Chapter 2

ORGANIZATION STRATEGY AND PROJECT SELECTION

Chapter Outline

1. The Strategic Management Process: An Overview
   A. Four Activities of the Strategic Management Process
2. The Need for a Project Portfolio Management System
   A. Problem 1: The Implementation Gap
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   C. Problem 3: Resource Conflicts and Multitasking
3. A Portfolio Management System
   A. Classification of the Project
4. Selection Criteria
   A. Financial Criteria
   B. Nonfinancial Criteria
5. Applying a Selection Model
   A. Sources and Solicitation of Project Proposals
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5. Managing the Portfolio System
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7. Summary
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9. Review Questions
10. Exercises
11. Case: Hector Gaming Company
12. Case: Film Prioritization
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14. Appendix 2.1: Request for Proposal (RFP)
    A. Contractor Evaluation Template

Chapter Objectives

- To identify the significant role projects contribute to the strategic direction of the organization
- To stress the importance of establishing project priorities and top management support
- To describe the linkages of strategies and projects
- To describe a scheme for prioritizing projects that ensures top management involvement and minimizes conflicts
- To apply an objective priority system to project selection
- To recognize that today's world may require a shorter range strategic plan.

Review Questions

1. Describe the major components of the strategic management process.

The strategic management process involves assessing what we are, what we want to become, and how we are going to get there. The major generic components of the process include the following:

a. Defining the mission of the organization
b. Analysis of the external and internal environments
c. Setting objectives
d. Formulating strategies to reach objectives
e. Implementing strategies through projects.

2. Explain the role projects play in the strategic management process.

Strategy is implemented primarily through projects. Successful implementation of projects means reaching the goals of the organization and thus meeting the needs of its customers. Projects that do not contribute to the strategic plan waste critical organization resources.

3. How are projects linked to the strategic plan?

Projects are linked to the strategic plan because projects represent *how* a strategy is to be implemented. Since some projects are more important than others, the best way to maximize the organization's scarce resources is through a priority scheme which allocates resources to a portfolio of projects which balance risk and contribute the most to the strategic plan.

4. The portfolio of projects is typically represented by compliance, strategic, and operations projects. What impact can this classification have on project selection?

By carefully aligning your project proposal with one classification, you may increase the chances of it being selected. Remember, senior management typically allots budgets for each category independent of actual project selection. Knowledge of funds available, risk portfolio, senior management bias, etc. may cause some to attempt to move their project proposal to a different classification to improve the chances of the project being selected.

5. Why does the priority system described in this chapter require that it be open and published? Does the process encourage bottom-up initiation of projects? Does it discourage some projects? Why?

An open, published priority system ensures projects are selected on the basis of their contribution to the organization. If the priority system is not open, squeaky wheels, strong people, and key departments all get their projects selected for the wrong reasons. Bottom-up is encouraged because every organization member can self evaluate their project idea against priorities – and so can everyone else in the organization. To some, this approach may look intimidating but rarely is in practice; however, it does discourage projects that clearly will not make positive, significant contributions to the organization vision.

6. Why should an organization not rely only on ROI to select projects?

Financial criteria, like ROI alone, will not ensure that selected projects contribute to the mission and strategy of a firm. Other considerations such as developing new technology, public image, brand loyalty, ethical position, and maintaining core competencies should be considered. Furthermore, it is difficult or next to impossible to assess ROI for many important projects (e.g., Y2K projects). While ROI is likely to be a key consideration for many organizations, multiple screening criteria are recommended for selecting and prioritizing projects.

7. Discuss the pros and cons of the checklist versus the weighted factor methods of selecting projects.

Checklist Model

- Flexible
- Applies over a wide range of different types of projects, divisions, and locations
- Impossible to rigorously compare and rank project by priority
- Politics, power, and manipulation of project selection is very possible.

Weighted Factor Model

- Allows comparison and ranking of potential projects
- Open system
- Allows for self evaluation of proposed project
- Power and politic games are exposed.

Exercises

1. **You manage a hotel resort located on the South Beach on the Island of Kauai in Hawaii. You are shifting the focus of your resort from a traditional fun-in-the-sun destination to eco-tourism. (Eco-tourism focuses on environmental awareness and education.) How would you classify the following projects in terms of compliance, strategic, and operational?**
   a. **Convert the pool heating system from electrical to solar power.**
   b. **Build a 4-mile nature hiking trail.**
   c. **Renovate the horse barn.**
   d. **Launch a new promotional campaign with Hawaii Airlines.**
   e. **Convert 12 adjacent acres into a wildlife preserve.**
   f. **Update all the bathrooms in condos that are 10 years or older.**
   g. **Change hotel brochures to reflect eco-tourism image.**
   h. **Test and revise disaster response plan.**
   i. **Introduce wireless Internet service in café and lounge areas.**

   How easy was it to classify these projects? What made some projects more difficult than others?

