, e.g., The New York Times, is the high cost that could run to $100,000 for a full page. Even if the center can afford that, the question is, from the center point of view, whether any return might justify the cost in contrast to using this money, for example, to open a new class.

The Future

Mr. Mir, the chairman of the executive committee, knows that the center success depends on continuing offering new and diverse educational programs and voicing social and cultural concerns of Muslim community. Strategic planning, expansion strategy, allocation of resource, and the future financial stability should be key concern of ICLI's management. Management needs to know more financial details (e.g., attendance of different programs) in order to make assessment of effectiveness allocation of resources.

Mr. Mir begins to write down issues and questions that he should present to the executive committee. Can the center reach the growing number of young Muslims with a both Islamic and non-Islamic background? Is the center doing all it can to reach this Muslim second generation? What should be done? What are specific educational programs that should be implemented in this regards? Currently there is the Sunday School (in summer), and the Crescent School which is a full year, eighth grade, school. The Crescent School is not covering its expense and has been supported by the center by an amount of $30,000 a year.

Are we moving in the right direction? Will senior members who carry the traditional view of Islam be willing to support and help with new innovative programs? Should the center has its own radio station and TV programs? How to persuade American Muslim leaders to act in this direction?

Management should also seek diversification of sources of finance and unique ways to increase revenue. Growth may come from individual and corporate donors, from some for-profit activities, and from strategic alliance with business concerns (see Appendix B for a brief discussion of strategic behavior and strategic environment of nonprofit organizations). ICLI has already succeeded in establishing strategic alliance with a telecommunication company and a commercial bank through urging the center's members to buy commercial services. The center receives percentage of revenues provided by members.

The committee should evaluate the effectiveness of some alternatives and offer other recommendations based on a thorough strategic analysis.

Discussion Questions:

Using the case, tables, appendices, and references, discuss the following questions:

1, What enable the organization to perform well?
2. Examine the adequacy of the mission statement?
3. Examine the external environment that affect the center and the way that the organization can meet new opportunities and challenges?
4. How to advance the relations between the organization and the its neigborhood?
5. What are the pros and cons of the board members being involved in micromanaging the center?
6. To cope successfully with their environment, nonprofits need many entrepreneurs or many entrepreneurial roles. Can you distinguish between four types/roles of entrepreneurship: social service, venture, fund raising, and intrapreneur? What are the implication for nonprofit organizations?

REFERENCES

Annual Reports
Minutes of Annual Sessions
ICLI Publications
Interviews
Directories of mosques in Long Island

Table 1: ICLI's 1998 lectures, Presentations, Dialogues

"An Islamic Open Forum," each Wednesday.
"The vision of and living Islam," each Sunday

1/4	"Central Asian Muslim states since their independence."
	"The Work of International Relief Organization."
1/11	"Multi-Faith Group of LI attending ICLI."
	"Qur'anic description of animal and plant kingdoms."
1/18	"Christian Muslim relations & the National Council of Churches."
	"Getting involved to help community."
1/25	"The people and the land of Palestine."
2/1	"Embryology in the Qur'an."
	"Living Islam."
2/8	" The many faces of domestic violence."
	"Islam: the path to physical, mental, and emotional health."
2/15	"My journey to Islam"
	"The many faces of domestic violence."
2/22	"The economic & political situation in Afghanistan: lesson to learn from our mistakes"
3/1	"The gift of fatherhood"
3/15	"The mission of the Council of American Islamic Relation."
3/22	"Muslims of India"
	"Oppression in Kosova."
	"Family values in Islam."
3/29	"Art and Islam."
4/5	"Islamic legacy of Malcolm X."
	"Family morals in Islam."
4/12	"US Muslims dig in politically."
	"Muslim political activism in the US."
4/19	"Qur'anic discussion."
4/26	"The vision of and living Islam."
5/3	"Forum on education."
5/10	"The vision of and living Islam."
5/17	"Islam & the West."
5/24	"Forum on education."
5/31	"Forum on personal health."
6/7	"What it means to be a Jew in America."
	"Different Jewish denominations," Temple Beth El, Great Neck.
6/14	"Living Islam."
6/21	"What does it mean to believe in God?"
6/28	"Night prayer."
7/5	"The vision of and living Islam."
7/12	"The vision of and living Islam."
7/19	"What does sin mean."
7/26	"Woman in Islam."
8/2	"The glorious Qur'an."
8/9	"The vision of and living Islam."
8/16	"Spanish Muslims."
8/23	"The vision of and living Islam."
8/30	"The vision of and living Islam."
9/6	"Islamic morality."
9/13	"Arab-Israeli Peace negotiation."
9/20	"Faith and restraining self from all ills."
9/27	"Participating in Muslim World Day parade."
10/4	"Qur'anic discussion on state of spiritual attainment."
10/11	"Islamic law."
10/18	"United Nations program for race against poverty."
10/25	"Repression & insurgency in Kashmir."
11/1	"Islam 2000."
	"Guest speakers: US Senate, Supreme Court."
11/8	"The vision of and living Islam."
11/15	"Islam 2000."
11/22	"Morals & manners: an Islamic perspective."
12/6	"Islamic finance."
	"Humbling lessons along the spiritual path."
12/13	"The vision of and living Islam."
12/20	"The vision of and living Islam."
12/27	"Woman Study Group."

Table 2 : Organizational Chart

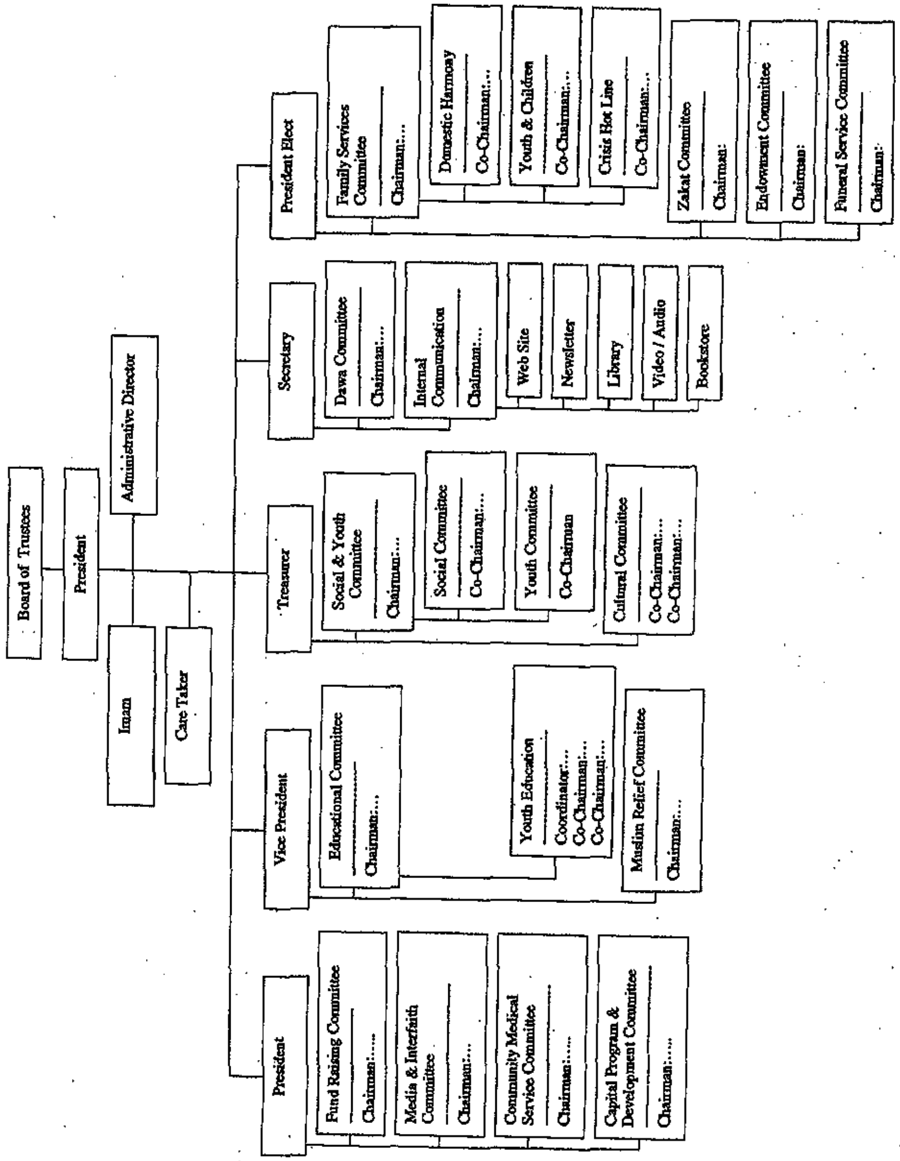


Table 3
Islamic Center of Long Island
Income Statement
January through December 1998

Income	
Income from Crescent School	3,000.00
Total Income from Book Sales	2,303.68
Income from Masjid	
Construction Donation	940.00
Iftaar	-1,230.00
Summer Camp Fund	9,395.00
Total Miscellaneous	9,669.25
Donations	48,351.68
Sunday School	70,116.00
Friday Collections	60,709.75
Total Fund Raising	149,017.00
AT&T/MEF	2,066.15
Income from Masjid - Other	7,980.00
Total Income from Masjid	384,214.00
Total Miscellaneous Income	2,020.63
Total Income	391,539.00
Expense	
Advertising	375.00
Funeral	400.00
Payroll Taxes	3,002.64
Salary Expense	7,100.00
Total Office Expense	575.95
Honorarium Expense	3,347.22
Total Maintenance	23,365.05
Bank Service Charges	833.68
Contributions	6,728.57
Dues and Subscriptions	565.00
Equipment Leases	3,563.58
Insurance	
Health Insurance	1,017.90
General Insurance	11,092.66
Disability Insurance	1,112.75
Total Insurance	13,223.31
Miscellaneous	6,718.08
Office Supplies	164.9
Payroll Expenses	111,979.43
Postage and Delivery	3,280-14
Printing and Reproduction	9,769.81
Professional Fees	
Accounting	2,067.53
LegalFees	13,500.00
Total Professional Fees	15,567.53
Total Rent	19,015.00
Total Repairs	17,325.30
Total Supplies	5,423.81
Telephone	5,949.02
Total Travel	8,622.58
Total Utilities	23,519.9
Total Expense	290,415.52
Net Income	101,123.62

Table 4
Islamic Center of Long Island
Income Statement Comparison
1997/96

	Jan-Dec 97	Jan-Dec 96
Income		
Income from Crescent School	4,500.00	1,500.00
Total Income from Book Sales	3,976.93	-1,190.47
Income from Masjid		
Iflaar	200.00	0
Summer Camp Fund	4,443.84	6,577.50
Total Miscellaneous	30,155.29	2,642.25
Donations	31,303.45	7,460.07
Sunday School	48,515.21	45,503.01
Membership Dues	35,720.00	1,550.00
Friday Collections	52,715.97	16,571.50
Total Fund Raising	145,891.20	133,864.00
AT&T/MEF	3,429,35	2,487.86
Income from Masjid - Other	15,756.50	0
Total Income from Masjid	**368,130.81**	**216,656.19**
Miscellaneous Income		
Interest Income	5,914.53	1,956-52
Calendar	789	-1,039.20
Miscellaneous Income-Other	0	-51.24
Total Miscellaneous Income	**6,703.53**	**866.08**
Total Income	**383,311.27**	**217,831.8**
Expense		
Funeral	2,489.00	0
Donations	5,629.00	540
Payroll Taxes	6,085.54	1705.97
Salary Expense	7,039.84	650
Security	132	243.5
Total Office Expense	0	608.8
Honorarium Expense	400.00	2,560.00
Total Maintenance	23,952.96	16,437.80
Bank Service Charges	215.11	305.93
Contributions	4,280.00	0
Dues and Subscriptions	459	47.48
Equipment Leases	208.96	626.88
Total Insurance	8,973.25	5,763.50
License and Permits	15.00	0

Table 4
Islamic Center of Long Island
Income Statement Comparison
1997/96

	Jan-Dec 97	Jan-Dec 96
Expense Continued		
Miscellaneous	2,500.08	1,878.77
Office Supplies	534.45	0
Payroll Expenses	113,840.65	34,203.74
Postage and Delivery	2,238.37	1,492.66
Printing and Reproduction	19,284.68	10,047.00
Professional Fees		
Accounting	1,087.75	121.82
LegalFees	8,650.00	0
Total Professional Fees	**9,737.75**	**121.82**
Total Rent	18,572.50	19,302.25
Total Repairs	6,085.71	1,977.30
Total Supplies	9,108.77	8,213.63
Telephone	5,082.41	1,466.75
Total Travel	4,785.41	677.5
Total Utilities	20,629.71	8,974.25
Total Expense	**272,280.16**	**117,846.43**
Net Income	**111,031.12**	**99,986.37**

Table 5
Islamic Center of Long Island
Balance Sheet
As of December 31, 1996

Assets	
Habib American-Savings	104,730.97
Fidelity Investment	55,659.14
European American	84,602.70
Habib American-Checking	75,020.69
Total Bank	**320,013.50**
Total Checking/Saving	**320,013.50**
Other Current Assets	
Exchange	-6,835.87
Restricted Funds	
Dawa Fund	-150.00
Muslim Prisons	941.00
Bosnia Child Sponsor	-2,700.37
Sadqua	-1,421.25
Zakat	-17,328.70
Fitr-Bosnia	-7,694.12
Fitr-Other	-178.00
Total Restricted Funds	**-38,447.54**
Relief Funds	
Chechnya	-350.00
Nawal Fund for Bosnia	-1,829.00
Kashmir Relief	-3,150.00
Relief Funds-Other	-2,705.10
Total Relief Funds	**8,034.10**
Total Other Current Assets	**-45,283.41**
Total Current Assets	**274,730.09**
Fixed Assets	
Library Books	2,116.44
Office Equipment	
Accum. Dep. Off. Equip.	-12,386.41
Office Equipment-Other	13,324.00
Total Office Equipment	**937.59**
Furniture and Fixtures	
Accum. Dep. Furn. & Fixt.	-11,622.00
Furniture &Fixtures-Other	13,811.00
Total Furniture & Fixtures	**2,189.00**

Table 5 (Continued)
Islamic Center of Long Island
Balance Sheet
As of December 31, 1996

Appraisal	250.00
Demolition	10,918.58
Kitchen Equipment	14,923.50
Jaime Dr. Building at Cost	
Accum. Dep. On Building	-22,100.18
Building at Cost-Other	127,297.00
Total Building at Cost	**105,196.82**
Jaime Drive Land at Cost	53,634.00
Building Improvement	
Accum. Amort. On Building	-30,824.36
Building Improvement-Other	2,116,549.44
Total Building Improvement	**2,085,725.08**
Building at Cost	
Accum. Dep. On Building	-105,762.84
Building at Cost-Other	155,524.00
Total Building Cost	**49,761.16**
Land at Cost	18,851.00
Total Fixed Assets	**2,344,503.17**
Other Assets	
Designated Funds	
Summer Camp Fund	-6,577.50
Medical Seminars	-1,160.00
TV & Radio Fund	-17,125.00
Total Designated Fund	**-24,862.60**
Other Assets	
Funeral Donation Fund	-100.00
Plot Sales	-22,400.00
Washington M Park	31,850.00
Land-Cemetery	13,250
Total Other Assets	**22,600.00**
Total Other Assets	**-2,262.50**
Total Assets	**2,616,970.76**
Liabilities and Equities	
Liabilities	
Current Liabilities	
Other Expenses	-2,445.00
M. Hanini Salary	-4,132.50

Table 5 (Continued)
Islamic Center of Long Island
Balance Sheet
As of December 31, 1996

Payroll Liabilities	
NYC Tax	26.14
SUI	46.50
State Income Tax Payable	33.89
Payroll Liabilities-Other	825.34
Total Payroll Liabilities	**931.87**
Total Current Liabilities	**-5,645.63**
Long Term Liabilities	
Mosque Building Fund	2,139,118.82
Total Long Term Liabilities	**2,139,118.82**
Total Liabilities	**2,133,473.19**
Equity	
Opening Balance Equity	355,592.54
Retained Earnings	28,866.72
Net Income	99,038.31
Total Equity	**483,497.57**
Total Liabilities and Equity	**2,616,970.76**

Table 6
Islamic Center of Long Island
Income Statement
January through December 1995

Income	
School Tuition Fee	31,512.00
Contributions and Donations	186,301.00
Membership	10,450.00
Hall from Rental Income	384.00
Designated Gift Funds	1327.00
Friday Box Collections	31,900.00
Total Income	**260,684.00**
Expenses	
Salary	49,905.00
Fundraising & S. Events	22,156.00
Sunday Quranic School	18,950.00
Lecture Fees	2,200.00
News Letter Printing	4,600.00
Depreciation	17,955.00
Majlis-E-Shura Fees	100.00
Property Insurance	4,816.00
Cleaning Expenses	7,154.00
General Supplies	4,384.00
Lease Expense-Copier Machine	3,014.00
Postage	2,970.00
Repairs and Maintenance	4,419.00
General Expenses	3,699.00
Contributions and Donations	4,060.00
Telephone	3,616.00
Heating and Power-Oil	2,516.00
Electricity/Light	15,601.00
Water and Sewer Taxes	538.00
Total Expenses	**172,640.00**
Net Profit (Loss)	**88,044.00**
Net Profit After Tax	**88,044.00**

Table 7
Islamic Center of Long Island
Balance Sheet
As of December 31, 1995

Assets	
Current Assets	
Cash	267,163
Loan to Community	1,450
Total Current Assets	**268,613**
Fixed Assets	
Land at Cost	18,851
Building at Cost	155,524
Accum. Dep. On Building	-105,763
Building Improvement	2,116,549
Accum. Amon. On Building	-30,824
Jaime Drive Land at Cost	53,634
Jaime Drive Building at Cost	127,297
Accum. Dep. On Building	-22,100
Kitchen Equipment	14,924
Demolition	10,919
Appraisal	250
Furniture & Fixtures	13,811
Accum. Dep. On Furn. & Fixt.	-11,622
Office Equipment	10,218
Accum. Dep. On Office Equipment	12,387
Library Books	2,116
Total Fixed Assets	**2,341,397**
Other Assets	
Land-Graveyard	16,000
Funds From Sale of Graveyard Plots	-3,750
Total Other Assets	**12,260**
Total Assets	**2,622,260**
Liabilities and Fund Balance	
Current Liabilities	
Restricted funds	25,037
Summer Camp Fund	6,578
M. Hanini Salary	-4,133
Other Expenses	-2,445
Total Current Liabilities	**25,037**
Long Term Liabilities	
Designated Fund	27,018
Mosque Building Fund	2,139,119
Total Long Term Liabilities	**2.166,137**
Operating Fund	
Beginning Balance	46,721
Cumulated Fund Balance	296,321
Current Surplust(Deficit)	88,04
Total Operating Fund	**431,086**
Total Liabilities and Fund Balance	**2,622,260**

Table 8
Islamic Center of Long Island
Balance Sheet
As of December 31, 1993

Assets	
Current Assets	
Cash in Bank	94,920.04
Receivable From Crescent School	4,193.00
Tuition Fee Receivable	8,280.00
Prepaid Salary	360.00
Sale of Books Receivable From Class "A"	78.00
Bosnian Children Sponsorship Fund Receivable	2250.00
Total Current Assets	**110,081.04**
Fixed Assets	
Brush Hollow Building	
a-Land	18,851.00
b-Building	155,524.00
c-Building Construction	2,045,712.18
Jaime Drive Building	
a-Land	53,634.00
b-Building	127,297.00
Cemetery Plots	14,250.00
Office Equipment	6,718.20
Kitchen Equipment	9,863.50
Furniture and Fixtures	11,377.00
Library Books	1,635.17
Accum. Depreciation and Amortization	-146,786.59
Total Fixed Assets	**2,298,075.46**
Total Assets	**2,408,156.60**
Liabilities and Fund Balances	
Current Liabilities	
Accrued Expenses	5,806.00
Total Current Liabilities	**5,806.00**
Fund Balance	
Restricted Funds	29,006.10
General Funds	
Mosque Building Fund	2,080,712.18
Operating Fund	292,632.22
Total Fund Balance	**2,402,350.50**
Total Liabilities and Fund Balance	**2,408,156.50**

APPENDIX A
Relevant Islamic Principles

The word Islam means "submission to God". Islamic beliefs and practices are based on the Book of God or the "Qur'an", a collection of Allah's "Suras" (God's revelations) to the Prophet Mohammed, and the "Sunna", Prophet Mohammed's conduct, tradition, and verbal expressions. For Muslim, the Qur'an is the Word of God "made book".

The Qur'an and the Sunna are the basis of Islamic law ("Shari'ah" and "fiqh") and Islamic tradition. The Islamic law covers the areas of criminal law, personal and family law and law of transactions. Variations in interpretations of the law have led to different schools of law, of which there are Shi'i and Sunni; the latter have settled on four major ones, namely the Hanafi, Maliki, Shafi'i, and Hanbali schools of law. These schools follow Imams (scholars) Abu Hanifah, Malik, Shafi'i, and Ibn Hanbal respectively. Differences among the schools are minor, and are more in the area of business and financial transactions than in the area of creed and ritual (Abdul Rauf, 1996). The following is some business related Islamic principles.

Planning. Part of the Islamic tradition is the belief in the concept of destiny, or fate, both the good and the evil. "The pens have been lifted and the pages have dried" (verbal expression "Hadith" by the Prophet: Abraham & Johnson-Davies, 1977, p.68), meaning that what has been written and decreed cannot be altered. But since man does not know what is kept hidden from him, man should be at his best. "Having given a limited free will, God gives a man reason and spiritual faculties" (Ali, 1983, p.1697, notes to Sura LXXXI). The Qur'an points to the coexistence of human freewill and responsibility (Ali, 1983, Verse 28, Sura LXXXI) and human limitations (Ali, 1983, Verse 29, Sura LXXXI). Man has freedom of choice but this free will is limited since the outcome of his action is determined by God. This freedom of choice and action is the base for man's accountability for his action (El-Ashmawy, 1989), because "If man errs, it is man's will that it is at fault" (Ali, 1983, Verse 7, Sura LXXXII).

Islamic traditions encourage careful planning, consultative decision making, and acquiring knowledge (Asad, 1980). Religion and knowledge are generally considered in Islam to be twin sisters, since the revealed word of God as well as the Prophet's tradition order every Muslim to seek knowledge and science (Bucaille, 1985).

Market Transaction. Scholars of Islamic economic (e.g., Chapra, 1992, Noonan, 1957) maintain that any kind of predetermined return on capital, known as "Riba" (usury), is prohibited. Interest-bearing bank account, loan, and bonds, are forbidden. Also business with an Islamically invalid purpose, such as gambling "Maysir" and liquor production, is not allowed.

Islamic business is supposed to be based on the concept of partnership. Islam law accepts the time value of money and allows financing business and profit from capital investment only when they result from sharing in managing the venture and/or sharing in profit, risk "Gharar", and losses. Islamic links financial reward with the behavior of assuming risk and adding values.

In Islamic law, there are a number of profit and risk sharing arrangements that are used in financing business (Habachy, 1962). For example moneylenders/investors can share as active partners, known as "Musharakah", by providing capital and labor or as non active partners, known as "Mudarabah", by providing capital while the other partners provide labor. The "Mudarabah" creats an opportunity to issue stocks (Mudarabah funds) to be owned by non active partners as shareholders. A third Islamic arrangement is known as "Murabaha" (sale with markups) when a moneylender/investor act as one commissioning a purchase of specific object/assets required by a venture and then sell it back to the venture with a markup. A fourth way, known as "Ijara" (lease and hire), is when a moneylender/investor act as a buyer of capital assets required by a venture then act as a leasor of that asset, with option to buy, to the venture. In the last case, ownership of the asset remains with the lessor until the purchase option is exercised. The Islamic criterion is that money lenders and investors share not only profits but also any losses, risk, and liability.

Risk Taking and Risk Management. The Islamic prohibition of interest "Riba" (usury) and its stipulation on linking financial reward with risk, by insisting on sharing of business risk by moneylenders/investors, is actually treating both of a capital user (entrepreneur) and a capital provider (investors, banks) as entrepreneurs. This is parallel to venture capitalists who finance ventures in exchange for part of ownership.

Another issue is the Islamic view of managing risk. In Islam, "Money is not treated as a commodity, as in the West, but as a bearer of risk, and therefore subject to the same uncertainties as those borne by other partners in the enterprise" (Vogel & Hayes, 1998, p.2). Accordingly, interest-bearing bank account is forbidden. Some traditional Islamic scholars consider transferring business risk by means of buying insurance or by other means of risk management such as hedging and future options are illegal Islamically because they violate "Riba" (usury) and risk rules (e.g., Coulson, 1984). In addition, insurance companies invest their premiums in forbidden interest-bearing investment. This view advocates an Islamic version of insurance, known as "Takaful" (solidarity), in which business or Muslim communities establish charitable collective enterprises or cohesive social groups by which they pool resources to aid each other in the event of loss. Insurance premiums are invested Islamically (Vogel & Hayes, 1998). There are also some other innovative insurance ideas that meet the Islamic criteria.

The foregoing argument could be some striking fact to the Western societies, where secularism rules prevail, because it represents an assertion of religious law, with its emphasis on welfare and utilitarianism, in the area of commercial life. Vogel & Hayes (1998) note that Islamic law challenge Western commercial laws in two key respects: ". . .first, it challenges the presumption that modern commercial rules are per se more efficient or otherwise superior; and second, it challenges the secular separation of commerce from consideration of religion and piety " (p.19).

Many Muslim scholars (e.g., Chapra, 1985) believe that if their interpretation of God's wards is correct, Islamic principles should experience universal success, yielding moral, social, and financial rewards, and leading to a better distribution of wealth and greater support for the poor and the needy.

Also, the foregoing discussion could imply that we should expect more conservative risk taking and risk attitude from Islamic business and entrepreneurs than that can be found in a typical capitalistic market. No research is found in the literature that attempts to test this assumption. Islamic law does not prevent profit maximization but it prohibits greedy and selfish behavior. Commercial risk is approved and even encouraged but pure speculation and obscure transactions, such as when parties lack knowledge of aspects of sale or that object of sale does not now exist or is not under the control of a seller, are prohibited (Vogel & Hayes, 1998).

REFERENCES

Abdul Rauf, F. (1996). *Islam, A Search for Meaning*. Costa Mesa, CA: Mazda Publishers.

Ali, Y. (1983). *The Holy Qur'an: Text, Translation and Commentary*, 2nd edition. Maryland: Amana Corp.

Asad, M. (1980). *The Message of the Qur'an*. Gibraltar: Dar al-Andalus, pp.i-iiiv.

Chapra, U. (1985). Toward a Just Monetary System. Leicester, UK: The Islamic Foundation.

Chapra, U. (1992). *Islam and Economic Challenge*. Leicester, UK: The Islamic Foundation.

Coulson, N. (1984). *Commercial Law in the Gulf States*. London: Graham & Trotman.

El-Ashmawy, M. (1989). *The Islamic Politics*, 2nd Ed. Cairo, Egypt: Sinai Publishing, p.30.

Habachy, S. (1962) Property, Right, and Contract in Muslim Law. *Columbia Law Review*, 42: pp.1-11.

Ibrahim, E. & Johnson-Davies, D. (1977). Forty Hadith, 2nd ed. Syria: The Holy Koran Publishing House.

Noonan, J.T., Jr. (1957). *The Scholastic Analysis of Usury*. Combridge, MA: Harvard University Press.

Vogel, F. And Hayes, S. (1998). *Islamic Law and Finance: Religion, Risk, and Return*. The Hague, The Netherlands: Kluwer Law International.

APPENDIX B
Nonprofits' Strategic Environment & Behavior

Private, nonprofit organizations play a vital role in responding to human needs, social problems, and improving the quality of life (Letts et al, 1999). These organizations vary enormously in purpose and scale. There are currently twenty-five types of tax-exempt organizations (Jacobson, 1997).

Nonprofits' Strategic Environment

The nonprofit environment is characterized by high complexity and uncertainty. One source of these characteristics is the existence of too many constituent groups. Dees (1998) proposes a spectrum of nonprofit organizations, that range from purely philanthropic to purely commercial, in terms of relationship with four key stakeholders (beneficiaries, capital, workforce, and suppliers). Within each of these key categories there are a number of different groups. For example, within capital (financial resources) there are charitable organizations, donor individuals, government grants, client's fee or membership, income from for profit operations, etc. Each of these may have partially different, and sometimes conflicting, needs and demands.

Another source of complexity and uncertainty is existence of high level of competition (e.g., Abelson, 1998). The fact that a large portion of financial resources is provided by parties other than clients have resulted in competition for financial support. This competition has been intensified as a result of cutbacks in government spending in social and human services.

Another area of competition exists in the market for attracting clients, customers, qualified personnel, and volunteers, especially with the absence of market entry barriers. The private nonprofit sector is usually characterized by a low economy of scale (few nonprofits are national or international), low government requirements with respect to market entry, and low capital requirements (especially up front capital needed for marketing, production, or R&D), with the exception of some industries such as health care and hospitals.

Nonprofits' Strategic Behavior & Options

Two of basic questions in any strategic choice are (1) how much risk (possibility of failure or loss) is there and (2) how much return is expected. The conventional profit-seeking strategic choice is usually represented by a trade-off between profit and financial safety (e.g., Fiegenbaum & Thomas, 1988). High risk is associated with high returns; low risk is associated with low returns.

However, this continuum of a positive relation between acceptable risk and expected return does not seem to represent the strategic choices of many nonprofits. The nonprofits' strategic behavior is usually characterized by a trade-off between profit and mission. Arrick (1988) notes that". . .one of the unique features of nonprofits is the inverse relationship between risk and return" (p.104). Strategic choices, that directly serve missions of nonprofits, are usually influenced by nonmonetary social, human, legal, and tax status factors. As Arrick (1988) correctly argues, in nonprofits, the board of directors, constituencies, charitable donations, or foundation grants, are not looking for a high financial return as much as for the programmatic or charitable achievements of the venture. Thus the return levels associated with high risk are the lowest. Accordingly, choices that directly serve to achieve the human and social missions of nonprofits, usually involve high risk and low financial return.

A similar argument is provided by Bryce (1987), who notes that in nonprofits "monetary considerations conflict with mission and manageability or feasibility of an option." (p.122). An optimum combination of legal and political feasibility, and social desirability, has equal or more influence on the selection of options than has the cost and benefit ratio. "Typically...what nonprofits do in program related investment, is take high risks and accept a low rate of return: for example, investing in low-income neighborhood" (Bryce, 1987, p.195).

This does not mean that nonprofits are not motivated to maximize their return on investment or to minimize their risk and cost. The dynamic and uncertain nature of today's environment, that is faced by nonprofits, make their responses a matter of survival. Furthermore, nonprofit organizations' responses to environmental uncertainty and adversity could involve one or more strategies that range from (1) a complete diversion of the whole corporation to a for-profit status, a strategy popular among health maintenance organizations , (2) establishing a for-profit venture, (3) developing strategic alliance with other organizations, or (4) introducing internal changes in mission and leadership structure (e.g., Ginsberg & Bucholtz, 1990). A nonprofit organization may pursue more than one strategy at the same time.

A popular strategic choice is the expansion in unrelated (for-profit) ventures, a strategy coined by Nielsen (1982) as "piggybacking." Bryce (1987, p.160) differentiates between related and unrelated business. A related business is one that is integrally a part of the mission of the nonprofit. Its revenue is generated as a direct result of the organization's conducting its social or human mission. This income is not taxed at all. In contrast, an unrelated business is one which is not integrally related to the mission of the organization. Its principal purpose is to generate cash to support and enable the organization to qualify for public charity status. Income generated from an unrelated business is taxed.

In their expansion in unrelated (for-profit) ventures, , nonprofits try to choose low risk—high return alternatives. Arrick (1988) observes that the nonprofits expansion in for-profit activities is usually characterized by risk aversion. Apparently this behavior is dictated by financial constraints. As Wielwel et al (1988) observe, expansion in for-profit ventures is mostly financed by risk conservative sources, such as banks or scarce surplus from previous years.

This mode of behavior in operating in two different environment (nonprofit and for profit) fits Miles & Snow's (1978) analyzer model of strategic behavior (an organization that operates in two contradictory environments). According to Miles & Snow (1978), a true analyzer is an organization that tries to minimize risk while maximizing the opportunity for profit.

Nonprofits are able to achieve high returns by designing a conglomerate structure that simultaneously (1) differentiates (for charity and tax purpose) between the for-profit and nonprofit organizations, and (2) integrates and links the activities of the two organizations. Distelhorst (1985) discusses many of these business linkages and arrangements between a nonprofit and its for-profit subsidiary. For example, to take advantage of depreciation and investment tax credits for its property, the latter may own most of the conglomerate's capital assets, and then leases it back to the former. The for-profit subsidiary is also able to grow by omitting paying dividends to its nonprofit parent, and to plow most of the profit back into the business. These and many other arrangements of special relationship and vertical integration should also reduce the risk of business failure.

The Nonprofit Entrepreneurs

There is a strong agreement that nonprofits can not survive in today's dynamic world without entrepreneurship (e.g,Young, 1985). The magnitude of environmental adversity (e.g. shrinking resources, competition) and social and economic changes creates overwhelming pressure on these organizations to adopt an agenda for change. This agenda includes a vision of what should be done, how it can be done, and how effective mobilization of resources and elicitation of cooperation and support can be built. Drucker (1985) argues that this should be the broad role of an entrepreneur.

In comparison to the for-profit sector's entrepreneurs, who often assume risk for the sake of profit, the motivations of the nonprofits' social entrepreneurs are not homogeneous and go beyond profit. They are motivated by a wider range of personal and social goals. Examples of these nonprofit goals include: creating a new social concept or a new way of providing an existing human service; innovation and growth; raising fund with a new idea or concept, to raise public consciousness and marshal support (e.g, Tropman, 1989).

REFERENCES

Abelson, R. 1998. Suddenly, Nonprofit Work Gets Profitable. *The New York Times*, March 29, p.3 wk.

Arrick, E. Financing the Enterprise. In Skloot, Edward (ed.) *The Nonprofit Entrepreneur.* New York, N.Y.: The Foundation Center, 1988, pp. 97-120.

Bryce, H. *Financial & Strategic Management for Nonprofit Organizations*. Englewood Cliffs, New Jersy: Prentice-Hall, Inc., 1987.

Distelhorst, G.(1985) When Associations Become Entrepreneurs. *Association Management*, Feb, pp.109-111.

Fiegenbaum, A.& Thomas, H. (1988) Attitude Towards Risk and Risk-Return Paradox: Prospect Theory Explanations. *Academy of Management Journal*, 31 (1), pp.85-106.

Ginsberg, A. & Bucholtz, A. (1990) Converting to For-Profit Status: Corporate Responsiveness to Radical Change. *Academy of Management Journal*, 33(3), pp.445-477.

Grossman, D., Salamon, L., and Altschuler, D. (1986) *The New York Nonprofit Sector in a Time of Government Retrenchment*. Washington, D.C.: The Urban Institute Press.

Jacobson, G. (1997). What an Executive Director of a Charity Needs to Know about Tax Law. In V. Futter and G. Overton (Eds) *Nonprofit Governance*. U.S.A.: American Bar Association.

Letts, C, Ryan, W. & Grossman, A. (1999). *High Performance Nonprofit Organizations*. New York: John Wiley & Sons, Inc.

Miles, R. & Snow, C. (1978) *Organizational Structure, Strategy and Process*. New York: McGraw-Hill Book Co.

Nielsen, R. (1982) Strategic Piggybacking: A Self-Subsidization Strategy For Nonprofit Institutions. *Sloan Management Review*, 23, Summer, pp.65-69.

Salamon, L. (1989). Of Market Failure, Voluntary Failure, and Third Party Government: Toward a Theory of Government-Nonprofit Relations in the Modern Welfare State. *Journal Of Voluntary Action Research*, 5, pp.29-49.

Tropman, J. (1989). "Human Service Entrepreneurship: The Four "C" Approach". *Administration in Social Work*, 13 (3,4), pp. 219-242.

Wiewel, W., Ridker, J., Mier, R., Giloth, R. (1982) *Businesses Spin-Offs: Planning the Organizational Structure of Business Activities*., University of Illinois at Chicago Circle: Center for Urban Economic Development.

Suggested Readings

Drucker, P. *Innovation and entrepreneurship: Practice and principles*. New York: Harper & Row, 1985.

Skloot, E. "Enterprise and Commerce in Nonprofit Organizations". In Powell, W. (Edt.) *The Nonprofit Sector, A Research Handbook*. New Haven: Yale University Press, 1987, pp.380-393.

Young, D. "Executive Leadership in Nonprofit Organizations". In Powell, W. (Edt.) *The Nonprofit Sector, A Research Handbook*. New Haven: Yale University Press, 1987, pp.380-393.

Lone Star Productions—1999

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Introduction

As Mike Sims reflected on the past year, he noted the many changes that took place in the company in which he had recently become president. As he considered the financial and operational improvements that had taken place, he pondered how to move Lone Star Productions to the next level. Will he be able to increase the size and profitability of the business so that one day he may lead the company in an initial public offering of LSPís common stock? How will he be able to maintain the companyís relaxed culture as he increases the breadth of services offered and takes on more clients and more responsibilities? These and many other questions consumed much of his time each day. The answers would be found only through careful research and trial and error.

History

Bill Oldman, the founder of Lone Star Productions (LSP), began his career in the entertainment industry in 1956 as a radio broadcaster and program director. After many years in the radio broadcast industry, including 15 years at a major radio station in Dallas, Texas, Bill Oldman decided to venture out into his own concert promotions business in 1981. Since 1986, his company has been the exclusive provider of concert promotions materials for 75% of the top grossing national tours. In 1998, Bill Oldman decided it was time to sell the business he had developed and leave the financial and operating worries to someone else. While he remained Chief Executive Officer of the company, Lone Star Productions was purchased by a group of investors headed by Mike Sims. Sims, with a background in banking and investments, took over the helm as LSPís president. Bill Oldman is now an investor and a top voice talent (see Glossary) for the company he founded.

Production Industry & Competition

The production industry encompasses several segments, including concert promotions, audio and video production, production staffing, video editing, web site development and equipment and suite rental. At LSP, these services are separated into three business areas: concert promotions, agency production, and industrial production. LSP participates in all of these business areas, but concert promotions makes up 90% of the companyís revenues. LSP has attempted to build the agency and industrial production segments of the business, but efforts have only been marginally successful. The management of LSP considers the further development of these businesses as critical to the long-term profitability and financial stability of the company.

In the concert promotions arena, LSP has only one competitor in the U.S.óTour Promoters, headquartered in Ohio. Tour Promoters has been a competitor for a number of years, but only recently began to win the business of tours that have been traditionally handled by LSP, such as the recently-lost Aerosmith tour. LSP and Tour Promoters create complete international tour materials for musical groups, plays and other touring companies. The management of the touring client contacts LSP to begin development of radio and television ads to be played in the markets in which the client will perform. These ads announce the dates and locations of the events and provide information regarding ticket purchases. When LSP is chosen as the provider for the tour materials, the radio or television station sponsoring the tour must purchase all promotional materials from LSP. Each market will have a different sponsor for which promotional materials must be purchased. Many tours have in excess of 50 show dates, generating an average of $300 in radio and television ad revenue per performance for LSP (See Price List in Appendix I). All materials are guaranteed 24-hour delivery to the purchasing station or client. This fact is the basis upon which LSP has developed its current client base. However, customers who have grown accustomed to LSPís willingness to do practically anything to maintain customer relationships have begun to make requests for changes and additional materials and services at no additional charge. Servicing these requests has become burdensome for LSP as many an hour is spent making minor changes and obtaining approval for each change from the client.

Both LSP and Tour Promoters are privately held, thereby eliminating any competitive analysis for this market. However, since only two companies provide these services, knowledge of the current tours that are performing allows each company to determine who has the largest market share and who is attracting the most clients.

The video production segment of the industry is populated by thousands of small, privately held companies who provide production services on a regional basis. LSP considers its regional market to be within a 100-mile radius of Dallas. Video services provided include music video production, corporate informational and training videos, and television and radio commercials for advertising agency clients. It is estimated that the approximate number of competitors in the Dallas market includes 50 production companies offering various combinations of production services. Of those 50 only one, Longhorn Video Productions, has captured a significant share of this market. LSP is currently in the process of completing a due diligence audit of LVPís records in order to determine if the company would be a suitable match to help build LSPís agency and industrial production business.

Local Area

LSP is located in Dallas, Texas. This area was chosen for its location in the central time zoneóallowing for optimal customer service within all U.S. time zones.

The facility is approximately 45 minutes from either of the two major Dallas airports and 10 minutes from a small municipal airport. This is convenient for clients who are interested in touring the facility or using the sound stage or audio/video suites.

The Dallas area is home to approximately 2,000,000 people. The availability of qualified labor and talent is high due to the many colleges and trade schools in the city.

Operations

Lone Star Productions is the most complete communications center in the state of Texas with a 17,000 square-foot film/video production facility. The facility houses three digital video suites, two AVID editing systems, seven digital audio suites, in-house custom music, and an extensive music and sound effects library. LSP also offers full video and print graphics/animation, a website design service, a sound stage and three camera/lighting packages.

Many projects require the audio department to first record the sound for a spot, then to forward it to the video department where video clips and graphics are added to complete the job. Due to inefficiencies in scheduling between the audio and video departments, the video staff very often must wait for the audio department to complete a project before they may begin work each morning. This causes employees to sit idle for a while each morning, and then to work a significant amount of unpaid overtime in order to complete projects in a timely fashion. These circumstances have led to employee dissatisfaction and high turnover in the video department. Customer satisfaction is sometimes sacrificed as video employees have been known to ìwalk outî on a job so that the product is not shipped to the customer in time.

Audio and video suites and production equipment may be rented on an hourly basis by LSP clients. This is a fairly recent service offered to help improve LSPís revenues and increase the utilization rates of its suites and equipment. Currently, each suite is available 168 hours per week but only used between 30 to 50 hours per week.

The current facility, while housing state of the art equipment, is no longer able to reasonably accommodate the growing staff. The bullpen area has five employee cubicles, serves as storage for many documents and compact discs, and is the hub for shared office equipment, such as copiers, printers and fax machines. One of the cubicles is shared by two employees. The accounting department employees share an office, as do the two graphic artists. LSP owns an additional acre of land at the current building site. This land is located across the parking lot from the current building.

Project redos cost LSP an average of $45 each in additional materials, labor and shipping costs, though they may cost as much as $125. With an average of 80 redos each month, this amounts to a conservative average of $43,200 annually. Redo errors are often avoidable, such as sending the wrong tape to a client, sending a tape to the incorrect address, or failing to send information out on time and having to re-send it via more expensive electronic methods. Sims estimates that up to 70% of all redos are avoidable.

Management

Lone Star Productions is owned by a group of investors, four of whom participate in the daily operations of the company. In June of 1997, Mike Sims led a group of investors in a substantial purchase of the companyís ownership. As LSPís President, Simsí strong financial and management background brings balance to the tendency of the other managers to focus only on the creative aspects of the company.

Bill Oldman, the companyís founder, acts as Chief Executive Officer and continues to operate as one of the companyís voice talents. His knowledge of the business and his reputation in the entertainment industry helps to retain current clients and provides the credibility necessary to gain new business.

Steve McMath left a large public accounting firm to join the management team at LSP in 1988. He fills many roles within the company, including Vice President and General Manager, Producer and Controller. His primary responsibility lies in bidding for production projects and seeing them through to completion.

Keith Harris joined LSP in 1981 as a Vice President and Manager of the Audio Group. With a background that includes radio programming at many major radio stations throughout the country and as the regional head of promotion for a division of Warner Brothers Records, Keithís voice is nationally recognized and demanded by many clients.

Mike Sims, being the newest member of the management team, has made many recommendations for financial change. However, with the tendency of the other members of the management team to focus on the creative aspects of the businessósometimes to the detriment of the financial aspectsóSims has met with some resistance to change by the other managers. This resistance has reverberated throughout the staff and several of Simsí attempts to measure efficiency and profitability have been met with complaints and even refusals to participate in his efforts.