   Most students classify the projects as follows:

Compliance:	f., h.
Operational:	a., c., i.
Strategic:	b., d., e., g.

   Most students claim it was not too difficult to classify the projects other than they had to make judgment calls given the limited information. In real life they would have such information. Debates occur around whether converting the heating system to solar polar was an operational necessity or to fit the eco-friendly image. Likewise, launching the promotional campaign with Hawaii Airlines would be considered strategic if it promoted the eco-tourism theme, otherwise it could be consider operational.

   What do you think you now know that would be useful for managing projects at the hotel?

   By classifying the projects, prioritizing is more easily done. Different selection criteria can be used for selecting strategic versus operational projects. Financially, senior management would have more information to divide the total money pie allocated to projects.

2. **Two new software projects are proposed to a young, start-up company. The Alpha project will cost $150,000 to develop and is expected to have annual net cash flow of $40,000. The Beta project will cost $200,000 to develop and is expected to have annual net cash flow of $50,000. The company is very**

concerned about their cash flow. Using the payback period, which project is better from a cash flow standpoint? Why?

Payback = Investment / Annual Savings

Project Alpha: $150,000 / $40,000 = 3.75 years

Project Beta: $200,000 / $50,000 = 4.0 years

Project Alpha is the better payback.

3. **A five-year project has a projected net cash flow of $15,000, $25,000, $30,000, $20,000, and $15,000 in the next five years. It will cost $50,000 to implement the project. If the required rate of return is 20 percent, conduct a discounted cash flow calculation to determine the NPV.**

	A	B	C	D	E	F	G	H
1								
2	**Exercise 2.3**							
3	**Net Present Value Example**							
4								
5	**Project 2.3**		**Year 0**	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**
6	**Investment**		**-$50,000**					
7	**Cash Inflows**			**$15,000**	**$25,000**	**$30,000**	**$20,000**	**$15,000**
8	**Required Rate of Return**	**20%**						
9								
10	**NPV =**	**$12,895**		**Formula: =C6+NPV(B8,D7:H7)**				

Since the NPV is positive, accept project.

4. **You work for the 3T company, which expects to earn at least 18 percent on its investments. You have to choose between two similar projects. Your analysts predict that inflation rate will be a stable 3 percent over the next 7 years. Below is the cash flow information for each project. Which of the two projects would you fund if the decision is based only on financial information? Why?**

Omega				**Alpha**			
Year	**Inflow**	**Outflow**	**Netflow**	**Year**	**Inflow**	**Outflow**	**Netflow**
Y0	0	$225,000	-225,000	Y0	0	$300,000	-300,000
Y1	0	190,000	-190,000	Y1	$50,000	100,000	-50,000
Y2	$150,000	0	150,000	Y2	150,000	0	150,000
Y3	220,000	30,000	190,000	Y3	250,000	50,000	200,000
Y4	215,000	0	215,000	Y4	250,000	0	250,000
Y5	205,000	30,000	175,000	Y5	200,000	50,000	150,000
Y6	197,000	0	197,000	Y6	180,000	0	180,000
Y7	100,000	30,000	70,000	Y7	120,000	30,000	90,000
Total	1,087,000	505,000	582,000	Total	1,200,000	530,000	670,000