With each manager going in many different directions within his own field of expertise, communication between the management team is somewhat lacking. Management communication is poor, not only within the management team, but also between some of the managers and their employees. Employees often are given projects without an understanding of what they are trying to accomplish and when the project will be considered complete. Employees often are hesitant to question the actions of their managers as some of the managers flaunt their positions of authority over their employees. This has led to an environment of mistrust and an ìus vs. themî attitude that has affected the morale and work ethic of several employees.

Due to the lack of planning, many issues that would otherwise be easily resolved often require the intervention of a manager to resolve. For example, there exists a loose framework for product pricing, but a series of exceptions and special treatments for disgruntled customers has created a pricing structure that is cumbersome and arbitrary. Mistakes by employees often are met with explosive reprimands. This leaves many employees feeling that they are in a no-win situationóno policy dictates the appropriate course of actions, but if they fail to carry out the ìpolicy of the day,î they will be in trouble.

Human Resources

The staff at LSP includes four full-time account representatives who are responsible for taking client orders and ensuring that they are properly produced and shipped on time. The accounting department includes an accounts payable administrator and an accounts receivable clerk. A part-time accountant assists Steve McMath in the accounting and payroll functions of the company. Three executive producers assist in the coordination and production of projects. Four audio talent and six video talent employees join Bill Oldman and Keith Harris in creating the image required by the client to promote tours and produce videos and commercials. Two graphic artists develop logos and create graphics and animation for videos and print ads. One computer information systems director maintains the companyís computer network and develops web sites for clients. Four *dubbers* make copies of the completed audio and video projects and ship them to the client. Also employed by LSP are a director and a directorís assistant, a technical equipment expert, an office manager, a receptionist, and a building superintendent.

The administrative office staff primarily consists of energetic employees below the age of forty who are loyal to the company and very conscientious about their jobs. Most of the employees work and socialize well together, but a few tend to create tension in the office with temper tantrums and other inappropriate behavior. While the tendency for most of the employees and management is to ignore these outbursts and behaviors, occasionally a confrontation will cause management to take corrective action.

Formal personnel policies and employee goals are nonexistent. The small family-like office environment has historically worked fairly well with this lack of structure. However, since the sale to the investors, changes are occurring that have caused a breakdown in the understanding of what is expected from the employees. The lack of employee goals makes performance appraisals appear arbitrary and the outcomes seem to depend more on the mood of the manager on that particular day than on the overall performance of the employee. Appraisals occur on occasion, but are not a routine eventóleaving employees wondering when and if they will receive their next pay raise.

All but seven of the employees are salaried. The seven hourly employees account for a relatively small portion of overtime paid each month as their pay rates are low and the number of overtime hours worked is minimal. Of the 28 salaried employees, eight are paid overtimeódespite their exempt statusófor any time worked that exceeds eight hours per day. The average cost of overtime worked each year by exempt employees is approximately $65,000. This is in addition to the $380,000 paid in salary to these same employees.

Marketing

LSP does not heavily market any of its services. Advertising done by the company includes advertisements in industry magazines and occasional mailings of videos showcasing LSPís talents in the audio, video and graphics departments. One notable video that is sent each year to LSP clients is the company Christmas video. The Christmas video introduces all LSP employees through a comedy skit. Professional writers are hired to write the script and it is produced as any other show would beócomplete with credits. Customer inquiries about the annual video each year suggest that it is a popular and effective attention-getter. Finally, promotional items such as jackets, shirts, pens and office supplies bearing the company name or logo often are sent to clients. These items cost LSP an estimated $6,000 per year. The total annual cost of the magazine ads is $1,200 and the cost of the video mailings is $1,800 in materials and shipping costs. Even without the efforts of a marketing department, LSP manages to stay very busy throughout the summeróthe time of year during which most concert tours take place.

A web site also is used to advertise the companyís services and to showcase LSPís talent in the audio and video areas. The LSP web site was the first in a series of web sited created by the newly-developed New Media department. The web site introduces the customer to many of the companyís personnel and includes sound bites and audio clips to demonstrate some of LSP's work. A list of past and current clients includes many well-known names in the entertainment industry and adds credibility to the companyís already good reputation in the concert promotions market. The web site also serves to advertise the companyís ability to create a very elaborate and well-done web site. In addition to LSPís web sites, the CIS director has created web sites for several entertainment personalities, including country singers George Strait and Clay Walker.

Accounting, Finance & Computer Information Systems

Financial statements are currently produced from an accounting package known as MAS90. The package was installed at LSP in 1989 and has not been upgraded to a newer version since that time. While it handles the accounting functions fairly well, it is not integrated with the client order, bidding, production projects or shipping systems. This creates problems in determining billing rates, time spent on projects, the status of orders, and other information critical to the operations of the business. A key problem with the order system not being linked to the accounting systems lies in the sales of services to clients with accounts that are severely delinquent. With a 24-hour turnaround, there is no time for the accounting department to stop production and shipment of a delinquent clientís order. This ultimately serves to increase bad debt expense through increased uncollectible receivables.

The Novell computer network at LSP is sufficient to run any accounting package typically used to generate financial information for a company its size.

Partially as a result of the inefficiency of the accounting system and partially due to the fact that the controller has many other job responsibilities, accounting and operating results for each month often are not available until the end of the following month. With so many responsibilities, accounting is a low priority on McMathís list. Conversely, one of Simsí goals is to generate a complete financial package by the 15th of each month. A weekly sales and cash balance report helps managers to keep up with available resources, but consistent and proactive financial analysis is virtually non-existent at LSP due to time constraints.

Financial statements for Lone Star Productions for 1996 through 1998 are included in Appendices II and III. Included in Appendices IV and V are financial statements for Longhorn Video Productions (LVP) for 1996 through 1998 along with projected financial statements for LVP for the next five years (see Appendices VI and VII). These projections are based on a buyout of the company that would allow the two current owners of LVP to join the management staff at LSP and to join the current group of investors as partial owners of LSP. The proposed purchase price of $3,300,000 includes the purchase of all of LVPís assets and taking on the responsibility of all binding lease agreements and short- and long-term debts. LSPís investors are prepared to invest a combined additional $1,000,000 in cash of their private funds to acquire a video production business.

GLOSSARY

Voice Talent—a person hired to record voice tags for radio and television ads. These individuals typically have pleasingly distinctive voices.

Concert Promotions—a segment of the entertainment industry that involves all aspects of promoting a tour, including radio, television and print advertisements.

Agency Production—production projects that arise through advertising agencies. For example, a grocery store chain will hire an advertising agency to develop a television commercial for their stores. The advertising agency will then select and hire a company to produce the commercial. The agency is responsible for the creative concept of the commercial, while the production company turns the concept into reality.

Industrial Production—production projects that arise from corporate clients. For example, a corporation will approach the production company for the creative and production aspects of training videos, informational videos to be sent to customers, etc. These differ from agency jobs in that the production company is hired directly by the client and is largely responsible for the creative concept of the project as well as the production.

Due Diligence Audit—an audit of a companyís records to ensure that information contained in the financial statements is accurate and to assess the operational aspects of the company (i.e., any potential economies of scale, stability of sales to large customers, etc.). These audits differ in scope from those performed by outside accounting firms. Accounting firms audit financial statements to ensure that all financial claims made are accurate and in compliance with generally accepted accounting principles. Due diligence audits are normally performed by the purchasing company when another company is being purchased and are used to satisfy the purchasing company of the claims made regarding the financial and operational health of the company.

Video Suite—a room containing video editing equipment. These rooms are used to develop the video for television ads and production projects and to add video tags to existing videos.

Audio Suite—an acoustically-designed room containing sound editing equipment. These rooms are used to develop the sound for radio and television ads, to record voice tags for existing ads and to create custom music for clients.

Video Tags—visual information added to a television ad or other videos that display information regarding times, locations, prices, disclaimers, etc.

Redo—the correction of errors made in the production or shipping of a project. Redos are made at no charge to the client. Typical errors include shipping materials to the wrong address, dubbing the wrong master tape or sending a blank tape, mispronouncing words or names in the audio tags, misspelling words or names in the video tags, and tags containing incorrect times, locations, sponsor information, etc. Redos also include projects redone at no charge for clients who are dissatisfied with the creative aspects of the project or who failed to give the correct information to the account representatives when the project was ordered.

Dubbers—employees responsible for copying audio and video recordings from the master copy. The customer orders a fixed number of copies. They are then duplicated by the dubbers and shipped out to the client. The master copy is kept on file by the production company in case the client requests another copy or there are problems with the dubs that were shipped.

APPENDIX I

Base Price List

Concert Promotions Radio Spot (includes 3 cuts)	$220
Concert Promotions Television Spot	$425
Concert Promotions Print Ad	$60
Audio Studio Rental (hourly rate)	$150
Video Studio Rental (hourly rate)	$450
"Production Projects (range $2,000 - $300,000)"	By Bid

APPENDIX III

Lone Star Productions
Income Statements 1996 - 1998

Revenues	1998	1997	1996
Studio Rental	351,866	345,302	444,166
Concert/Event/LP	3,064,995	2,700,810	2,988,986
Dubs/Materials	860,019	812,540	911,738
Commercial Production	1,537,711	1,088,453	691,632
Music Video Production	380,788	945,799	624,991
Corporate Production	671,185	211,785	117,802
Day Rate/Rentals	148,257	149,269	286,714
Shipping	329,281	318,197	367,261
Talent/Other	71,149	77,624	95,669
Total Revenues	7,415,251	6,649,779	6,528,959

Expenses			
Salaries	1,682,877	1,453,592	1,331,368
Bonuses	235,798	274,101	332,229
Profit Sharing	123,651	121,297	108,093
Health Insurance	121,687	92,461	63,420
Insurance-Other	80,374	71,234	57,611
Outside Voice Talent	32,752	44,347	49,504
On Camera Talent	46,556	75,662	45,467
Producers Fee	140,490	108,888	281,064
Equipment Rental	30,419	23,030	24,399
Production Supplies	82,297	97,975	44,183
Post Production Supplies	134,405	146,905	193,219
Music Library/Duplication	27,031	37,351	19,929
Printing	15,786	24,314	42,918
Freelance Workers	734,758	737,611	464,727
Travel/Location	337,931	300,112	211,006
Equipment/Camera	120,354	96,554	76,078
Lights	79,294	69,421	53,900
Grip Rental	30,915	27,477	25,354
Genny/Crane Rental	18,814	22,088	16,482
Film Purchase	89,461	85,297	58,334
Processing/Developing	83,921	88,758	77,976
Cost of Sales	4,249,571	3,998,475	3,577,261
General & Administrative	226,675	214,370	158,701
Repairs & Maintenance	89,729	86,667	67,752
Shipping Expenses	277,099	279,376	324,726
Taxes	180,825	172,495	175,696
Marketing Expenses	3,000	-	-
Contract Labor	14,728	129,000	20,449
Utilities/Phone	94,456	98,290	92,605
Amortization	70,000	-	-
Depreciation	442,500	367,000	444,735
Total Operating Expenses	5,648,583	5,345,673	4,861,925
Operating Income	1,766,668	1,304,106	1,667,034
Owner Bonus	-	1,000,000	1,750,000
Interest Income-Operating	36,688	40,718	39,476
Interest Expense-Founder	242,994	263,384	-
Interest Expense-Real Estate	20,800	-	-
Interest Expense-Equipment	48,600	-	-
Interest Expense-Revolver	-	-	260,728
Interest Expense-Subordinated	96,000	-	-
Net Interest	(371,706)	(222,666)	(221,252)
Net Income before Taxes	1,394,962	81,440	(304,218)

APPENDIX III
Lone Star Productions
Balance Sheets 1996 - 1998

Current Assets	12/31/98	12/31/97	12/31/96
Cash/Cash Equivalents	403,405	886,424	611,821
Trade Accounts Receivable	749,975	862,089	781,889
Prepaid Expenses and Other	32,160	50,510	36,300
Total Current Assets	1,185,540	1,799,023	1,430,010
Property, Plant and Equipment			
Machinery and Equipment	2,826,916	3,113,711	3,077,696
Building	1,489,255	1,860,815	1,857,007
Land	155,745	155,744	155,744
Furniture and Fixtures	949	86,635	80,977
Software	-	75,932	69,283
Automobiles and Trucks	-	53,068	69,158
Accumulated Depreciation	(105,000)	(3,304,968)	(3,027,722)
Total PP&E	4,367,865	2,040,937	2,282,143
Other Assets-Goodwill	5,378,664	21,746	46,269
Total Assets	10,932,069	3,861,706	3,758,422
Current Liabilities			
Accrued Bonuses	79,634	130,406	231,857
Accrued Liabilities	21,177	60,945	44,292
Accrued Payables	27,589	140,293	74,987
Total Current Liabilities	128,400	331,644	351,136
Deferred Taxes	613,491	-	-
Notes Payable	-	3,633,904	3,592,703
Revolving Credit	-	-	-
Real Estate Loan	1,297,126	-	-
Senior Bank Debt	3,025,000	-	-
Subordinated Debt	4,400,000	-	-
Shareholders' Equity			
Common Stock, no par, 1 million authorized	40,000	268,315	268,315
Founder Preferred Stock	1,400,000	-	-
Retained Earnings (Deficit)	-	(453,597)	(149,514)
Current Earnings	37,385	81,440	(304,218)"
Total Distributions on Preferred Stock	(9,333)	-	-
Total Shareholders' Equity	1,468,052	(103,842)	(185,417)
Total Liabilities and Stockholders' Equity	10,932,069	3,861,706	3,758,422

APPENDIX IV
Longhorn Video Productions
Income Statements 1996 - 1998

Revenues	**1998**	**1997**	**1996**
Sales	3,041,908	2,717,968	2,921,061
Rental Income	192,298	6,000	2,500
Total Revenues	3,234,206	2,723,968	2,923,561
Expenses			
Facility & Equipment Rental	249,786	61,867	68,265
Production Supplies/Music License	15,433	18,936	27,759
Freelance Labor	169,170	167,831	166,591
Video Tape/Filmstock/Audio Tape	83,666	97,196	106,695
Travel/Production	31,680	21,541	16,493
Other	213,937	154,766	109,480
Cost of Sales	763,672	522,137	495,283
Salaries & Payroll Taxes	1,257,585	1,202,977	1,139,713
Contract Labor	24,559	41,340	52,805
Travel & Entertainment	21,651	29,985	28,051
Advertising & Printing	6,307	15,863	24,576
Corporate & Group Insurance	88,270	89,842	124,554
Professional Fees	25,769	25,722	37,545
Office Rent	77,218	76,436	76,541
Office Supplies	19,434	17,254	20,231
Engineering Supplies	36,207	53,141	33,275
Utilities	75,911	70,865	71,481
Repairs & Maintenance	45,801	44,560	38,500
Freight	2,113	2,100	20,565
Property Taxes	21,270	23,816	25,950
Other	43,269	47,834	61,921
Depreciation	453,572	522,471	611,095
Amortization of Goodwill	-	-	-
Total Operating Expenses	2,962,608	2,786,343	2,862,086
Operating Income	271,598	(62,375)	61,475
Interest Expense	224,456	187,310	174,457
Net Income before Taxes	47,142	(249,685)	(112,982)
Taxes	(16,028)	(1,067)	58,118
Net Income	31,114	(250,752)	(54,864)

APPENDIX V
Longhorn Video Productions
Balance Sheets 1996 - 1998

	12/31/98	12/31/97	12/31/96
Current Assets			
Cash	109,509	971	118,218
Trade Accounts Receivable	368,224	410,915	492,491
Other Current Assets	259,365	274,228	111,087
Total Current Assets	737,098	686,114	721,796
Property, Plant and Equipment			
Machinery and Equipment	4,569,348	4,415,173	3,883,061
Furniture and Fixtures	185,629	167,790	155,044
Leasehold Improvements	572,034	572,034	530,808
Automobiles and Trucks	165,456	165,456	133,946
Accumulated Depreciation	(4,246,517)	(3,860,794)	(3,352,524)
Total PP&E	1,245,950	1,459,659	1,350,335
Noncurrent Assets	5,200	7,600	25,096
Total Assets	1,988,248	2,153,373	2,097,227
Current Liabilities			
Notes Payable	90,000	40,000	101,250
Current Portion of Capital Lease Obligations	264,708	197,550	97,106
Current Portion of Long-Term Debt	397,425	233,177	278,615
Accounts Payable & Accrued Expenses	58,225	192,775	15,665
Taxes Payable	-	2,263	312
Total Current Liabilities	810,358	665,765	492,948
Non-Current Liabilities			
Capital Lease Obligations	317,039	459,775	214,768
Long-Term Debt	700,997	915,122	1,026,047
Total Non-Current Liabilities	1,018,036	1,374,897	1,240,815
Shareholders' Equity			
Capital Stock	5,427	5,427	5,427
Retained Earnings	123,313	358,036	412,901
Net Profit/(Loss)	31,114	(250,752)	(54,864)
Total Shareholders' Equity	159,854	112,711	363,464
Total Liabilities and Stockholders' Equity	1,988,248	2,153,373	2,097,227

APPENDIX VI
Longhorn Video Productions
Projected Income Statements

Revenues Year 1	Year 1 %	Year 2	Year 2 %	Year 3	Year 3 %	Year 4	Year 4 %	Year 5	Year 5 %	
Sales 3,300,000	100%	3,456,000	100%	3,638,250	100%	3,820,163	100%	4,011,171	100%	
Rental Income	-	0%	-	0%	-	0%	-	0%	-	0%
Total Revenues	3,300,000	100%	3,456,000	100%	3,638,250	100%	3,820,163	100%	4,011,171	100
Expenses										
Facility & Equipment Rental	64,929	2%	66,877	2%	68,883	2%	70,950	2%	73,078	2%
Production Supplies/Music License	22,058	1%	22,720	1%	23,401	1%	24,103	1%	24,826	1%
Freelance Labor	136,697	4%	140,798	4%	145,022	4%	149,373	4%	153,854	4%
Video Tape/Filmstock/Audio Tape	100,000	3%	103,000	3%	106,090	3%	109,273	3%	112,551	3%
Travel/Production	35,666	1%	36,736	1%	37,838	1%	38,973	1%	40,142	1%
Other	231,000	7%	237,930	7%	245,068	7%	252,420	7%	259,993	6%
Cost of Sales	590,350	18%	608,061	18%	626,302	18%	645,092	18%	664,444	17%
Gross Profit	2,709,650	82%	2,847,939	82%	3,011,948	82%	3,175,071	82%	3,346,727	83%
Salaries & Payroll Taxes	1,313,250	40%	1,326,898	38%	1,366,704	38%	1,407,706	37%	1,449,937	36%
Contract Labor	36,856	1%	37,962	1%	39,101	1%	40,274	1%	41,482	1%
Travel & Entertainment	25,000	1%	25,750	1%	26,523	1%	27,318	1%	28,138	1%
Advertising & Printing	9,465	0%	9,749	0%	10,042	0%	10,343	0%	10,653	0%
Corporate & Group Insurance	90,000	3%	92,700	3%	95,481	3%	98,345	3%	101,296	3%
Professional Fees	30,000	1%	30,900	1%	31,827	1%	32,782	1%	33,765	1%
Office Rent	78,000	2%	80,340	2%	82,750	2%	85,233	2%	87,790	2%
Office Supplies	20,000	1%	20,600	1%	21,218	1%	21,855	1%	22,510	1%
Engineering Supplies	42,000	1%	43,260	1%	44,558	1%	45,895	1%	47,271	1%
Utilities	75,000	2%	77,250	2%	79,568	2%	81,955	2%	84,413	2%
Repairs & Maintenance	45,000	1%	46,350	1%	47,741	1%	49,173	1%	50,648	1%
Freight	3,171	0%	3,266	0%	3,364	0%	3,465	0%	3,569	0%
Property Taxes	22,000	1%	22,660	1%	23,340	1%	24,040	1%	24,761	1%
Other	45,000	1%	46,350	1%	47,741	1%	49,173	1%	50,648	1%
Depreciation	400,000	12%	400,000	12%	400,000	11%	400,000	10%	400,000	10%
Amortization of Goodwill	29,763	1%	29,763	1%	29,763	1%	29,769	1%	29,763	1%
Total Operating Expenses	2,854,855	86%	2,901,859	84%	2,976,023	83%	3,052,418	81%	3,131,088	79%
Operating Income	445,145	14%	554,141	16%	662,227	17%	767,745	19%	880,083	21%
Interest Expense	224,560	7%	198,115	6%	169,189	5%	137,550	4%	174,457	
Net Income before Taxes	220,585	7%	356,026	10%	493,038	12%	630,195	15%	705,626	21%
Taxes	74,999	2%	124,109	4%	167,633	5%	214,269	6%	58,118	
Net Income	145,586	5%	231,917	6%	325,405	7%	415,926	9%	647,508	21%
EBITDA	874,908	23%	983,904	21%	1,091,990	19%	1,197,514	18%	1,309,846	32%

APPENDIX VII
Longhorn Video Productions
Projected Balance Sheets

Opening		Year 1	Year 2	Year 3	Year 4	Year 5
	Current Assets					
44,452	Cash	644,808	1,212,768	1,951,570	2,873,437	3,991,422
581,837	Trade Accounts Receivable	361,644	379,726	398,712	418,648	439,580
252,060	Other Current Assets	264,183	264,183	264,183	264,183	264,183
878,349	Total Current Assets	1,270,635	1,856,677	2,614,465	3,556,268	4,695,185
	Property, Plant and Equipment					
1,672,493	Machinery and Equipment	1,672,493	1,672,493	1,672,493	1,672,493	1,672,493
65,739	Furniture and Fixtures	65,739	65,739	65,739	65,739	65,739
203,041	Leasehold Improvements	203,041	203,041	203,041	203,041	203,041
58,727	Automobiles and Trucks	58,727	58,727	58,727	58,727	58,727
-	Less: Accumulated Depreciation	(400,000)	(800,000)	(1,200,000)	(1,600,000)	(2,000,000)
2,000,000	Total PP&E	1,600,000	1,200,000	800,000	400,000	-
446,451	**Goodwill**	446,451	446,451	446,451	446,451	446,451
-	Less: Accumulated Amortization	(29,763)	(59,527)	(89,290)	(119,054)	(148,817)
5,200	**Non-Current Assets**	5,460	5,733	6,019	6,320	6,637
3,330,000	**Total Assets**	3,292,783	3,449,334	3,777,645	4,289,985	4,999,456
	Current Liabilities					
-	Notes Payable	-	-	-	-	-
-	Current Portion of Capital Lease Obligations	-	-	-	-	-
340,000	Current Portion of Long-Term Debt	340,000	340,000	340,000	340,000	-
240,000	Accounts Payable & Accrued Expenses	247,200	254,616	262,254	270,122	278,226
-	Taxes Payable	-	-	-	-	-
580,000	Total Current Liabilities	587,200	594,616	602,254	610,122	278,226
	Non-Current Liabilities					
1,360,000	Long-Term Debt	1,020,000	680,000	340,000	-	-
1,360,000	Total Non-Current Liabilities	1,020,000	680,000	340,000	-	-
790,000	**Subordinated Debt**	790,000	790,000	790,000	790,000	790,000
	Shareholders' Equity					
600,000	Capital Stock	600,000	600,000	600,000	600,000	600,000
-	Retained Earnings	-	295,583	784,718	1,445,391	2,289,864
-	Net Profit/(Loss)	295,583	489,135	660,673	844,472	1,041,366
600,000	Total Shareholders' Equity	895,583	1,384,718	2,045,391	2,889,863	3,931,230
3,330,000	**Total Liabilities and Stockholders' Equity**	3,292,783	3,449,334	3,777,645	4,289,985	4,999,456

AMRAD Corporation Limited (A)*

Daniel F. Jennings, Texas A&M University
L. Murray Gillin, Swinburne University of Technology
Gennaro D'Alessandro, Swinburne University of Technology
John Morgan, Swinburne University of Technology
Harry Van Andel, Swinburne University of Technology

In 1982, the Australian Labor Party came to power in the state of Victoria and triumphed nationally in 1983. Thus began a decade of activities in which high-technology ventures were created in Australia. One such venture, AMRAD Corporation, was created to develop Australia's pharmaceutical industry and also to develop Australia's biomedical research into commercial products.[1] When Dr. John Stocker was appointed the first managing director (chief executive officer) of AMRAD, he had limited funding, no employees, and had to develop strategies that would make AMRAD commercially successful.

History

During the 1980's the state government of Victoria, Australia became very active in industrial development initiatives within the state. From 1985 to 1987, Victoria's government published three position papers. The principal contributor to these state government reports was Dr. Peter Sheehan who had an earned doctorate in philosophy from Oxford University and was a faculty member at Melbourne University. Dr. Sheehan was active in identifying an opportunity to establish a world ranking pharmaceutical industry in Victoria. The first paper,[2] published in 1985, described the economic strategies that were to be pursued, while the

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This case is based on original research conducted by Gennaro D'Alessandro, John Morgan, and Harry Van Andel while they were completing the 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 provided by the AMRAD Corporation and in particular by Paul Bell, John Grace, Robert Manser, Peter Sheehan, Katherine Slack, and John Stocker. This case was prepared as a basis for class discussion rather than to illustrate either effective or ineffective handling of an administrative situation.

* Unless otherwise noted, financial data is expressed in terms of Australian dollars.

[1] See Appendix 1, "Industry Note" for a description of Australia's Venture Capital Industry.

[2] *The Economic Strategy for Victoria* (1985). Melbourne: Government Printer.

second[3] and third[4] papers, published in 1987, targeted certain industries and announced initiatives that were to be implemented. Both the Victorian State Treasurer, Rob Jolly, and the State Premier, John Cain, together with Professor Sir Gustav Nossal, Managing Director of the Walter and Eliza Hall (WEH) Institute of Medical Research became ardent backers of Dr. Sheehan's efforts to develop Australia's pharmaceutical industry. The WEH Institute had been beaten by interests from Japan and the United States in the race to commercialize lenograstim rHUG-CSF ("G-CSF") which had been discovered by the WEH Institute. (G-CSF), known commercially as Granocyte* has strong links with pioneering medical research conducted in Melbourne during the past three decades on the group of blood cell hormones known as colony stimulating factors (CSFs). The development of in vitro culture techniques in the 1960s that allowed the discovery of the CSFs is credited to Professor Donald Metcalf of the WEH Institute and Dr. Ray Bradley working at the University of Melbourne. By the early 1980s, Professor Metcalf's team had isolated and purified four CSFs. Each CSF is able to stimulate the formation of white blood cells to protect the body against infections. However, research teams from the United States and Japan applied the final research and development to the work that Professor Metcalf and his colleagues had carried out over 25 years. The Japanese and American teams leapfrogged much of the Melbourne research effort and developed methods to mass produce the CSFs in bacteria and mammalian cells. During the process, they obtained patent rights to develop three of these CSFs, one of which is now marketed as Granocyte (G-CSF). Thus, Australia lost a once-in-a-lifetime opportunity to commercialize a major international pharmaceutical discovery. Granocyte (G-CSF) is used in the treatment of neutropenia, a condition associated with the treatment of cancer. Professor Nossal believed that it was not practical for each Australian medical research institute to have a commercial product development aim. However, Professor Nossal realized that some benefits could be achieved by creating a firm that would represent all of the medical research institutes in their actions to commercialize their innovations.

Australian Medical Research

Since 1945, Australia has earned an international reputation for excellence in biomedical research, particularly in the area of hematology (the study of blood) and cytokines (protein molecules involved in the human body's immune process). Hemapoietic growth factors (agents that facilitate the growth of blood cells) such as G-CSF, GM-CSF (factors used to offset the side effects of chemotherapy) and LIF (Leukemia Inhibitory Factor)* have been discovered and purified. Also, as illustrated in Exhibit 1, Australian Research has made major contributions to other medical areas. Medical research in Australia is highly funded by the government and the research infrastructure has a world class reputation.

[3] *Victoria. Technology Statement: Partnerships in Technology for the 1990s* (1987). Melbourne: Government Printer.

[4] *Victoria. The Next Decade: Leading Australia Into the Next Decade* (1987). Melbourne: Government Printer.

* *Granocyte* is AMRAD's brand name for the actual product lenograstim rHUG-CSF.

* LIF is not used to offset the side effects of chemotherapy. LIF's full potential as a therapeutic agent is still being examined.

Exhibit 1
Major Australian Biomedical Research Discoveries

CSFs or Colony Stimulating Factors	The biological techniques which led to the discovery of the CSFs were developed and deployed in Melbourne in the 1960s, leading to the purification, characterization and gene cloning of a number of haemopoietic regulators and their receptors (Metcalf et al.).
Cellular Immunology	Australia has made numerous contributions to fundamental cellular immunology, including the clonal selection theory of antibody production (Burnet); the immunological role of the thymus (Miller and Mitchell); MHC restriction (Zinkernagel and Docherty).
Relaxin	The polypeptide hormone relaxin, which is involved in cervical ripening during childbirth, was discovered and cloned in Melbourne in 1983 (Niall) and is now in Phase II clinical trials for use in induced labor by Genentech, the U.S. Company.
Inhibin	The polypeptide hormone inhibin, involved in controlling spermatogenesis, was purified and cloned in Melbourne in 1987 (de Kretser).
Helicobacter pylori	The gastric bacterium, H. pylori, believed to be the major causative agent of Type B gastritis, duodenal ulcers and implicated also in stomach cancer, was first identified (Warren, 1979) and cultured (Marshall, 1983) in Perth.
Influenza virus	One of the major influenza virus surface proteins, neuraminidase, was discovered in Melbourne in the 1950s (Gottschalk) and its crystal structure, which now forms the basis for the design of anti-influenza viral drugs, determined in 1983 (Colman).
Fragile X syndrome	The association between a cytogenetic chromosomal abnormality, the fragile X site, and the most common form of familial mental retardation was made in Australia in the early 1970s (Turner and Harvey) and the genetic sequence responsible cloned in Adelaide in 1991 (Sutherland).

Despite this excellence in biomedical research, Australia has failed to fully exploit the commercial potential of these discoveries. An interesting philosophy among Australian medical researchers is to first report their research findings to the worldwide medical community by publishing their results in academic journals rather than attempting to develop commercial products. As mentioned earlier, the WEH Institute was beaten by interests from Japan and the United States in the race to commercialize Granocyte. Australian researchers first made this discovery—reported it in a medical journal—and were not aggressive in their commercialization efforts.

Medical Research Institutes

Most of the biomedical research in Australia is conducted in independent research institutes which are affiliated with major teaching hospitals and/or universities. As depicted in Exhibit 2, in 1987 there were 17 large biomedical research institutes in Australia with international reputations. Research activities of these institutes consisted of (a) fundamental biological research which involved the discovery of new biological entities, (b) sophisticated new molecular synthesis based on protein structural analysis and computer modeling, and (c) the clinical evaluation of new drugs and treatment modalities.

Exhibit 2
Principal Australian Medical Research Institutes

Institute	Location	Principal research interests
Baker Medical Research	Melbourne	Cardiovascular research
Biomolecular Research Institute	Melbourne	Protein structure analysis and rational drug design
Howard Florey Institute of Experimental Physiology and Medicine	Melbourne	Physiology; endocrinology; developmental biology
Ludwin Institute for Cancer Research	Melbourne	Cell biology; oncology
Macfarlane Burnet Centre of Medical Research	Melbourne	Virology
Mental Health Research Institute	Melbourne	Psychiatric disorders: schizophrenia and dementia
Murdoch Institute for Research into Birth Defects	Melbourne	Congenital diseases; embryology
Prince Henry's Institute of Medical Research	Melbourne	Reproductive endocrinology; neuropharmacology
Royal Children's Hospital Research Foundation	Melbourne	Childhood and developmental diseases
Walter and Eliza Hall Institute of Medical Research	Melbourne	Hematology; immunology; oncology
Centenary Institute of Cancer Medicine and Cell Biology	Sydney	Oncology; immunology
Heart Research Institute	Sydney	Cardiovascular research
Garvan Medical Research Institute	Sydney	Endocrinology
Queensland Institute of Medical Research	Brisbane	Tropical medicine; transplantation biology; parasitology
Menzies School of Health Research	Darwin	Tropical medicine; transplantation biology; parasitology
Hanson Cancer Centre	Adelaide	Hematology; oncology
Institute for Molecular Genetics and Immunology	Perth	Human immunogenetics

More than half of Australia's biomedical research is performed in Melbourne where 10 of the 17 largest research institutes are located. Some divisions of the Commonwealth Scientific and Industrial Research Organization (CSIRO), as well as a number of university departments, are also involved in medical research activities.

The Global Pharmaceutical Industry

The global pharmaceutical industry is characterized by high and increasing levels of research and development (R&D) expenditures with increasing lead times for the introduction of new products. R&D in the pharmaceutical industry is not only expensive but risky. For example, out of 15 products which reach clinical trials, only one makes it to the market and only one in four marketable products generates sufficient returns that cover development costs.[5] Patent protection is another aspect affecting firm profitability within the

[5] *The Pharmaceutical Industry: Impediments and Opportunities* (1991). Canberra. Government Printer.

pharmaceutical industry. When the patent on a particular drug expires, other companies can manufacture the product and usually the profit margin declines. As an example, Merck (a U.S. pharmaceutical firm) lost its number one position in the industry during the late 1970s and early 1980s as the result of several of its drugs coming off patent protection.[6]

The pharmaceutical industry tends to be very profitable because products were introduced that greatly improved the quality of health care for many patients. Examples include Mevacor, a drug for cholesterol conditions; Tagamet, an antiulcerant that often eliminates the need for surgery, and Ceclor, an antibiotic.[7] In 1988 worldwide revenues for the pharmaceuticals were US$154 billion and about US$200 billion in 1993.[8]

Although the worldwide pharmaceutical industry is populated by hundreds of companies, no single company holds a dominant market share position. In fact, from 1980 through 1994 no single company had more than 5 percent market share. Competition in the pharmaceutical industry was mitigated by several factors during the 1980s. First, firms are differentiated by therapeutic class* with no company manufacturing a leading product in every major category.

A second factor regarding competition in the pharmaceutical industry is that throughout the 1980s and early 1900s, decisions about purchases were made by medical doctors whose primary interest was in obtaining the most medically effective treatments for their patients. Studies indicate that doctors were unaware of prices in many cases.[9] Prescribing habits of doctors tended to favor branded products, perhaps because as Caves and his associates suggest—brand names are easier to remember than lengthy, complex chemical names.[10] A government study sponsored by the U.S. Congress indicated that during the 1980s, the pharmaceuticals spent an average per year of US$1 billion more on promotion than on research.[11]

Another important competitive characteristic of the industry is the extent of government regulation. National governments control (a) access to their markets through the use of drug evaluation systems and (b) the price of products in their markets. In essence, the regulatory system in a country has a significant impact on firm profitability. Gaining market share in the pharmaceutical industry is not directly related to an increase in profitability. However,

[6] "Merck: Admirable, But..." (1987). *Economist.* 17 January: 61-62. "Patent Expiration in the U.S. Pharmaceutical Industry" (1991). *Brookings Institute Report on U.S. Economic Activity.* Washington: Brookings Press.

[7] "Pharmaceutical Costs and Rewards" (1990). *U.S. Congress, Office of Technology Report.* Washington, DC: U.S. Government Printing Office.

[8] "Top 50 Pharmaceutical Companies—Worldwide" (1994). *Med Ad News.* September: 13-26.

* In 1988, the top three therapeutic classes (cardiovascular treatments, antibiotics, and central nervous system therapies) accounted for approximately 38 percent of industry revenues, while the top ten classes accounted for about 70 percent.

[9] Peter Temin, *Taking Your Medicine: Drug Regulation in the United States* (1990). Cambridge: Harvard University Press.

[10] Richard Caves, Michael Whinston, and Mark Hurwitz. "Brand Loyalty and Price Competition in the Pharmaceutical Industry," *Journal of Law and Economics.* October: 331-350.

[11] "Pharmaceutical Costs and Rewards" (1990). *U.S. Congress, Office of Technology Report.* Washington, DC: U.S. Government Printing Office.

market share gains do result from successful product differentiation efforts. Exhibit 3 depicts world market shares for the top ten ethical drug companies.

Exhibit 3
World Market Shares—Top Ten Ethical Drug Companies, 1980-1990

	1980		1990	
Rank	Company	% Share	Company	% Share
1	Hoechst (FRG)	3.4	Merck (US)	4.1
2	Ciba-Geigy (Switz)	3.1	Bristol-Myers Squibb (US)	3.5
3	Merck (US)	3.1	Glaxo (UK)	3.5
4	AHP (US)	2.7	SB (UK/US)	3.0
5	Roche (Switz)	2.6	Ciba-Geigy (Switz)	2.9
6	Smith-Kline (US)	2.4	Hoechst (FRG)	2.7
7	G-Ingelheim (FRG)	2.3	American Home Products (US)	2.5
8	Sandoz (Switz)	2.2	Lilly (US)	2.4
9	Pfizer (US)	2.2	Bayer (FRG)	2.3
10	Bristol-Myers (US)	2.0	Sandoz (Switz)	2.3

The Australian Pharmaceutical Industry

In 1987, the Australian pharmaceutical industry was dominated by subsidiaries of the previously described large foreign firms to the extent that these firms supplied 94 percent of the Australian market. However, some Australian pharmaceutical firms such as Commonwealth Serum Laboratory and Faulding were well established and actively exported pharmaceutical products. The Australian market accounted for approximately two percent of the global pharmaceutical market. With a slow product approval system and government efforts to maintain low prices for products, Australia was not perceived to be an attractive area for pharmaceuticals despite high quality medical services, biomedical research institutes, and the proximity to growing Asian markets. A stated objective of both national and state Australian government was to secure a reliable supply of pharmaceuticals at the lowest cost to Australian citizens. To achieve this objective, the National Government created the Pharmaceutical Benefit Scheme (PBS) to regulate and secure lower pharmaceutical prices for Australian consumers. However, Australian pharmaceutical firms have indicated that the resulting price levels obtained by PBS were approximately one-half of the world average price for pharmaceutical products from 1985-1987.[12]

[12] *The Pharmaceutical Industry: A Critical Analysis of Australia's Role* (1988). Melbourne: Government Printer.

Creation of AMRAD Corporation

In late 1985 the economic strategy position paper published by Dr. Sheehan for the State Government of Victoria recommended that a major feasibility study be conducted to investigate the possibilities of establishing an entity to identify and commercially develop medical products. In early 1986 a feasibility study conducted by Dr. Sheehan with assistance from individuals from Monash University began investigating a variety of scenarios. During the feasibility study, through the efforts of Professor Nossal of the WEH Institute, biotechnology was identified as a promising area to commercialize because of the following research activities depicted in Exhibit 4.

Exhibit 4
1986 Biotechnology Research Activities
Conducted by Australian Medical Research Facilities

Research Facility	Research Activity
WEH Institute	Developing a malaria vaccine
Howard Florey Institute	Determining the structure of the hormone, relaxin
Prince Henry Institute	Determining the structure of the hormone, inhibin
Fairfield Hospital	Developing treatments for hepatitis A and B and techniques to determine the presence of AIDS
The University of Melbourne Medical Research Centre and Peter McCallum Hospital	Developing procedures for treating cancer and detecting AIDS
Royal Children's Hospital Research Institute	Developing an oral vaccine to prevent rotavirns gastroenteritis in children
Baker Medical Research Institute	Determining the causes of hypertension and atherosclerosis.

Through the efforts of Dr. Sheehan and Professor Nossal, government officials realized that while the state of Victoria had high levels of research activity in biomedicine, manufacturing capability was lacking. To resolve the deficiency, the State Government established the Australian Medical Research and Development (AMRAD) Corporation in April 1987. Exhibit 5 describes the objectives of AMRAD.

Exhibit 5
AMRAD Corporation Objectives

- Identify research opportunities for Australia's medical research institutes.
- Generate proposals and prepare contracts to link the activities of Australia's medical research institutes with that of companies.
- Work to manufacture and market both prescription and generic drugs.

Exhibit 6 details how AMRAD would generate income.

Exhibit 6
AMRAD Corporation Proposed Sources of Income

- Fees for arranging project funding for Australia's medical research institutes.
- Fees for securing contract research for Australia's medical research institutes.
- Profits from manufacturing and marketing both prescription and generic drugs.

The State Government intended that the ownership of AMRAD would be as illustrated in Exhibit 7.

Exhibit 7
Proposed Ownership of AMRAD Corporation

Entity	Percent Equity
Australian Medical Research Institutes	15
Victoria's State Government	35
Private Investors	50

The State Government through the Victorian Economic Development Corporation (VEDC) provided $14 million to fund "start-up" expenses for AMRAD which was to include the recruitment of a managing director and key staff members as well as securing the necessary facilities and infrastructure. $3 million in equity funding was also issued by the VEDC to certain Australian medical facilities as a fee for their intellectual property. These medical facilities included the WEH Institute, Macfarlane Burnet Institute,* Royal Children's Hospital Research Foundation, Howard Florey Institute, and the Murdoch Institute for Birth Defects.

A search team was formed to locate a managing director and reported that a shortage of individuals who possessed both medical research skills and managerial-entrepreneurial skills existed. Leading Australians living overseas who had the necessary qualifications and who might be interested in returning to Australia were identified. In mid-1987, Dr. John Stocker, Research Director of the multinational European-based pharmaceutical firm Hoffman La Roche, agreed to become the first managing director of AMRAD. Dr. Stocker was well respected within the international pharmaceutical industry. Prior to his employment with Hoffman La Roche, Dr. Stocker was involved in research with the WEH Institute and was highly recommended for the AMRAD post by Professor Nossal.

Securing Equity Funding

While the search was underway to locate a managing director for AMRAD, the State Government attempted to secure equity funding from the Australian Medical Research Institutes and from private investors. The Research Institutes were invited to participate as capital providers, to supply projects, scientific advice, assistance, scientists, and facilities. Professor Nossal worked diligently to secure equity funding from the Research Institutes. However, the response of the Research Institutes to Professor Nossal's advocacy and the State Government's overtures was lukewarm. Many of the Institutes feared a loss of control of their discoveries and a skepticism existed regarding how successful AMRAD might be in their commercialization process. Furthermore, the Institutes' Board of Directors tended to be conservative and viewed initiatives of a Labor Government with suspicion. Private investors also were not interested in investing in AMRAD.

Stocker's Arrival at AMRAD

Upon his arrival in Melbourne, Australia, to manage AMRAD, Dr. Stocker found that he had no employees, no office from which to operate, and no organizational structure on how to organize AMRAD. Equity funding was badly needed. AMRAD needed to develop projects that would generate revenues. In October, 1987, the Australian stockmarket crashed. It was not an auspicious year to start a company.

When Dr. John Stocker arrived in Melbourne as chief executive officer of AMRAD, the firm had no facilities, no employees, and only limited funding. "My rented office space was completely empty and for some reason it struck me that the office did not have a waste paper

* At the time AMRAD was established, the Macfarland Burnet Institute was part of Fairfield Hospital and operated as a research centre.

basket. My first thoughts were—should I purchase the waste basket myself, or should I employ a secretary and have her do it?" Dr. Stocker had to quickly develop a plan of action for building an organization from the waste paper basket up.

Employing John Grace

One of the first employees recruited by Dr. Stocker was a General Manager of Business Development, John Grace. With a Bachelor of Science degree in Chemistry from the University of New South Wales, Grace had worked in a variety of positions involving the interface between technical and commercial activities. In prior positions, Grace had (1) established a successful business to produce cheese-making bacteria for Burns-Philip headquartered in Sydney and operating in a number of other countries and (2) was a founding executive of Sirotech Limited, a firm specializing in the biotechnology area.

Stocker's Initial Concern

Stocker's initial concern was to develop an immediate cash flow for AMRAD. He realized and understood that medical research was not only expensive and very risky but required long lead times to commercialization. As indicated in Exhibit 1, the path from pharmaceutical discovery to the marketplace is long and costly. For example, in many cases, it takes in excess of ten years with total costs from Stages 2 to 4 of Exhibit 1 exceeding $100 million.[13]

Exhibit 1
Time Required From Research Development To Marketing Of A Typical Pharmaceutical Product

Stage	Activity	Time Span
1	Research (drug discovery, screening and isolation)	Many years (some drugs have required 20 years)
2	Preclinical testing (toxicity)	2 to 3 years
3	Development (human clinical trials for safety and efficacy)	4 to 6 years
4	Registration (regulatory evaluation)	up to 2 years
5	Marketing (product introduction)	

[13] AMRAD Internal Publication 1994.