	A	B	C	D	E	F	G	H	I	J
1										
2	**Exercise 4a**									
3	**Net Present Value Example Comparing Two Projects**									
4										
5	**Project Omega**		**Year 0**	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**	**Year 7**
6	**Required Rate of Return**	**18%**								
7	**Investment**		**-$225,000**							
8	**Cash Inflows**			**-$190,000**	**$150,000**	**$190,000**	**$215,000**	**$175,000**	**$197,000**	**$70,000**
9	**NPV =**	**$119,689**	Formula Project Omega: =C7+NPV(B6,D8:J8)							
10										
11	**Project Alpha**		**Year 0**	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**	**Year 7**
12	**Required Rate of Return**	**18%**								
13	**Investment**		**-$300,000**							
14	**Cash Inflows**			**-$50,000**	**$150,000**	**$200,000**	**$250,000**	**$150,000**	**$180,000**	**$90,000**
15	**NPV =**	**$176,525**	Formula Project Alpha: =C13+NPV(B12,D14:J14)							
16										
17	**NPV comparison: Accept both Omega and Alpha; or select Alpha that has the highest NPV of $176,525**									
18										
19	**Exercise 4b**									
20	**Net Present Value Example Comparing Two Projects (with inflation)**									
21										
22	**Project Omega**		**Year 0**	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**	**Year 7**
23	**Required Rate of Return**	**21%**								
24	**Investment**		**-$225,000**							
25	**Cash Inflows**			**-$190,000**	**$150,000**	**$190,000**	**$215,000**	**$175,000**	**$197,000**	**$70,000**
26	**NPV =**	**$76,650**	Formula Project Omega: =C24+NPV(B23,D25:J25)							
27										
28	**Project Alpha**		**Year 0**	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**	**Year 7**
29	**Required Rate of Return**	**21%**								
30	**Investment**		**-$300,000**							
31	**Cash Inflows**			**-$50,000**	**$150,000**	**$200,000**	**$250,000**	**$150,000**	**$180,000**	**$90,000**
32	**NPV =**	**$129,536**	Formula Project Alpha: =C30+NPV(B29,D31:J31)							
33										
34	**NPV comparison: Accept both Omega and Alpha; or select Alpha that has the highest NPV of $129,536**									

5. You are the head of the project selection team at SIMSOX. Your team is considering three different projects. Based on past history, SIMSOX expects at least a rate of return of 20 percent. Your financial advisors predict inflation to remain at 3 percent into the foreseeable future.
Given the following information for each project, which one should be SIMSOX first priority? Should SIMSOX fund any of the other projects? If so, what should be the order of priority based on return on investment?

The only project SIMSOX should consider is Voyagers. Each of the other two projects would not satisfy the high rate of return SIMSOX expects from its projects.

Project: **Dust Devils**

Year	Inflows	Outflows	Net flow	Discount Factor	NPV
0		500,000	(500,000)	1.00	(500,000)
1	50,000		50,000	0.81	40,500
2	250,000		250,000	0.66	165,000
3	350,000		350,000	0.54	189,000
					Total: $(105,500)

If calculated in EXCEL: $(106,020)

Project: **Ospry**

Year	Inflows	Outflows	Net flow	Discount Factor	NPV
0		250,000	(250,000)	1.00	(250,000)
1	75,000		75,000	0.81	60,750
2	75,000		75,000	0.66	49,500
3	75,000		75,000	0.54	40,500
4	50,000		50,000	0.44	22,000
					Total: $(77,250)

If calculated in EXCEL: $(77,302)

Project: **Voyagers**

Year	Inflows	Outflows	Net flow	Discount Factor	NPV
0		75,000	(75,000)	1.00	(75,000)
1	15,000		15,000	0.81	12,150
2	25,000		25,000	0.66	16,500
3	50,000		50,000	0.54	27,000
4	50,000		50,000	0.44	22,000
5	150,000		150,000	0.36	54,000
					Total: $56,650

If calculated in EXCEL: $55,714

6. **You are the head of the project selection team at Broken Arrow records. Your team is considering three different recording projects. Based on past history, Broken Arrow expects at least a rate of return of 20 percent. Your financial advisors predict inflation to remain at 2 percent into the foreseeable future. Given the following information for each project, which one should be Broken Arrow's first priority? Should Broken Arrow fund any of the other projects? If so, what should be the order of priority based on return on investment?**

   The first recording Broken Arrow should choose to undertake is **Tonight's the Night,** followed by **On the Beach**. The **Time Fades Away** project does not satisfy the high rate of return Broken Arrow expects from its projects.

Recording Project: **Time Fades Away**

Year	Inflows	Outflows	Net flow	Discount Factor	NPV
0		600,000	(600,000)	1.00	(600,000)
1	600,000		600,000	0.82	492,000
2	75,000		75,000	0.67	50,250
3	20,000		20,000	0.55	11,000
4	15,000		15,000	0.45	6,750
5	10,000		10,000	0.37	3,700
					Total: $(36,300)

If calculated in EXCEL: **$(36,322)**

Recording Project: **On the Beach**

Year	Inflows	Outflows	Net flow	Discount Factor	NPV
0		400,000	(400,000)	1.00	(400,000)
1	400,000		400,000	0.82	328,000
2	100,000		100,000	0.67	67,000
3	25,000		25,000	0.55	13,750
4	20,000		20,000	0.45	9,000
5	10,000		10,000	0.37	3,700
					Total: $21,450