Also, the prevailing view of Australian Medical Research Institutes was that they should receive substantial fees for their drug discoveries while the commercializing firm should bear all of the costs for product development. The Australian medical researcher considered the attainment of either a published journal article or a patent as the reward for his or her research efforts rather than considering these endeavors as just a step in the commercialization process. Current economic conditions in Australia made it very difficult for private investors to participate in such ventures as AMRAD. The Victorian State Government's Industrial Development Program was coming under fire from a variety of sources suggesting that adequate government funding might not be forthcoming.

Developing A Strategy

From Stoker's experience in Europe, he was aware that Merck, Sharp and Dohme (a division of the American pharmaceutical firm Merck & Company) had developed a strategic alliance with an Italian pharmaceutical firm. Would such an alliance be feasible in Australia? Merck & Company already had a subsidiary, Merck, Sharp and Dohme Pty. Ltd. in Australia.

Merck & Company

Merck's roots can be traced as far back as 1668 when the Merck family purchased an apothecary in Darmstad, Germany. In 1827 the apothecary began manufacturing its own drugs and the Merck family opened additional apothecaries in Germany. A branch was opened in New York City in 1887 and later drugs and specialty chemicals were manufactured in 1903 at Whitehouse Station, New Jersey (the present day headquarters for Merck & Company). The Merck businesses were incorporated in the United States in 1908 as Merck & Company and stock was sold to the public for the first time in 1919. By 1945 manufacturing facilities were established throughout the United States. Merck & Company merged with another pharmaceutical firm, the Sharp and Dohme Company, in 1953. In 1987, Merck's organizational structure consisted of several divisions, one of which was Merck, Sharp and Dohme—responsible for the worldwide marketing and administration of human pharmaceuticals. Other divisions of Merck & Company were responsible for the worldwide marketing and administration of animal health products, the discovery and development of drugs for humans and animals, and the manufacture of these drugs. A specialty chemicals division was responsible for developing, manufacturing, and marketing specialty chemicals for sale to the public as well as to other Merck divisions.[14] *Exhibit* 2 describes the size of Merck & Company, together with its Australian subsidiary, Merck, Sharp and Dohme (Australia) Pty. Ltd. (MSD). From 1985-1987, Merck & Company had been "America's Most Admired Corporation" in Fortune magazine's annual feature of the same title.[15]

[14] This information developed from John Bryne, "The Company," *Business Week*, October 19, 1987: 84-89. Merck & Company Annual Report 1987. "Merck & Company *Standard & Poors Industry Surveys*, June 1988: H14-19.

[15] Each year *Fortune* polls 8,000 American top executives and financial analysts and asks them to rank companies in their industry in eight categories: (1) quality of management, (2) quality of products or services, (3) innovativeness, (4) long-term investment value, (5) financial soundness, (6) community and environmental responsibility, (7) use of corporate assets, and (8) ability to attract, develop, and keep talented people. In 1987, for the third consecutive year, Merck received the highest cumulative score for any corporation in the United States.

Exhibit 2
1987 Size of Merck, Inc. and its Australian Subsidiary (MSD)
(US$)

	Merck	MSD (Australia)
Number of Employee	1070	560
Net Sales	$5.1 Billion	$325 Million
Total Assets	$6.1 Billion	$445 Million
Net Income	$906 Million	

1987 Merck & Company Annual Report

Merck's chief executive officer in 1987, Dr. Roy Vagelos, was known as a hard-driving manager who expected results and had his managers "running scared." For example, when the United States Federal Drug Administration approved the Merck drug Mevacor (a cardiovascular product with a US$ billion future), Vagelos phoned the scientist that had headed up the Mevacor product to congratulate him. During the conversation, Vagelos asked the scientist how they were coming on developing possible substitutes. Instead of running Merck defensively, avoiding risks and letting its current successes carry it along, Vagelos drove the company as hard as he had driven its research division. A medical doctor with graduate degrees in chemistry, Vagelos began his career as a senior surgeon at the National Institute of Health and later served as chairman of the department of biological chemistry at Washington University's School of Medicine in St. Louis, Missouri. When he joined Merck in 1975 as Director of Research, the research division had not produced a "big winner" for two decades. As research director, Vagelos scrapped dubious products and financed only major programs directed at discovering drugs that would cure known diseases. To enhance the research division, Vagelos hired eminent university scientists, created a "campus-like" atmosphere with first class facilities, and paid outstanding salaries. The strategies paid off because the Merck scientists under Vagelos developed Vasotec (a drug for the treatment of congestive heart failure), Zocor (a cardiovascular drug), Pepcid (a treatment for peptic ulcers), and Primaxin (an antibiotic medication with the broadest spectrum of antimicrobial activity of any antibiotic yet marketed). Other breakthrough drugs developed under Vagelos include Timoptic, Primaxin, Mevacor, Proscar, and the generic invermectin—products with total annual sales of US$6.1 billion.[16] Despite Vagelos' emphasis on performance, Merck had the lowest employee turnover rate of any U.S. pharmaceutical firm and used a progressive approach

[16] Developed from C. Elkand and C. Green, "A Research Whiz Steps Up From The Lab," *Business Week*, June 24, 1985: 87-88. S. Quicker, "Merck—Sheer Energy," *Fortune*, May 1988: 21-26. N. Nichols, "Medicine, Management, and Mergers," *Harvard Business Review*, November-December, 1994: 105-114.

toward developing employee satisfaction. Merck sold its prescription drugs worldwide through its professional sales representatives to drug wholesalers and retailers, physicians, veterinarians, hospitals, clinics, government agencies, and other institutions. Merck prided itself on the product knowledge and competence of these sales people. A new sales recruit was in training for two years, which included technical training equivalent to that given at many medical schools.[17]

In recent years, foreign companies have posed the greatest threat to Merck. Foreign companies were not only active in 1987 selling their products in the United States, but they were increasingly involved in strategic alliances to solidify their competitive position. An important strategic goal for Merck in 1986-1987 was to expand its global market share.[18]

Creating The Alliance

Stocker realized that MSD's (Australia) Managing Director, David Anstice, was well respected by Merck's top management group in the United States and could be a valuable ally in developing an alliance between AMRAD and MSD (Australia). Stocker and Anstice met on numerous occasions to discuss AMRAD's intentions and developed a mutual respect for each other. The relationship between Stocker and Anstice fostered an atmosphere in which Paul Bell, MSD's (Australia) second in command, and John Grace could work. These four individuals (Stocker, Anstice, Grace, and Bell) agreed that required tasks could best be performed by a certain individual. For example, Stocker would devote his efforts toward working to obtain the approval of the Australian equity partners, the Victorian Government and the Medical Research Institutes, while Anstice would work toward obtaining the approval of Merck & Company's top management group located in the United States. Grace and Bell would work to develop the specific details, the nuts and bolts, of the alliance. On a number of occasions when difficulties developed with particular constituencies of AMRAD and MSD, Stocker and Anstice worked together to resolve these problems. Through their working relationships, Stocker and Anstice developed an empathy for each other's problem which facilitated the development of the alliance.[19]

Stocker and Grace believed that AMRAD's quickest way to obtain a cash flow would be to form a joint venture in which (1) the venture would license drugs from MSD (Australia) that were currently being sold in Australia by MSD (Australia) and for the venture to market these drugs and (2) develop the research initiatives into commercial products and then market these new drugs. Stocker and Grace realized that MSD had an existing, well-trained and aggressive sales force that would compete with the venture's sales force if both partners sold the same products. However, Stocker and Grace emphasized that a proposed venture between AMRAD and MSD (Australia) would include the technological advantage of biotechnology. For example, MSD (Australia) pharmaceuticals developed by Merck laboratories were chemical agents that were foreign to the human body. Drugs developed from a biotechnological approach have an advantage in that they are the same or similar to the human body. One result is that the human body can better tolerate biotechnology products. Exhibit 3 further illustrates the differences between these two approaches.

[17] W.H. Wagel, "Merck: Performance Appraisal With a Difference," *Personnel*, February 1987: 4-7. John Byre, "Giving Free Rein to Merck's Best and Brightest," *Business Week*, October 19, 1987.18

[18] Merck & Company, 1987 Report.

[19] Personal interview with John Stocker.

Exhibit 3
Differences in Pharmaceuticals Developed by Merck versus the Biotechnological Approach

Characteristic	Merck Pharmaceuticals	Pharmaceutical Developed from Biotechnology
Source	Non-human	Human
Side effects	Higher	Lower
Human body tolerance	Lower	Higher
Discovery process (basic research)	Higher	Lower
Patent protection left	5-10 years	15 years
Legal liability	Higher	Lower
Cash flow received	Lower	Higher

Source: AMRAD and Merck & Company, Internal Research Report, 1987.

In December, 1987, AMRAD Pharmaceuticals Pty Ltd was formed as a joint venture between AMRAD and MSD (Australia) and Mr. Robert Manser was appointed managing director of the venture. Manser, with a master of science degree in pharmacology from the University of Melbourne, began his career as a pharmacologist with Imperial Chemical Industries (ICI) and held positions in product development, marketing management, and sales management. The business objective of the venture, AMRAD Pharmaceuticals, was the sale and distribution of pharmaceutical products. MSD (Australia) and its parent, Merck & Company, allowed AMRAD Pharmaceuticals to market and distribute five products described in Exhibit 4 which were owned by Merck and marketed by MSD (Australia).

Exhibit 4
Products Owned by MSD (Australia) to be Marketed by AMRAD Pharmaceuticals

Product	Profile
Amprace	(enalapril maleate) an ACE-inhibitor for the treatment of hypertension and heart failure
Ampamox disease	(famotidine) an HZ-antagonist for peptic ulcers and reflux
Lipex	(simvastatin) a cholesterol lowering agent
Chlotride	(chlorothiazide) a long-established diuretic for hypertension and oedema
Prinivil	(Lisinopril) a new ACE-inhibitor for hypertension and heart failure

Source: AMRAD Internal Report, 1994

Exhibit 5 explains the ownership characteristics of the joint venture.

Exhibit 5
Ownership Characteristics of the Joint Venture Formed by AMRAD and MSD (Australia) in December 1987

Characteristic	AMRAD	MSD (Australia)
Equity	55%	45%
Board representation (in addition to the managing director of AMRAD Pharmaceuticals)	3	3

Source: AMRAD Internal Report, 1988

Reaction of MSD's (Australia) Sales Force

The reaction of MSD's sales force to the formation of AMRAD Pharmaceuticals was one of bewilderment. Why would AMRAD be allowed to sell MSD's (Australia) products to the same medical practitioners? The Director of Sales of MSD (Australia) indicated that his sales people would "fight" to keep their market share and they weren't going to roll over and play dead for AMRAD Pharmaceuticals. In early 1988, AMRAD Pharmaceuticals had a sales force of 21 individuals while MSD (Australia) had approximately 150 highly trained and experienced sales people.[20]

John Stocker realized that he had created a joint venture that had the potential for creating needed cash flow for AMRAD. However, Stocker was concerned just how effective AMRAD Pharmaceuticals might become. David Anstice and Paul Bell had advised him of the reactions of the MSD sales force. The sales force of AMRAD Pharmaceuticals would have to hit the ground running.

Questions

1. To what extent should the State Government of Victoria have become involved in their industrial development activities?
2. Was biotechnology a good selection for industrial development?
3. Discuss the role of Dr. Sheehan and that of Professor Sir Gustav Nossal in the creation of AMRAD Corporation.
4. Does Dr. Stocker have a clear statement on the strategic intent for this development?
5. What is the most important issue facing Dr. Stocker when he first became CEO of AMRAD? The most urgent? What recommendations might be offered to Dr. Stocker?
6. How valid was Stocker's strategy of developing an immediate cash flow for AMRAD? What other options were available? How feasible were these options?
7. Why would Merck & Company allow its Australian subsidiary, MSD, to form a venture with AMRAD?
8. How practical was it to have AMRAD Pharmaceuticals and MSD (Australia) market similar products?
9. What governance problems, if any, might develop regarding the composition of AMRAD Pharmaceuticals Board of Directors?
10. Describe the relationship that developed between Stocker and Anstice during the

[20] Cathy Howarth, Murray Gillin, and John Bailey. *Strategic Alliances* (Melbourne, Australia: Pitman Publishing, 1995).

planning and implementation stages of the joint venture. How important could this relationship become with respect to the future success of AMRAD Pharmaceuticals?

11. Discuss the benefits that each of the following organizations could receive from the joint venture: the Australian Medical Research Institutes, AMRAD, MSD (Australia), Merck (the parent), and the Victorian government. Which organization might benefit the most? The least?

APPENDIX 1
Industry Note
Australian Venture Capital

During the 1980s the nature of corporate Australia changed dramatically. In December 1983, the Australian dollar was floated and foreign exchange controls were abolished forcing Australia into the international economy. The banking system was also deregulated and foreign banks were permitted to complete with local Australian banks. The rules of the game changed considerably in the world of corporate Australia as takeover specialists, greenmailers, white knights, share traders, investors, and speculators pushed aside old conventions and practices and led the restructing of business and enterprise. In addition, the decade of the 1980s saw the second longest sustained rise in the Australian stockmarket in recent history—a five year bull run—and also saw the inevitable meteoric rises and falls in individual and company fortunes.

However, in late 1987 the Australian stockmarket crashed and many individuals experienced considerable losses. Following this decline in the Australian stockmarket, the so-called entrepreneurs (who were the golden boys prior to the 1987 crash) experienced an unprecedented attack from financial institutions, the popular press, and individuals. The late 1980s also saw the misuse and abuse of the word entrepreneur which in Australia has come to mean anything from a risk taker or gambler to an innovator or creator of wealth. Thus, many financial institutions and individuals with wealth are still reluctant to become involved in new venture development.[21]

Australian financial analyst Michael Hynes of Gillon Securities in Sydney reports that many Australian investors do not understand the drug development process because it is complicated, risky, and products require a long time to be developed. Thus, a large number of Australian investors do not invest in companies in the pharmaceutical industry. Also, analyst Neil Mckissock of Godrey Weston Securities in Melbourne reports that Australians have always been hesitant to invest in high-tech ventures but are willing to bet considerable sums on horse races and to plow sizable sums into speculative mining companies that are often riskier bets than any of the medical research companies.[22]

[21] M.Hartwe and J. Lane, *Champions of Enterprise: Australian Entrepreneuership* (Double Bay, NSW: Focus Books, 1991).

[22] W. da Silva, "Why Investors Don't Like Drugs," *The Sunday Age* (Melbourne, Australia), 11 June 1995, pg. 26.

The Victorian Economic Development Corporation (VEDC)

In 1982, the Australian Labor Party came to power in the state of Victoria, Australia, ending a 27-year reign of the Liberal Party. One year later, in 1983, the Labor Party also triumphed nationally. Both the Victoria state and the Australian national regimes had a stong commitment to foster entrepreneurship and to create new high-technology ventures. To accomplish these objectives, the Commonwealth government created the Management Investment Company (MIC) while the Victorian state government formed the Victorian Economic Development Corporation (VEDC). The mission of the VEDC was to provide equity funding to high-technology ventures which had difficulty in obtaining financing from traditional sources.[23]

From its inception, critics of the VEDC obtained information regarding the failure of certain loans made by the VEDC to create new ventures and then publicized these failures. Such activity created an atmosphere of suspicion and distrust which was detrimental to the proper functioning of the VEDC. These criticisms continued and in 1988 the VEDC was ordered to issue a report describing the "condition" of the loans made to new venture firms. This report indicated that in 1988 the VEDC had outstanding loans of A$255 million that had been made to new venture firms. A footnote indicated that a provision for "doubtful" investments of A$112 million had also been established.

Following the 1988 "loan condition" publication of the VEDC, the Liberal Party began a campaign implying that the VEDC had lost A$112 million and that the remaining A$143 million ($255M-$112M) was at risk. Public outcry was great and the VEDC was liquidated in 1989 by the Victorian state legislature. After liquidation, the State Legislative Assembly ordered a "Report of Inquiry" of the VEDC which was conducted by Fergus Ryan.[24] Following are certain excerpts from Ryan's report that was ordered by the Victoria State Legislative Assembly to be published.[25]

1. The provision for A$112 million, by definition, did not represent a loss that had been realized. It is only a provision which may or may not become an actual loss.
2. There is no evidence that the remaining A$143 represents a potential loss.
3. No evidence of dishonesty or fraud was noted.
4. The Chairman and the General Manager of the VEDC did not have banking or lending experience nor did many of the directors have such experience.

[23] K. Hindle and M. Gillin, "Government Involvement in Entrepreneurship and New Business Creation in Australia," *Innovation and Research Monograph* (Hawthorne, Australia:SIT Press, 1991).

[24] Fergus Ryan is a well respected business consultant and Professor of Accounting at Melbourne University.

[25] F. Ryan, *Report of Inquiry: Victorian Economic Development* Corporation (Melbourne: Jean Gordon Government Printer, 1989).

5. The Board did not have a policy on prudent limits and exposures regarding loans.
6. While the Board had a documented strategy for its operation, it lacked a strategic direction.
7. The VEDC did not have a manual on policy and procedures regarding its lending and investment practices until October 1988. Many loans were made as a result of "position" papers.
8. The VEDC did not specify financial objectives or performance requirements for its loans and investments nor was the financial performance of firms that received loans and investments monitored.

AMRAD Corporation Limited (B)*

Daniel F. Jennings, Texas A&M University
L. Murray Gillin, Swinburne University of Technology
Gennaro D'Alessandro, Swinburne University of Technology
John Morgan, Swinburne University of Technology
Harry Van Andel, Swinburne University of Technology

John Stocker and John Grace had worked toward forming a joint venture between AMRAD and Merck, Sharpe and Dohme (Australia) Pty Ltd (MSDA). While Stocker was pleased with the creation of this venture AMRAD Pharmaceuticals, he was also concerned about how quickly AMRAD Pharmaceuticals would generate a positive cash flow. Stocker realized that additional funding and revenue sources were needed for AMRAD.

Attempts to Develop Additional Funding

Stocker was active in seeking venture capital from the Australian Medical Research Institutes and from private investors. Two additional research institutes, the Menzies School of Health Research and the Queensland Institute of Medical Research, agreed to contribute some of their intellectual property in return for an equity position in AMRAD. Australian private investors, however, were not interested. Within the Australian financial community, there was little understanding of the pharmaceutical industry and almost no desire to try to understand the industry.

This case is based on original research conducted by Gennaro D'Alessandro, John Morgan, and Harry Van Andel while they were completing the 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 provided by the AMRAD Corporation and in particular by Paul Bell, John Grace, Robert Manser, Peter Sheehan, Katherine Slack, and John Stocker. This case was prepared as a basis for class discussion rather than to illustrate either effective or ineffective handling of an administrative situation.

* Unless otherwise noted, financial data is expressed in terms of Australian dollars.

Proposed Venture with Kaneka

In early 1990, Stocker began discussions with Kaneka Chemical and Pharmaceutical Company—a Japanese firm with production facilities in North America, Europe, and Southeast Asia. Kaneka also had research interests which included autoimmune diseases. Exhibit 1 describes the following factors that made AMRAD attractive to Kaneka.

Exhibit 1
Factors Making AMRAD An Attractive Partner

- A strong partner in MSD (Australia)
- Biotechnology research connections through the Australian Medical Research Institutes
- Victorian government support
- Dr. Stocker's reputation

AMRAD was interested in (1) obtaining the rights to market pharmaceutical products which were owned by Kaneka and (2) having Kaneka provide funding to the WEH Institute for autoimmune disease projects.

Grace Becomes Managing Director of AMRAD

In April, 1990, Dr. Stocker resigned as Managing Director (chief executive officer) of AMRAD to accept the position of Managing Director of the Commonwealth Science and Industrial Research Organization (CSIRO). The national science agency of Australia, CSIRO is a billion dollar organization responsible for (1) conducting and administering a variety of research projects, (2) providing consulting services to public and private firms as well as to state and the Australian national government, and (3) is interlinked with global networks. Stocker's comments regarding his resignation from AMRAD were:[1]

- AMRAD was not his child in the sense that Genentech and Biogen were to their founders.
- His strengths were essential in the introductory stage of AMRAD's existence rather than in the growth stage.
- AMRAD needed a managing director with commercial development and licensing skills.

[1] Personal interview with John Stocker.

Quickly, John Grace became Managing Director of AMRAD. Many issues had to be addressed.

John Grace's first task as Managing Director was to finalize the joint venture between AMRAD and Kaneka Chemical. Grace believed that the best opportunities for AMRAD were to (1) continue to build relationships with the Australian Medical Research Institutes and (2) form alliances with foreign investors. The Australian venture capital industry was not well developed—not many Australian "angels" existed who were interested in investing in start-up Australian businesses. However, foreign investors, particularly the Japanese, were showing considerable interest in the fledgling Australian pharmaceutical industry. AMRAD Pharmaceuticals was beginning to become successful after only two years of operation. Grace realized that AMRAD Pharmaceuticals was at a critical position in its growth and required considerable monitoring. Indeed, John Grace had a considerable range of opportunities and tasks facing him.

The Amkaid Venture

Grace was successful in establishing a joint venture with Kaneka Chemical in 1990 which was named AMKAID. Kaneka provided $1.5 million in research and development (R&D) funding while AMRAD contributed in-kind support towards the WEH Institute's autoimmune disease project. The focus of this research was to clone immunodominant B cell epitotes into drugs to treat diabetes and thyroid disease. Other approaches were being developed by the WEH Institute for rheumatoid arthritis, scleroderma and Grave's disease.

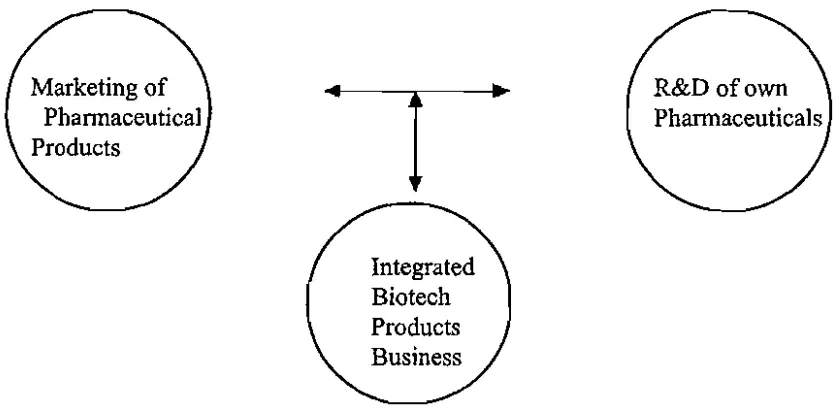
Strategies For Success

Under Grace's direction, the following mission statement was developed for AMRAD.

> To commercialize the results of Australian medical research so that AMRAD will become a profitable International pharmaceutical and biotechnology company.

Strategies were developed to form additional joint ventures with foreign investors, grow AMRAD Pharmaceuticals into a major distributor of pharmaceutical products, and to continue developing relationships with Australian Medical Research Institutes. AMRAD concentrated on the areas which are illustrated in Exhibit 1 to implement these strategies.

Exhibit 1
AMRAD's Business Area



The Marketing of Pharmaceuticals will be accomplished through the efforts of AMRAD Pharmaceuticals and will include newly developed products as well as the five products currently being marketed.

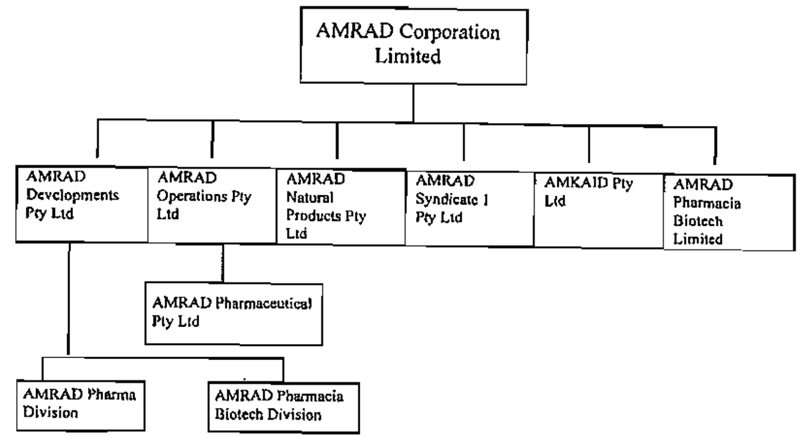
R&D of Own Pharmaceuticals will involve providing funding for Australian research and development projects leading to the development of pharmaceutical products.

Integrated Biotech Products Business will involve the formation of strategic alliances with other international pharmaceutical companies, using its access to their established development and marketing networks. This business area will also address the expenses associated with pharmaceutical development.

AMRAD's Strategic Business Units

By 1995, the AMRAD group consisted of six strategic business units that are depicted in Exhibit 2.

Exhibit 2
AMRAD Organization Chart—1995



AMRAD *Developments* Pty Ltd conducts research and development and consists of two divisions. The AMRAD Pharma Division researches and develops AMRAD's own pharmaceutical products while the AMRAD Pharmacia Biotech Division is involved with the development of biotechnology products. Intellectual property rights and commercial collaborations are managed by the AMRAD Pharma Division.

AMRAD *Operations* Pty Ltd is involved with technology transfer and includes AMRAD Pharmaceuticals Pty Ltd, a joint venture with Merck Sharp and Dohme (Australia) involved in the marketing and sales of licensed products.

AMRAD *Natural Products* Pty Ltd is the vehicle by which AMRAD has embarked on a natural products screening program.

AMRAD *Syndicate* Pty Ltd is a special purpose research and development division.

AMKAID Pty Ltd is a joint venture with the Japanese chemical company, Kaneka.

AMRAD *Pharmacia Biotech* Ltd is a New Zealand operating company which was created when AMRAD acquired the Australian and New Zealand division of Pharmacia LKB Biotech, a Swedish pharmaceutical firm. AMRAD has exclusive rights to market existing and future products of Pharmacia LKB Biotech in Australia and New Zealand. In addition, AMRAD Pharmacia Biotech Ltd also develops, manufactures, and sells Australian Biotechnology products).

Strategic Alliances

In addition to joint ventures formed with MSD (Australia) and Kaneka, AMRAD secured a 1992 license from Chugai Pharmaceuticals of Japan to sell lenograstin rHUG-CSF which is used in the treatment of neutropenia, a condition following bone marrow transplantation and cyotoxic cancer chemotherapy.[2] Sales of rHUG-CSF under the brand name, Granocyte in Australia are approximately $20 million annually. In 1992, Chugai assumed a license to further develop AMRAD's potential product LIF (Leukemia Inhibitory Factor) to be used as a therapy for thrombocytopenia secondary to bone marrow transplantation or high dose chemotherapy. Later in 1994, AMRAD signed an agreement in which Chugai took an eight percent shareholding in AMRAD and will gain specific rights to AMRAD's research and development portfolio. AMRAD will gain access to financial, technical, and commercial assistance from Chugai as well as the preferential rights to commercialize any Chugai product in Australia and New Zealand. The Chugai Company, based in Tokyo, spends approximately $300 million on research and development each year and has approximate net sales of $1.4 billion annually. Also in 1994, AMRAD licensed the product ZYCLIR (acyclovir) from Wellcome Australia Ltd. Acyclovir is presently the only effective treatment available in Australia for the treatment of genital herpes and other herpes viruses, including shingles. Exhibit 3 describes AMRAD's ownership interests in its strategic business units that are depicted in Exhibit 2 as well as the joint ventures with MSD (Australia) and Kaneka.[3]

Exhibit 3
Equity Interest and Joint Venture Investments
AMRAD 1994

Entity	Equity Interest	Amount of Investment ($000)
Joint Ventures		
AMRAD Pharmaceutical	55%	$1650
AMKAID (joint venture with Kaneta)	51%	$1561
Other Strategic Business Units	100%	——
AMRAD Operations		
AMRAD Developments	100%	——
AMRAD Natural Products	100%	——
AMRAD Syndicate 1	100%	——
AMRAD Pharmacia Biotech	100%	——

[2] Interestingly, rHUG-CSF was the product that led, in part, to the formation of the AMRAD Corporation. See AMRAD (A) for an expanded discussion of the events associated with rHUG-CSF.

[3] 1994 AMRAD Annual Report.

Relationships with Australia Medical Research Institutes

As indicated in AMRAD (A), only five of Australia's medical research institutes chose to have an equity position in AMRAD in 1987. However, by 1994, eleven of the leading medical research institutes, listed in Exhibit 4, had an equity in AMRAD.

Exhibit 4
Australian Medical Research Institutes
with an Equity Position in AMRAD

Institute	Location (by state)
Howard Florey Institute	Victoria
Macfarlane Burnet Institute	Victoria
Murdoch Institute for Birth Defects	Victoria
Royal Children's Hospital Research Fund	Victoria
WEH Institute	Victoria
Menzies School of Health Research	Northern Territory
Australian Institute of Marine Science	Queensland
Queensland Institute of Medical Research	Queensland
Immunogenetics Research Foundation	Western Australia
Heart Research Institute	New South Wales
Centenary Institute for Cancer Medicine and Cell Biology	New South Wales

These member institutes currently spend approximately $100 million annually on basic medical research. By funding research projects within the member institutes and acting as the commercial arm for the institutes, AMRAD can enhance commercial focus early in the research phase. In addition to its interaction with member institutes, AMRAD works with "non-member" research groups and many research projects arise from these sources. AMRAD has also established several research awards to assist Australian biomedical research scientists. For example, AMRAD Post Doctoral Awards in the amount of $20 thousand have been established to assist Australian scientists who are returning to Australia after a post-doctoral period overseas. Each recipient also receives a commemorative medallion. The AMRAD $1 million Pharmaceutical Discovery Grant, payable over two to four years, encourages research that results in the discovery and development of novel therapeutic agents for human use. In addition, travel funds are made available to young researchers to encourage their involvement at scientific meetings and AMRAD also provides the necessary funding to underwrite special training courses for graduate students in biomedical science.[4]

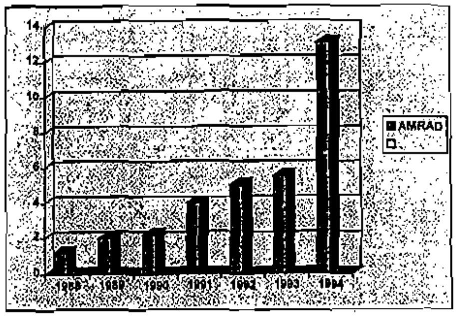
Research Development Activities

Exhibit 5 illustrates AMRAD's research and development expenditures from 1988-1994.

[4] AMRAD *BIONEWS*, 1993 & 1994.

Exhibit 5
R&D Expenditures - AMRAD
1988-1994

$M



Financial Performance

AMRAD's financial performance is described in Exhibits 6 and 7. Total revenue and operating profit before taxes are graphically presented in Exhibit 8, while Exhibit 9 details the cash flow statement.

Exhibit 6
AMRAD Corporation Abridged Profit and Loss Accounts
For the Years Ended June 30

	1994 $000	1993 $000	1992 $000	1991 $000	1990 $000	1989 $000	1988 $000
Sales Revenue	60,221	45,312	34,745	17,199	3,660	316	3
Other revenue[5]	15,021	10,284	9,785	7,924	6,300	6,444	1,628
Total revenue	75,242	55,596	44,530	25,123	9,960	6,760	1,631
Operating profit before tax	(5,741)[6]	2,859	2,730	2,238	(112)	935	(1,581)
Income tax expense	(1,570)	(1,591)	(989)	(561)	0[7]	0	0
Operating profit after tax	(7,311)	1,268	1,741	1,677	(112)	935	(1,581)
Outside equity payment	(1,188)	(873)	(264)	(902)	160	635	0
Operating profit after tax and outside equity	(8,499)	395	1,477	775	48	1,588	(1,581)
Beginning retained profit	2,233	1,838	361	(414)	(462)	(2,050)	(469)
Ending retained profit	(6,266)	2,233	1,838	361	(414)	(462)	(2,050)

[5] Licensing fees, subsidies, participation fees, and interest earned.

[6] Loss resulted from the funding of necessary R&D and was in line with the business plan and budget.

[7] Zero income tax charges for years 1988-1990 reflect income tax losses resulting from research and development expense concessions.

Exhibit 7
AMRAD Corporation Abridged Balance Sheet
(For the Years Ended June 30)

	1994 $000	1993 $000	1992 $000	1991 $000	1990 $000	1989 $000	1988 $000
Current Assets							
Cash	5,541	6,204	4,197	4,211	1,590	750	479
Receivables	16,425	9,314	7,281	5,697	26,950	27,278	12,787
Inventory	619	1,418	63	0	0	0	0
Investments[8]	61,354	24,102	26,285	23,991	0	0	0
Prepayments	442	951	208	85	16	55	0
Total Current Assets	84,381	41,989	38,034	33,984	28,556	28,083	13,266
Non-Current Assets							
Property, plant and equipment (Net)	3,528	2,786	2,008	1,422	1,354	734	177
Intangibles[9]	9,674	12,580	3,298	2,719	2,889	2,649	3,006
Total non-current assets	13,202	15,366	5,306	4,141	4,243	3,383	3,183
Total assets	97,583	57,355	43,340	38,125	32,799	31,466	16,449
Current Liabilities							
Payables	18,062	10,898	6,963	4,712	2,857	1,437	999
Total current liabilities	18,062	10,898	6,963	4,712	2,857	1,437	999
Non-current liabilities							
Syndicated Research[10]	378	6,794	442	319	25	0	0
Total non-current liabilities	378	6,794	442	319	25	0	0
Total liabilities	18,440	17,692	7,405	5,031	2,882	1,437	999
Shareholder's Equity	79,143	39,663	35,935	33,094	29,917	30,029	15,450
Total liabilities and Shareholders' equity	97,583	57,355	43,340	38,125	32,799	31,446	16,449

[8] Investments in Business units, supported by negotiable instruments.

[9] Rights to technology.

[10] Agreements with an unincorporated venture syndicate. If the research and development is a commercial success, AMRAD will make an advance royalty payment to the syndicate; if unsuccessful, AMRAD will make available to the syndicate's investors a limited recourse loan.

Exhibit 8
AMRAD Corporation Total Revenue and Operating Profit Before Taxes
1988-1994

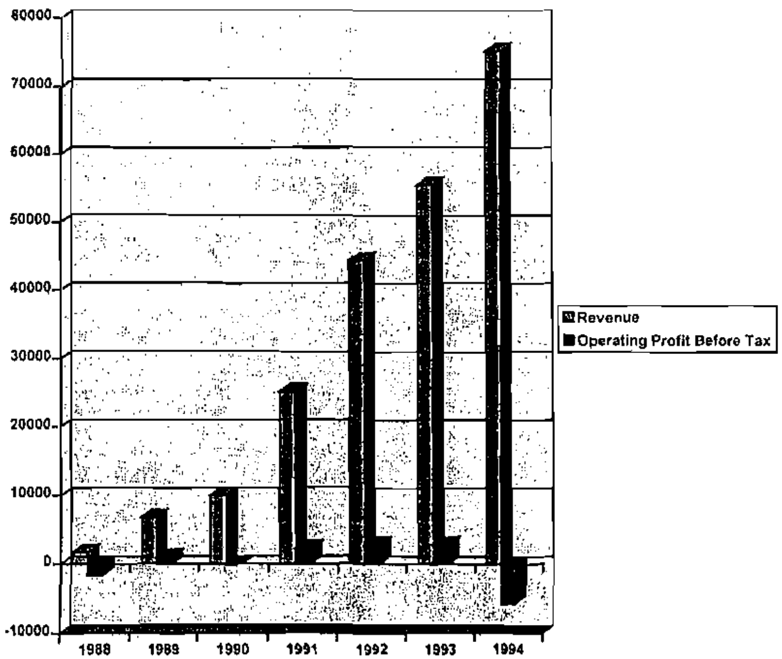


Exhibit 9
AMRAD Corporation Statement of Cash Flows
(For the Years Ended June 30)

	1994 $000	1993 $000	1992 $000
Cash Flows from Operations			
Cash receipts	67,230	52,066	37,809
Cash payments	(72,094)	(51,595)	(38,759)
Income taxes paid	(1,671)	(845)	(549)
Net cash used by operations	(6,535)	(374)	(599)
Cash Flows from Investing Activities			
Interest received	530	269	412
Payments for property, plant and equipment	(1,794)	(1,484)	(1,391)
Proceeds from sale of non-current assets	126	151	233
Payments for business acquisition	—	(2,222)	—
Proceeds from transfer of assets to others	—	—	—
Payment for investments	—	(421)	—
Payment for technology rights	(3,500)	—	—
Net cash (used in)/provided by investing activities	(4,818)	(3,707)	(746)
Cash Flows from Financing Activities			
Lease payments	(43)	(15)	(17)
Interest paid	(8)	(4)	(3)
Proceeds from the issue of shares	46,786	1,409	—
Cash drawn from management funds	11,000	5,350	1,350
Cash transferred to management funds	(45,000)	—	—
Share issue costs	(1,370)	(202)	—
Dividends paid	(675)	(405)	—
Net cash provided by financing activities	10,690	6,088	1,330
Net Increase (Decrease) in Cash Held	(663)	2,007	(14)
Cash at the beginning of financial year	6,204	4,197	4,211
Cash at the end of financial year	5,541	6,204	4,197

Changes in the Global Pharmaceutical Industry

During the late 1980s and early 1990s, the global pharmaceutical industry has rapidly consolidated as drug makers search for partners or targets to share the costs of keeping pipelines full of new drugs while having the distribution muscle to sell the products around the world. This consolidation comes amid fierce pricing pressure from governments and big customers around the world.[11] Exhibit 10 describes the consolidations that have occurred in the industry since 1988.

Exhibit 10
The Ten Largest Pharmaceutical Deals Since 1988

Acquirer	Target	Size (U.S. $ Billion)	Year
Glaxo Holdings	Wellcome	$14.2	1995
Bristol-Myers	Squibb	12.0	1989
American Home Products	American Cyanamid	9.5	1994
Beecham Group*	SmithKline Beckman	7.9	1989
Hoechst	Marion Merrell	7.1	1995
Dow Chemical	Marion Laboratories	6.2	1989
Upjohn*	Pharmacia	6.0	1995
Roche	Syntex	5.3	1994
Eastman Kodak	Sterling Drug	5.1	1988
Sanofi	Sterling Drug-Europe	4.5	1991

*Merger

Source: Wall Street Journal, 21 August 1995.

In addition to this consolidation, the industry structure of the prescription pharmaceutical industry has changed since 1993. In November 1993, Merck & Company, the worldwide leader in prescription pharmaceuticals, acquired Medco Containment Services, a mail-order pharmacy and prescription-benefits-management company (PBM). Analysts interpreted the transaction as part of an effort to secure a favorable competitive position for Merck as the pharmaceutical industry undergoes substantial change. The management of several other pharmaceutical companies apparently found this logic compelling: SmithKline Beecham and Eli Lilly recently announced plans to acquire Diversified Pharmaceutical Services and McKesson's PCS Health Systems, respectively. These transactions attracted attention both because the general public was unfamiliar with PBMs and because the proposed acquisition prices were so high: $2.3 billion for Diversified Pharmaceutical Services and $4 billion for PCS Health Systems. Merck paid $6.6 billion, more than two and a half times Medco's sales and 45 times its earnings in fiscal 1993.*

Explanations for these acquisitions typically emphasize changes in the health care environment in the last decade, especially in the growth of managed-care organizations. PBMs

[11] Stephen Moore and Thomas Burton. "Upjohn and Pharmacia Sign $6 Billion Merger," *Wall Street Journal,* 21 August 1995: A3, A4.

* Dollars are U.S.

act on behalf of payers to encourage the use of less expensive alternatives to branded drugs. In the course of providing this service, PBMs acquire information on patients and physicians, which may include data on the health histories of patients who have used certain prescription drugs. Executives of pharmaceutical companies note that access to those data could be invaluable for research and marketing productivity.

Certain criticisms have emerged as a result of these acquisitions. For example, one criticism deals with PBM's practices for obtaining permission from physicians to substitute less expensive alternatives for drugs originally indicated on patients' prescriptions. In their function as mail-order pharmacies, PBMs employ pharmacists to telephone doctors for their permission to make substitutions. Some PBMs also reportedly offer incentives to retail pharmacists who succeed in obtaining permission to switch. Critics observe that a PBM owned by a pharmaceutical company may use these incentives to promote its parent's products as low-cost options and thereby increase market share.

Another criticism addresses the effect of the acquisitions on the research and development of new drugs. Some observers express concern that aggressive growth of acquired PBMs contributes to price competition, which may diminish profits and thus the incentives for research. Critics argue that lower prices will therefore decrease investment in the discovery of new drugs and hence slow advances in health care.[12] One report states that patents on many major drugs are scheduled to expire by the year 2000.[13] Thus, a generic pharmaceutical may be produced after the expiration of a patent on the branded product. Such a generic product would cause a decline in the sales volume of the branded drug. Of course, the producer of the branded drug could offer the product under another name with a lower price, thus competing with the generic product. By the middle of 1994, generic drugs accounted for nearly 37 percent of pharmaceutical prescriptions in the U.S.[14] Industry analysts argue that by obtaining interests in companies that sell generic drugs, the major pharmaceutical firms have reduced the threat of losing market share to those competitors with the greatest incentive to compete on price.[15]

Exhibit 11 describes the world market shares for the top ten ethical drug companies for 1994.

[12] A.M. McGahan, "Focus on Pharmaceuticals: Industry Structure and Competitive Advantage," *Harvard Business Review,* November-December 1994: 115-124.

[13] C. Heuer and J. Kearns, "Drug Industry: January 1994," Smith Barney Shearson Analyst Report.

[14] G. Muirhead, "Learning to Live with Generic Drugs," *Drug Topics,* 21 February 1994: 38-39.

[15] M. Mitka, "Drug Makers Move to Shared Risk to Sell Managed Care," *American Medical News,* 7 March 1994: 3-5.

Exhibit 11
World Market Shares—Top Ten Ethical Drug Companies
1994

Rank	Company	% Share
1	Johnson & Johnson (U.S.)	4.1
2	Merck (U.S.)	3.9
3	Bristol-Myers Squibb (U.S.)	3.2
4	Sandoz (Switzerland)	3.1
5	Roche Holding (Switzerland)	2.8
6	SmithKline Beecham (U.K.)	2.6
7	Abbott Laboratories (U.S.)	2.4
8	American Home Products (U.S.)	2.3
9	Glaxo Wellcome (U.K.)	2.2
10	Pfizer (U.S.)	2.1

Existing Products and Leading Compounds

AMRAD's existing products are described in Appendix 1 by business unit. The path of a project from discovery to market place is a complex one. The discovery process attempts to isolate biologically active substances with pharmacological utility. These potential products are known as "leading compounds" and are sourced from three main areas: biotechnology, natural products, and chemical syntheses. Appendix 2 details AMRAD's promising leading compounds.

APPENDIX 1
AMRAD's Existing Products by Business Unit

AMRAD Pharmaceuticals

- AMPRACE* (enalapril Maleate) and ACE-inhibitor for the treatment of hypertension and heart failure
- AMFAMOX* (famotidine) an H2-antagonist for peptic ulcers and reflux disease
- LIPEX* (simvastatin) a cholesterol lowering agent
- CHLOTRIDE* (chlorothiazide) a long established diuretic for hypertension and edema
- PRINIVIL* (lisinopril) a new ACE-inhibitor for hypertension and heart failure
- GRANOCYTE* (lenograstim rHUG-CSF) a treatment for febrile neutropenia following bone marrow transplantation and cyotoxic cancer chemotherapy
- ZYCLIR* (acyclovir) an antiviral agent for the treatment of genital herpes and shingles

* Trademarks used under license.

AMRAD Pharmacia Biotech

AMRAD *developed and manufactured:*
CAPTAGENE-GCN4
COLLECTAGENE
HEL-pTEST
ESGRO
pure human and murine LIF
a range of recombinant autoantigens
a range of unique antibodies
Exclusive product ranges:
Pharmacia Bioprocess AB (Sweden)
Pharmacia Laboratory Supply (Sweden)
Pharmacia PL Biochemicals (U.S.)
Oncogene Science (U.S.)

APPENDIX 2
AMRAD's Leading Compounds

1. **Rotavirus Vaccine**
Phase 1 clinical trial of an oral vaccine based on an attenuated rotavirus strain isolated by researchers at the Royal Children's Hospital Research Foundation was completed. Further trials in some of the developing countries where rotavirus infection causes significant infant mortality will take place in 1995/6. The Phase 1 trial was the first that AMRAD has conducted on an Australian medical research discovery, and is a significant milestone in AMRAD's development.
2. **Anti-D Monoclonal Antibody**
Haemolytic disease of newborn infants may be severe and potentially fatal. It is most often caused by Rh incompatibility between a pregnant woman and her fetus. This condition can be prevented to a large extend by the use of immunoglobulins from donor human blood products. However, as with any serum extract, there is an attendant risk of viral infection. A team from the NSW Red Cross Blood Transfusion Service has developed a number of human B-lymphoid cell lines producing anti-D monoclonal antibodies which have the potential to replace the existing donor-derived products. Research is now in progress to evaluate and select the best anti-D producing cell lines for progression to product, toxicology and human clinical trial in 1995.
3. **Receptor First Cytokines**
The traditional approach to purifying and characterizing cytokines from cellular extracts is a difficult and time consuming process. AMRAD has invested in a new, sensitive laser-based technology capable of identifying a novel cytokine by binding to its cognate receptor. To date, researchers have isolated three novel receptors. This technology is enabling AMRAD to capitalize on the extensive libraries of cell lines held by Member Institutes. These libraries are potential sources of novel unidentified cytokines.

4. **Leukemia Inhibitory Factor (LIF)**
A license agreement has been completed providing Chugai with the rights to market LIF for human pharmaceutical indications in Japan. Sandoz Pharma, the license holder of LIF for all other territories (excluding Australia and New Zealand) has elected not to develop LIF for the treatment of thrombocytopenia. Since the balance date, Chugai has also indicated its intention to cease development of LIF for the treatment of thrombocytopenia. Investigations into a number of alternative indications for which LIF may be useful are being undertaken at The Walter and Eliza Hall Institute and the Royal Children's Hospital Research Foundation.
5. **Cyclodextrins**
The market for cholesterol-lowering drugs is very large and continues to grow. Researchers at the CSIRO Divisions of Food Science and Technology in Sydney and Human Nutrition in Adelaide are investigating the cholesterol-lowering properties of a group of compounds derived from cyclodextrins that have the capacity to bind cholesterol. The project aims to develop insoluble cyclodextrin derivatives that are able to sequester cholesterol absorption from the gastrointenstinal tract.
6. **D-140**
D-140 is a novel beta-blocking compound discovered by Melbourne University researchers. This compound exhibits absolute specificity for beta-1 receptors and has potential both for the treatment of glaucoma and for the management of heart beat irregularities encountered around the time of surgery. Phase 1 Clinical Trial in healthy volunteers, and subsequently in glaucoma patients has commenced.
7. **Anti-Viral Agents**
AMRAD is the commercializing partner in an R&D syndicate involving a project to find clinically useful agents against a number of viruses. The research is being conducted at the CSIRO, Macfarlane Burnett Centre for Medical Research and Monash University. Several exciting compounds have been developed to date.
8. **Natural Products Screening**
Approximately twenty-five percent of ethical pharmaceutical drugs are sourced from natural products. AMRAD has signed an agreement with the U.S.-based company Panlabs Inc. to secure rights to Panlab's mass screening technology. AMRAD will explore the biochemical diversity of the Australian biota as a potential source of new drugs and will establish its own screening facility in Melbourne in 1995.

Questions

1. Do you agree with Dr. Stocker's rationale for resigning? Explain.
2. To what extent will Stocker's resignation affect the proposed joint venture with Kaneka Chemicals?
3. What is the most important problem facing John Grace? The most urgent?
4. How successful is AMRAD? Explain.
5. If AMRAD has been successful, is this success sustainable? Discuss. If AMRAD has been unsuccessful, how might success be achieved?

Osbon Medical Systems

Donald P. Howard, Augusta State University
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Abstract

In the early 1960's, at the age of 59, Geddings D. Osbon, Sr. was confronted with a sensitive medical problem. With a shrug and a pat on the back, his physician informed him that very little could be done to correct his impotence. However, this determined entrepreneur was unwilling to accept this bleak prognosis. He devised a treatment for his own impotence and, in so doing, invented an innovative, non-invasive solution for hundreds of thousands of impotent men. In 1982, he received the first permission from the United States Food and Drug Administration (FDA) to market a prescription product for impotence. Through his rare combination of ingenuity and determination Osbon became known as the father of non-invasive impotence management with external vacuum therapy.

Today, Osbon Medical Systems, a wholly owned subsidiary of Urohealth Systems, Inc. and located in Augusta, Georgia, is a $50 million company which manufactures and distributes prescription medical products for the treatment of impotence. The primary product is accompanied by a unique method of service delivery for patients and physicians.

By the end of 1990 the company had 37 distributors in 58 countries. A joint venture was formed with a company in the United Kingdom, and activities in Europe and the Pacific Rim are expanding. In 1995 the company was selected by the U.S. Department of Commerce as a winner of the prestigious "E" award, a presidential award for "outstanding contribution to the export expansion program of the United States."

Today Osbon Medical is no longer a single product focused company. As a result of the merger it will be marketing a very diverse product line. Interestingly, Osbon's previous marketing strategies were sold against other treatment options they now find themselves selling. In the near future Osbon will be faced with additional challenges. They include the impact of managed care on the marketing of their products, development of more effective alternate treatments, changes in the regulatory environment and achieving comparable operating efficiencies in their international markets.

The authors express their appreciation to Osbon Medical Systems, Inc. for its cooperation in this case's development. Case is for classroom discussion purposes only. It is not intended to illustrate either effective or ineffective handling of managerial situation.

A special thank you to Mr. Julian Osbon, company CEO, and Ms. Jo Ann Hoffman, Marketing Director, for their significant cooperation and assistance.

Introduction

Geddings D. Osbon, Sr. and Bessie Wilcher had been married for thirty years and together had raised six children in their home in Aiken, South Carolina. They looked forward to happily growing old together. However, in the early 1960s, at the age of 59, he was confronted with a sensitive medical problem. With a shrug and a pat on the back, his physician informed him that very little could be done to correct impotence. "After three or four doctors, he was told basically to forget about it," recalled his son, Julian Osbon (Aug. Chron., 1989). However, this determined entrepreneur was unwilling to accept his physician's prognosis. He devised a treatment for his own impotence and, in so doing, invented an innovative, non-invasive solution for hundreds of thousands of impotent men.

Impotence is an extremely common medical disorder estimated by the National Institutes of Health to affect 20 to 25 percent of the U.S. adult male population (NIH, 1992). In 85 percent of the cases, impotence is secondary to an underlying organic cause, such as diabetes or vascular disease, which may or may not have been diagnosed and treated.

Impotence is also secondary to between 50 and 70 percent of surgery or irradiation for prostate cancer and is a side effect of over 250 common prescription drugs. Approximately one in three men over the age of 60 has problems with impotence (NIH, 1992).

A grade-school dropout, Osbon owned and operated the Aiken Tire Company for over sixty years until its bankruptcy in 1982. His experience in the tire industry, along with his desire to find a solution to his own impotence, would prove to be the catalysts for his invention. He simply reversed the piston on a tire pump to create a device that is widely accepted today by the medical profession. Although Osbon was not the first to experiment with negative pressure to manage impotence, he developed the concept and the first usable devise. No record of prior use exists in the medical literature (Osbon, 1994). In 1982, Osbon received the first permission from the United States Food and Drug Administration (FDA) to market a product for impotence. Through his rare combination of ingenuity and determination, Osbon became known as the father of non-invasive impotence management with vacuum therapy.

The use of vacuum and tension as a treatment option for impotence was introduced to physicians in 1985 at a national meeting of the American Urological Association. The following year, the medical journal Urology published the first recognized clinical data on vacuum therapy. At the time of his death in 1986, more than two thousand physicians had prescribed to their patients over 10,000 "Osbon Systems." Today, with over 450,000 units sold, the device commands a 75 percent share of the vacuum therapy market it created (Ext. Vac. Therapy, 1996).

In 1995, Osbon Medical Systems became a wholly owned subsidiary of Urohealth Systems, Inc. headquartered in Newport Beach, CA. As the urological division of Urohealth, Osbon remains located in Augusta, Georgia, and has grown to a $50 million company which manufactures and distributes diagnostic and therapeutic products primarily for the treatment of impotence. Osbon's hallmark product, an external vacuum device (EVD) known as the ErecAid7 System, is differentiated by a unique method of service delivery for patients and physicians.

Beginnings

Osbon developed his device in 1961 to treat his own impotence and used the product successfully for over a decade, before exploring the business viability of his invention. In 1974, he founded a company for the purpose of assembling and marketing his innovative product as a "marital aid." During these early years, Osbon enlisted the family to assist in assembling and packaging the product. His son, Julian, recounts using the kitchen table for the assembly line.

Osbon developed some educational and marketing materials to accompany his device and gradually created the small mail-order company he called Nu-Potent, Inc.. The company operated out of a two-room warehouse in Augusta, Georgia. Osbon believed his primary mission was to educate others about the safe and easy technique that was enabling him, though impotent, to participate in the physical intimacy of a loving marriage.

In 1976, the U.S. Postal Service, however, did not view Osbon's use of the mail as benevolent. Though his materials were tasteful, informative and circumspect, the federal government classified the literature as pornographic and shut the company down. But Osbon persisted. He proved to the U.S. Postal service that his materials were educational and not in any way prurient. Osbon was allowed to continue the mail-order sale of his device as a recognized marital aid, clearly removed from the category of sexual novelties (Osbon, 1994).

From 1974 through 1982 the company functioned as a one-man operation. During this period Osbon sold about 2000 units, established important contacts in the medical community and achieved several critical objectives in establishing the ErecAid® System as a legitimate and effective medical product.

Growth Years

While the revenue of these early growth years was not substantial, about $18,000 in 1983, Osbon continued establishing relationships among physicians who were beginning to show interest in his product. During this same period, he obtained both a patent and FDA permission to market the ErecAid® System by medical prescription. Within the next few years, approximately 20 clinical studies were published, with consistent reports of more than 90% effectiveness in enabling a return to sexual function using ErecAid® System (Witherington, 1989). Its status as a bona fide medical treatment was irrevocable.

In 1984, Julian Osbon joined his father in forming Osbon Medical Systems, Ltd. and assumed the operational, marketing and financial responsibilities of the Company. Following Geddings Osbon's death in 1986, Julian became Chairman and CEO of Osbon Medical Systems and gradually assembled a management team and Board of Directors to help implement his vision for the Company. In mid 1990, James B. Osbon joined his brother as Executive Vice President and later served as President and Chief Operating Officer for the company. The corporate structure was expanded to include marketing, financial, medical, technical and informational management divisions. By 1995, the operation was supported by approximately 250 employees.

Osbon is the holder of numerous United States patents and trademarks; several additional patents are pending. Osbon also holds patents and trademarks in 13 countries outside the United States.

Key Events

Two significant events stand out in the company's history. The first is the 1979 issuance of an FDA "cease and desist order," with the following FDA recognition in 1982. The second, a 1992 appearance of CEO Julian Osbon on the Geraldo Rivera show.

FDA Challenge: A Pivotal Issue. Osbon's initial contact with the FDA was a negative one. The 1976 Medical Device Act resulted in the FDA's classifying Osbon's product as a "Medical Device" under their control, requiring him to seek FDA permission to market the product. In late 1979, when the FDA became aware of Osbon's marketing of the ErecAid® product, a "cease and desist order" was issued, effectively shutting the mail-order company down (Osbon, 1994).

The event was nearly fatal for Geddings Osbon's fledgling company. However, he made the decision not to quit, but to find out what it would take to get FDA marketing permission. In the process, he learned that the Medical Device Act included a "grandfather clause" which allowed "pre-enactment products," or those being marketed prior to 1976, to retain marketing permission under certain circumstances. Osbon persisted despite many obstacles and was eventually successful in proving his current product was "substantially-the-same" as the product he had offered for sale prior to 1976.

The prescription medical device process. On October 5, 1982, the FDA gave Geddings Osbon permission to market his product as a medical device, the first time the FDA had ever permitted a non-invasive product to be sold to treat impotence. However, a stipulation requiring the sale to be "prescription only" presented what seemed like another insurmountable marketing challenge (Osbon, 1994). Doctors, not patients, became his target market. Fortunately for Osbon, he had already marketed enough of his "marital aid" products to physicians to have developed a small core of physicians who agreed to support him in marketing to the largely skeptical medical community. With this small group of willing physicians, Osbon began marketing and distributing his product as a "controlled medical device." To gain further ethical acceptance for his device, he began a process that included patient and physician support programs; clinical studies of his device; and user surveys to determine safety, effectiveness and acceptance by the patient.

FDA: Friend or Foe? Clearly, in the long run, the FDA's "prescription only" requirement was a blessing in disguise for Osbon. It gave the product creditability with each of various constituent groups. The ruling elevated Osbon's product in the eyes of the medical community and put great distance between it and the sexual novelty items in the market place.

Further, as a direct result of the FDA ruling, a toll-free patient telephone support system was developed. Osbon was concerned that any significant complaint received by the FDA might result in the loss of marketing permission, and decided to move quickly to install toll-free lines for patient access to the Company. Osbon wanted to hear the complaints before they could reach the FDA, which would give the Company the opportunity to resolve most problems. The company learned a great deal from their contact with the patients, and this proved to be the beginning of their innovative technical support program.

Geraldo Television Show

In 1992 the Geraldo Rivera Show aired a program which focused on sexual dysfunction, its causes and treatments. The show featured a panel of spokesmen for each of the major impotence management treatments, including prosthesis implant, drug injection and external vacuum device patients. A number of physicians and industry experts, including Julian Osbon, CEO of the company, also participated in the discussion (Geraldo, 1992).

During the last segment of the program, the company's ErecAid® product was featured as a highly effective, non-invasive treatment alternative. And in the last few moments of the show, Julian Osbon held up one of Osbon's educational booklets and said, "If anyone would like a copy of this booklet, Impotence: Current Diagnosis and Treatment, you can call us toll-free, and we will send you this booklet, free of charge."

The program was taped about three weeks prior to the scheduled run date, so Osbon had time to alert his support staff to the potential calls that might result from his appearance on "Geraldo." Twenty telephone lines with the 800 number were activated in anticipation of a good response. What happened was overwhelming, a major turning point in the company's history.

"They called the morning of the airing to make sure we were prepared," recounts Paul Peterson, Senior Vice President of Marketing. "We started getting calls at about 10:00AM that morning right after the program, and they continued until we left here at 3:00AM the next morning. When we arrived back at 7:00AM, the phones were still ringing continuously. We had over 600 calls logged on our voice mail. On the day of the showing our call volume shut down all other 800 service in the Metro Augusta area. We were drawing all the trunk lines for 800 service in the country into the Augusta area."

"We got about fifteen thousand calls in the first seventy-two hours, and a total of about 25,000 over the next four weeks. Many said the number had been busy for three days. It took all of our manpower just to answer the phones. So on the second day we hired temporary workers, gave them crash course training and put them on the phones. We had to attend to daily operations somehow! Our regular customers and physicians still couldn't reach us. In fact, the volume of calls actually killed our sales for three or four days. Still, "Geraldo" was one of those once-in-a-lifetime events that moved us to another level."

"What we didn't realize initially was the tremendous cost associated with servicing the twenty-five thousand calls. First you've got to answer the phones. Then you have to mail a fulfillment package. So, it cost a good deal to respond. We actually lost money the month the show aired because we sent out twenty-five thousand comprehensive information packets. We even took a look at our literature to see if we could cut some cost without sacrificing the quality of the material. The marketing staff developed new packets with a unit cost of $4. each. But we were still looking at a $100,000. cost in literature alone, not including mailing. It was a major risk for Julian to take, but he responded "full-speed-ahead!" And it paid off. Within forty-five days, sales sky-rocketed to an incredible level. It was just phenomenal." (Peterson, 1996).

Philosophy and Mission

Julian Osbon, President of Osbon, believes that the company's success depends on more than producing a much-needed, quality medical device. "Our success is contingent upon the full-service commitment we have made to men affected by impotence, their partners, the medical professionals who treat this condition and the retail sector which distributes the product," (Osbon, 1994). The philosophy of Osbon Medical Systems may be summarized in one sentence: "Our goal is not just to meet our customers' expectations; our goal is to exceed our customers' expectations, by being willing and able to do what our competitors are not willing or able to do."

Accordingly, the company's mission is to:

> "Strive to use our unique method of delivery to expand our marketing and distribution of urological medical products.
>
> Preserve our role as leader in the medical treatment of impotence by continuing to deliver quality products that provide the maximum in safety, effectiveness, patient satisfaction, risk management, competitive pricing and lowest life-time cost.
>
> Seek appropriate world-wide opportunities to acquire and/or develop innovative products and techniques backed by superior service.
>
> Leverage corporate resources to market commodity products to the urological sector of medicine.
>
> Adhere to stringent standards of ethics and tastefulness, provide opportunity to those who contribute to the company's prosperity and discover the future by profitably challenging the paradigms of the past."

The Competition

Osbon's primary product competition comes from other therapies rather than assemblers and marketers of vacuum therapy products. The strongest vacuum competitors tend to be those with established relationships with the urology profession through other products, such as implants, yet the Company's nearest competitor has about 14% market share to Osbon's 75%. The industry's weaker companies typically fail to develop effective distribution channels or service delivery and are more likely to compete solely on price. Of the seven direct competitors in the EVD industry, only four companies, Mentor Corp., Mission Pharmacal Company, Pos-T-Vac Inc. and Vet-Co, Inc., have any significant market position. Product performance, pricing policies, and customer service (physician and customer) are the most significant differentiating elements of the marketing mix (Comp. Analysis Report, 1996).

Clearly, Osbon Medical is the market leader with a dominant 75% domestic market share. Osbon's innovative method of delivery, which incorporates physician and patient training in a clinical approach, is a key factor in differentiating the company from its competitors.

Potential future competitors are the very large pharmaceutical and medical product companies whose involvement in the treatment of impotence thus far has been limited to drugs and implants. These companies could commit sizable resources to the EVD market, though it is more likely they will pursue drug therapies for impotence.

When asked who is Osbon's toughest competition, Julian Osbon responds, "In a way, our greatest competitor is ignorance! Impotence is the most common untreated treatable medical

disorder in the United States. There are millions of potential patients out there unaware of the availability of treatment and long-term support. Widespread ignorance about erectile dysfunction is the reason we commit so much of our resources to the education of the physician and the potential patient."

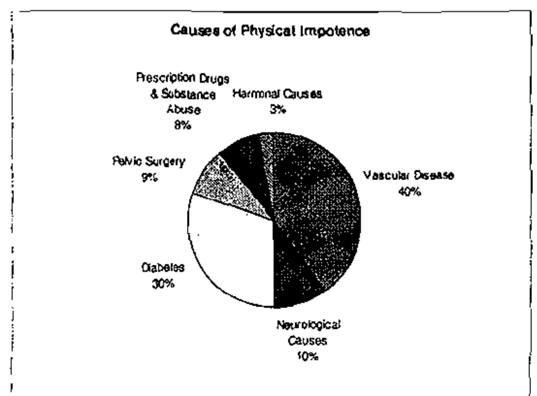
Consistent with this perspective, the company views market entry by legitimate competitors, whether with vacuum or pharmaceutical products, to be of long-term benefit to the industry. Prominent ethical companies will support and strengthen Osbon's continuing efforts at educating and increasing the market for impotence management products and services.

Marketing Overview

Osbon's products, which are available only through physician prescription, are marketed to hospitals, clinics, retailers, physicians, third-party providers, and directly to end-users. As the market share leader in the external vacuum therapy segment of the impotence management industry, Osbon has set industry standards for such issues as physician and patient education, physician support and ethical advertising practices. The marketing strategy used to develop the Company's impressive results could best be characterized as highly relationship focused. This relationship emphasis is reinforced in every aspect of the Company's operation.

Market Analysis. The potential market for impotence management products and services is enormous. Approximately 25-30 million men in the United States, as many as 20-25% of adult males, may be affected by some form of impotence. One in three men over the age of 60 has problems with impotence, and one-half of all diabetic men over 50 will become impotent (NIH, 1992). Impotence is the most common untreated medical disorder existing today. Recent research has altered the traditional diagnosis and treatment of impotence. Once thought to be psychological in origin, impotence is today believed to have an organic cause, up to 85% of the time. Though nearly 100% of all impotence has a psychological impact (Korenman, 1990). Exhibit 1 illustrates the major causes of physical impotence.

Exhibit 1



Given our rapid and continuing expansion of the over-50 market (population), and a resulting constant increase in the number of men affected by impotence-related disease, the impotence treatment market is a rapidly expanding one.

Marketing Strategy. Osbon's marketing strategy is to position their systems as the leading treatment for the management of impotence. The strategy requires the company to pursue four distinct objectives:

1. Increase the number of men seeking treatment for impotence;
2. Establish external vacuum therapy as the treatment of choice for impotence;
3. Position Osbon products as the premier product and service offering in the impotence management industry;
4. Expand the company's distribution network.

The Osbon approach seeks to develop a sound patient relationship built on education and mutual trust. The Osbon Program is designed to address potential patient concerns identified in targeted market research. The first is simply overcoming the ignorance and mystique that prevents many people from seeking medical help. The second, educating the potential patient about a simple, safe, effective, acceptable and low-cost therapy. The third, training in the correct use of the therapy. The fourth, providing a physician referral if requested and easy access to help should difficulty occur in applying the therapy in the privacy of the home; and the last, providing a warranty and liberal return policy.

The Product. The Osbon ErecAid® System consists of the following components.

A negative pressure system that uses a patented vacuum device to draw sufficient blood into the affected area.

A tension system that uses a patented tension device to temporarily reduce the rate of blood outflow.

An education, training, and support program that informs and advises those affected by impotence. In addition to general information on the diagnosis and treatment of impotence, the program teaches the patient how to safely and effectively utilize its negative pressure and tension system. An important component of the program provides the owner with confidential access to credentialled professionals who are experienced in adapting the Osbon Technique to the patient's needs. This program was created because very few physicians actually train patients in the use of vacuum therapy.

Product Warranty. The ErecAid® Systems have proven to be so successful that Osbon provides each owner with a lifetime warranty on major components of its ErecAid® Systems, and an option to return the product for a full refund with in 90 days of purchase, if Osbon's product or services are not satisfactory. Less than 1.5% of the over 450,000 systems dispensed to date have been returned.

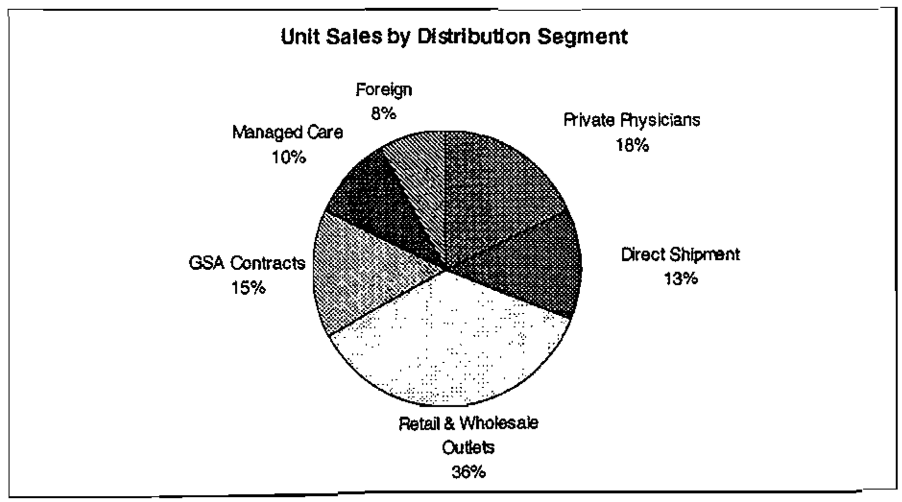
Pricing Considerations. Osbon has defined a strategy which differentiates itself through the quality, range and uniqueness of its support services as opposed to price. Julian Osbon often says, "The product hardware is fairly inexpensive. It's the services and support materials that ensure success that we provide that cost. A third of our inventory cost is in physician and patient educational materials." Though the Company experiences high gross margins, with a retail price just under $500, the operational requirements of the intensive patient and physician support services moderate profitability. Additionally, certain price concessions are offered to large quantity suppliers such as major clinics and hospitals.

Sales and Distribution Network. Osbon Medical Systems' sustained sales growth is due in large part to its integrated sales, service, and education infrastructure. This structure is designed to accommodate new products, new services, new customers and new personnel with less operational down time and a quicker introduction-to-profit cycle. Osbon is regarded as having developed the most effective physician and patient service and support system in the industry. It is the cornerstone of a unique distribution network in the industry. Key elements of the network are:

Sales force. With 83 certified technicians in the field, Osbon has one of the largest urological sales forces in the industry, supported by an inside account service staff of 24. The Osbon technicians have conducted an average of 5,000 clinical training sessions per month over the last year in doctors' offices and clinics, and the support staff handles 13,000 phone requests per month. These "clinicals" are an integral part of the total sales and support effort.

The Osbon sales force is the only organization in the urology market which is tested certified in an accredited program of vacuum therapy. The primary audiences for the company's direct sales force are urologists, endocrinologists, and family physicians, with educational efforts directed at internists, gynecologists, psychiatrists and others. The sales force is responsible for managing existing physician relationships as well as developing new ones. Exhibit 2 illustrates the unit sales percentage by distribution segment.

Exhibit 2



Physician Network. Of the 17,500 physicians prescribing Osbon impotence treatment products, about 1,100 are referral physicians who agree to educate their patients on all impotence treatment options in return for referrals of patients in their geographical area requesting a physician who treats impotence. These physicians often give local seminars on impotence using slides and literature provided by Osbon. The development of strong physician relationships provides for a vocal and credible body of support and research for its products and services. The Physician Network is a vital part of the company's marketing and distribution strategy.

Retail Referral Program. Of the 3,500 retail outlets which purchase Osbon impotence products, approximately 1,400 are under contract as exclusive dealers. In return for customer and physician referrals and significant marketing benefits, the referral retailer agrees to stock only Osbon vacuum systems. These retailers spend a combined average of $18,000 per month on cooperative advertising of Osbon products.

Wholesale Distribution Contracts. For its medical device line, Osbon has secured contracts with the three largest home health care suppliers in the country: Apria; Lincare; and American Home Patient. The Osbon distribution channel adds depth with contracts with several major drug wholesalers, including McKesson, Bergen-Brunseig, Foxmeyer and Amerisource. More recently, Osbon has contracted with VGM, a buying group with a pharmacy membership of 2,000.

Managed Care Accounts. The managed care division of Osbon Medical Systems has 70 contract/supply agreements currently managed by a staff of eight people situated in strategic geographic regions. Major managed care accounts include Aetna, Cigna, Humana, and Kaiser.

Government Accounts. Osbon Medical has Federal Supply Schedule B and Schedule D contracts which allow the company to sell and market to any Veterans Administration Hospital and to all federal military or naval hospitals or clinics. Osbon handles approximately 80% of the VA vacuum treatment business.

Promotional Strategy. Osbon's marketing group has invested significant time, energy and capital resources in meeting its unique marketing challenge. The varied aspects of service, education, training and support programs were developed in such a way as to create and reinforce a demand for Osbon products. These programs are summarized in Appendix A. Due to the sensitivity of the subject and the inherent need for carefully constructed advertising, the company has chosen to focus its efforts on print media, which it feels has a greater ability to reach its target audience. The company's insistence on ethical promotional practices helps consumers to distinguish fraudulent from legitimate products and claims.

Financial

In 1983, when Julian Osbon began marketing his father's invention, the company had sales of $18,000. Five years later, sales had grown to almost $1.4 million dollars. The following year, sales more than doubled. This spectacular growth continued every year, and reached more than $25 million in 1995. Estimated worldwide sales for fiscal 1996 are in excess of $50 million, with approximately $5.5 million in international sales. Consistent with this high growth rate, net income rose from $33,311 in 1988 to more than two million dollars in 1995.

The Company's assets grew threefold in one year—from $318,441 in 1988 to over one million dollars in 1989. By 1994, Osbon Medical Systems' total assets reached almost $8 million dollars. The financial statements are shown in exhibits 3 and 4.

Osborn Medical Systems
Statement of Income and Changes in Retained Earnings
Years Ended September 30, 1990-1995

	1995	1994	1993	1992	1991	1990
Net Sales	25,767,000	20,680,596	17,284,569	11,586,227	8,069,983	7,481,058
Less: Cost of Goods Sold	5,066,000	3,585,811	2,910,390	1,691,190	993,766	887,922
Gross Profit	20,701,000	17,094,785	14,374,179	9,895,037	7,076,217	6,593,136
Selling, General and Adm. Expenses	16,667,000	15,492,162	12,150,890	8,774,655	6,712,265	6,185,245
Operating Income	4,034,000	1,602,623	2,223,289	1,120,382	363,952	407,891
Other Income	17,000	173,512	28,413	10,021	12,297	25,528
Other Expenses	620,000	379,805	264,061	150,569	90,116	74,077
Loss on Disposal of Assets	0	1,923	8,727	59,063	0	0
Income Before Taxes	3,431,000	1,394,407	1,978,914	920,771	286,133	359,342
Deferred Income Tax/Benefit						17,874
Income Taxes	1,386,000	547,149	771,260	29,728	0	0
Net Income	2,045,000	847,258	1,207,654	891,043	286,133	377,216
Retained Earnings, Beg. of Year	2,403,387	1,556,129	1,195,823	465,340	406,512	237,296
Net Income and Retained Earnings	4,448,387	2,403,387	2,403,477	1,356,383	692,645	614,512
Less: Distribution to Stockholders	0	0	847,348	160,560	227,305	208,000
Retained Earnings, End of Year	4,448,387	2,403,387	1,556,129	1,195,823	465,340	406,512

Osbon Medical Systems
September 30, 1990-1995

* 1995 data rounded to nearest thousand

	1995*	1994	1993	1992	1991	1990
Assets						
Current Assets						
Cash and Cash Equivalents	253,000	128,459	416,647	63,210	10,592	36,726
Receivables						
Trade	3,078,000	2,841,460	2,085,869	1,557,945	860,587	773,185
Other	-	85,872	13,127	12,831	6,596	66,203
Total Trade and Other Receivables	3,078,000	2,927,332	2,098,996	1,570,776	867,183	839,388
Less Allowance for Doubtful Accounts	32,000	32,212	25,321	22,393	12,205	12,205
Total Receivables	3,046,000	2,895,120	2,073,675	1,548,383	854,978	827,183
Inventories						
Components	-	650,950	472,336	448,283	104,944	228,598
Literature	-	248,249	234,535	207,262	91,022	87,723
Direct Marketing	-	32,147	34,187	-	-	-
Total Inventory	1,215,000	931,346	741,058	655,545	195,966	316,321
Other Current Assets	136,000	223,572	320,532	145,200	61,730	111,588
Total Current Assets	4,650,000	4,178,497	3,551,912	2,412,338	1,123,266	1,291,818
Net Property and Equipment	3,363,000	1,843,772	1,447,772	896,868	716,324	596,880
Long-Term Investment	-	34,577	-	-	-	-
Other Receivables	-	29,634	-	-	-	-
Total Assets	8,013,000	6,086,480	4,999,684	3,309,206	1,839,590	1,888,698
Liabilities and Stockholders' Equity						
Current Liabilities						
Bank Overdraft	-	164,313	-	-	-	-
Line of Credit	986,000	1,232,969	1,036,881	798,843	441,507	325,329
Note Payable to Finance Company	50,000	46,392	36,885	27,648	28,894	28,045
Current Mat. of Long Term Debt	157,000	127,136	94,224	8,057	11,241	10,066
Current Obligation Capital Leases	12,000	9,984	26,215	31,042	26,992	30,962
Trade Accounts Payable	472,000	444,004	563,150	558,986	358,207	514,939
Accrued Liabilities	961,000	560,551	594,620	436,855	238,823	200,634
Income Taxes Payable	44,000	-	6,786	21,982	-	-
Total Current Liabilities	2,682,000	2,585,349	2,358,761	1,883,413	1,105,664	1,109,975
Long-Term Liab. Less Current Maturities						
Long-Term Debt	815,000	888,601	870,158	2,575	10,146	21,097
Obligations Under Capital Leases	18,000	29,951	35,444	48,203	79,248	109,422
Total L-T Liab. Less Current Maturities	833,000	918,552	905,602	50,778	89,394	130,519
Deferred Income Taxes						
Contingent Liabilities	-	-	-	-	-	62,500
Total Liabilities	3,515,000	3,503,901	3,264,363	1,934,191	1,195,058	1,302,994
Stockholders' Equity						
Common Stock	1,000	1,000	1,000	1,000	1,000	1,000
Capital In Excess of Par Value	178,000	178,192	178,192	178,192	178,192	178,192
Retained Earnings	4,319,000	2,403,387	1,556,129	1,195,823	465,340	406,512
Total Stockholders' Equity	4,498,000	2,582,579	1,735,321	1,375,015	644,532	585,704
Total Liabilities and Stockholders' Equity	8,013,000	6,086,480	4,999,684	3,309,206	1,839,590	1,888,698

It should be noted that inventories are stated at the lower of cost (first-in, first-out method) or market. In 1994 the company obtained a revolving line of credit with a bank bearing interest at the prime rate minus .25% as published in the Wall Street Journal, adjusted daily. The company sponsors a 401 (k) plan which is available to eligible employees. Annual voluntary contributions to the plan may be made by the Company at the discretion of the Board of Directors.

Production and Quality Issues

Osbon recognizes that in order to maintain their market share, continuous development of new products and refinements of established products are necessary. Significant resources are committed to product research and development on an annual basis. Additionally, many of the innovations have come from physician and end-user feedback. These innovations allow for easier, safer, faster and more effective use of the system. Also, the latest models of the product are far more compact and aesthetically pleasing.

Osbon also maintains quality control measures throughout the company. A quality assurance department ensures product acceptability in the market place. The company's quality control procedures for patient support service, product hardware, and product labeling are listed below (St. Paul, 1994).

Patient Support Service quality procedures:

- provide 24-hour technical support for safe, successful product use;
- provide accessibility to staff physicians;
- provide technicians who complete a medical certification program, accredited by CBUNA (Certification Board of Urologic Nurses and Associates);
- regularly survey customers on product and service satisfaction;
- provide comprehensive product education;
- monitor customer phone calls for quality of service;
- provide assistance with filing and appealing insurance claims; and
- solicit customer registration and communication.

Product Hardware quality procedures:

- meet stringent product specifications and apply test procedures;
- meet FDA'S GMP (Good Manufacturing Practices) standard;
- inspect all raw materials and components and institute quality testing as dictated under Military Standard 105-E for components delivered by suppliers;
- inspect and investigate all returned products and components to allow for continuous improvement; and
- destroy used products.

Product Labeling procedures: Osbon Medical Systems abides by all FDA guidelines for the labeling of prescription medical devices in Class I. Osbon has been routinely inspected by the FDA, and has maintained an "in good standing" rating. In addition, the product manual issues a clear warning about the use of tension rings according to a self-imposed time limit, which has since become the standard time-limit warning in the industry. Osbon further exceeds labeling standards by including in its manuals potential side effects, though the only known side effects are minor.

As a continuation of this commitment to high quality standards, Osbon has initiated an ISO 9000 registration program.

International Activities

Starting in 1986 Osbon Medical Systems received inquiries from foreign medical professionals and individuals expressing interest in the company's products. As the number of inquiries, along with requests to distribute these products, increased, the company appointed its first distributor on July 1, 1986 in Finland.

International sales activity in 1987 and 1988 was limited to processing orders when they came in. Late in 1989, the company decided to expand the marketing effort and develop the international market. In February 1989, Osbon International, Limited became a separate entity within the company, charged with analysis and development of international opportunities.

In September 1989 Osbon International hired the first full time employee. By the end of 1990 the company had 37 distributors in 58 countries. In 1993, a joint venture was formed with a company in the United Kingdom and activities in Europe and the Pacific Rim are expanding. In 1995 the company was selected by the U.S. Department of Commerce (Commerce, 1995) as a winner of the prestigious "E" award, a presidential award for "outstanding contribution to the export expansion program of the United States."

Urohealth Merger

In September of 1995, Osbon Medical Systems announced its intent to merge with Urohealth Systems, Inc., a California-based, publicly traded company specializing in urological and minimally invasive surgical products (AMEX-URO). In the agreement, Osbon received 15 million newly issued shares of Urohealth common stock for a total transaction value of more than $47 million The trading range for the first year was $4 - $14 per share (Annual Report, 1995).

Osbon Medical will use its international sales network to begin selling many of Urohealth's products. In effect, Osbon becomes not only the parent company's urological division, but also its marketing arm and primary distribution channel. Urohealth's strategy is to develop marketing synergy through Osbon's sales and distribution network. In a letter to the stockholders, Charles A. Laverty, Chairman and

CEO of Urohealth, said, "Osbon employs a sales force of 100 clinically credentialled technicians, calling on urologists and primary care physicians. This channel of distribution, which is the only one of its kind in the industry, is expected to be very powerful when leveraged with complementary office-based products for impotence (Annual Report, 1995)."

Urohealth Systems, Inc. was created in 1994, when Davstar Industries merged with Dacmod Corporation; both were companies that had developed products for impotence and incontinence. Urohealth has since merged with AllState Medical, a South Dakota-based company also specializing in disposable urological medical products.

In discussing the most recent merger, Laverty said, "We are continuing our strategic pursuit of growth because the market potential is so large. It is estimated that 20 to 25% of the male population is affected with impotence or incontinence." Laverty further stated, "We will now be able to offer a full line of urological products to the company's large national hospital accounts, as well as to the physicians (Marcial, 1996)."

Market Perspective: Urohealth has been a whirlwind of buyouts. There were four acquisitions in 1996 on top of five acquisitions in 1995. So far the strategy has been successful. In the past two quarters dates Urohealth has changed from a loss-ridden operation into a moneymaker. "We're impressed with the company's growth-and-acquisition strategy," says Mike Gross, partner at Apollo Advisor (Marcial, 1996).

David Pyrce, of San Francisco's investment firm Van Kasper, notes the CEO Charles Laverty is "highly shareholder-oriented" and is building up Urohealth assets and product line to create a company that larger firms may be interested in. "I wouldn't be surprised if it ends up a takeover target itself," says Pyrce (Marcial, 1996).

Organization: Following the merger, Osbon Medical Systems was reorganized. Exhibits 5 and 6 show the composite of the Board of Directors of Urohealth and the organizational chart of Osbon, respectively.

Exhibit 5

UroHealth, Inc.
Board of Directors

Charles A. Laverty
Chairman, President and CEO
UroHealth, Inc.

Lawrence Goelman
Independent Consultant

Gerald W. Timm, Ph.D.
Vice Chairman and EVP
UroHealth, Inc.

Julian W. Osbon
President and CEO
Osbon Medical Systems

Abbey J. Butler
Co-Chairman and Co-CEO
FoxMeyer Health Corporation

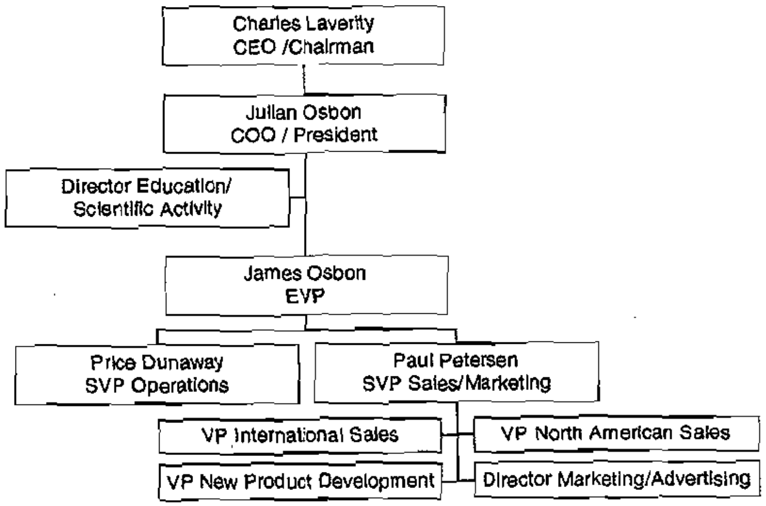
James B. Osbon
Executive Vice President
Osbon Medical Systems

Robert E. Elkins, M.D.
Chairman and CEO
Integrated Health Services

Francis Tedesdco, M.D.
Medical College of Georgia

Melvyn J. Estrin
Co-Chairman and Co-CEO
FoxMeyer Health Corporation

Exhibit 6
Osbon Medical Systems
Organization Chart (August 27, 1996)



Future Issues and Concerns

The Health Care Industry is subject to laws and regulations of the federal, state and local governments and is an area of extensive and dynamic regulatory change. Changes in the law, or regulations or in the interpretation of existing laws, can have a dramatic effect on permissible activities and the relative costs of doing business. There is no assurance that additional restrictions may not be imposed on any or all of Osbon's products or activities.

Patents and Trademarks. There is no assurance that Osbon will be able to enforce its patent and trademark rights against possible infringement by others. Osbon relies on trade secret law and confidentiality agreements to protect its non-patented proprietary knowledge. However, there can be no assurance that such confidentiality agreements will provide meaningful protection for Osbon's trade secrets or other propriety information, especially since Osbon's premiere product is based upon public domain technology.

The post merger Osbon Medical is no longer a single product focused company. As a result of the merger with Urohealth, Inc. Osbon will be marketing a very diverse product line. Interestingly, Osbon's previous marketing strategies which sold against other treatment options were presented at the expense of the options they now find themselves selling.

In the near future Osbon will be faced with additional challenges. They include the impact of managed care on the marketing of their products, development of more effective treatments, changes in the regulatory environment and achieving efficiencies in their international markets.

REFERENCES

Annual Report, Urohealth Systems, Inc., 1995, Newport Beach, California.

Augusta Chronicle, "Search for Treatment Led to Firm's Start," May 3, 1989; page 13c, Augusta, Georgia.

Competitive Information Analysis, Internal Osbon Report, 1996, Augusta, Georgia.

External Vacuum Therapy for Erectile Dysfunction, "An Historical and Clinical Review," 1996; pages 1-10, Osbon Medical Systems, Augusta, Georgia.

Geddings D. Osbon Foundation, Foundation Report, 1995, Augusta, Georgia,

"Geraldo," Impotence, The Hidden Shame, 1992, New York.

Korenaman, S.G., Viosca, S.P. Kaiser, F. E., Mooradian, A.D., and Morley, J. E., "Use of A Vacuum Tumescence Device in the Management of Impotence," JAGS, 38: 217-220, 1990.

Marcial, Gene G., "Inside Wall Street: Urohealth Looks More Robust," *Business Week*, August, 1996.

National Institutes of Health, NIH Consensus Statement, Impotence, 1992; 10 (4): 21-22.

Osbon Medical Systems, "A Company History," 1994, Osbon Medical Systems, Augusta, Georgia.

Peterson, Paul, Personal Interview, September 1996, Augusta, Georgia.

St. Paul Report, "Risk Management Guidelines for Impotence Treatment With Vacuum Therapy," 1994; page 3-5, St. Paul Fire and Marine Insurance Company, Atlanta, Georgia.

U.S. Department of Commerce, Press Release on Presidential "E" Award, April 1995, Savannah, Georgia.

Witherington, R., Vacuum Constrictive Device for Management of Erectile Impotence, *Journal of Urology*, 1989, 141: 320-322.

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