If calculated in EXCEL: $21,551

Recording Project: **Tonight's the Night**

Year	Inflows	Outflows	Net flow	Discount Factor	NPV
0		200,000	(200,000)	1.00	(200,000)
1	200,000		200,000	0.82	164,000
2	125,000		125,000	0.67	83,750
3	75,000		75,000	0.55	41,250
4	25,000		25,000	0.45	11,250
5	10,000		10,000	0.37	3,700
					Total: $103,950

If calculated in EXCEL: $104,205

7. **The Custom Bike Company has set up a weighted scoring matrix for evaluation of potential projects. Below are five projects under consideration.**
   a. **Using the scoring matrix below, which project would you rate highest? Lowest?**
   b. **If the weight for "Strong Sponsor" is changed from 2.0 to 5.0, will the project selection change? What are the three highest weighted project scores with this new weight?**
   c. **Why is it important that the weights mirror critical strategic factors?**

Criteria / Weight	Strong sponsor	Supports business strategy	Urgency	10% of sales from new products	Competition	Fill market gap	Weighted total Part a.	Weighted total Part b.
	2.0	5.0	4.0	3.0	1.0	3.0		
Project 1	9	5	2	0	2	5	**68**	**95**
Project 2	3	7	2	0	5	1	**57**	**66**
Project 3	6	8	2	3	6	8	**99**	**117**
Project 4	1	0	5	10	6	9	**85**	**88**
Project 5	3	10	10	1	8	0	**107**	**116**

a. Rate Project 5 the highest and Project 2 the lowest.
b. Yes. The three highest are Projects 3, 5, and 1. Given the new strong sponsor weight, Project 3 becomes the first choice. However, note that Project 5 is still the near equivalent of Project 3 by the weighting scheme.
c. It is important that the weights mirror critical strategic factors because failure to do so will cause selection of projects that do not contribute the most to the strategic plan.

Case
Hector Gaming Company

This case points up a very common problem found in many businesses. Implementing organization strategy, in a large part, represents projects. In many firms there is no *interdependent* way to prioritize projects. This gap causes conflicts similar to those noted in the HGC case. Proposed projects typically come from functional areas such as marketing, production, information systems, finance, etc. with no central clearing house to ensure that resources are adequate and projects are prioritized with the strategic plan.

Students are generally good at recognizing the problem. If they fall short, it will be in showing a selection process which might work in this dynamic environment of HGC. The process and generic example shown in Figures 2.1 and 2.2 are typically used as a basis for their recommendations. For those who have had some business experience, answers very from highly creative criteria to simple, general statements. The authors find those who have doubts about a project priority system working ("It wouldn't work in my company.") will stimulate the class discussion. We find asking students to discuss examples from their work experience fruitful. The outcome usually indicates most businesses do not use a clear method for prioritizing projects to the strategic plan. The obvious question is, "Would the company be better off if it had a priority system closely linked to the strategic plan?" We end the discussion by reviewing the important role projects play in implementing strategy, the interdependence of functional groups and projects rather than independence, and the changing role of the project manager in the project driven organization.

Case
Film Prioritization

The objective of this in-class exercise is to demonstrate how a project priority system can be used to select and prioritize projects according to an organization's objectives and strategic plan. The exercise involves a film division of a large entertainment conglomerate and the priority team's decision to review and prioritize different film proposals. The priority system used is consistent with the one described in Chapter 2.

Step 1 Introduction (10 minutes)

Students read the scenario and ask questions before starting step 2. Students who have read Chapter 2 have few problems understanding what they are supposed to do. For those who did not, you may have to explain the difference between a "must" and "want" objective and that they are to multiply the impact rating with the relative importance score. For example, if the film proposal is considered to have a high potential for being nominated for an Academy Award for Best Picture of the Year, then it would receive a weighted score of 120 (2 x 60). You may also have to explain the ROI probability information included with each proposal. For example, for proposal #1 (My Life with Dalai Lama), there is an eighty percent chance that it will earn 8 percent return on investment, a fifty-fifty chance the ROI will be 18 percent, and a 20 percent chance that the ROI will be 24 percent.

Step 2 Individual assessment (10 minutes)

Students use the Project Priority Evaluation Form provided in the text to assess and rank the seven proposals on their own.

Step 3 Priority team assessment (15-20 minutes)

Students meet in small groups of four to five students to collectively assess and rank the seven film proposals. Students should be instructed to not simply vote or calculate the average ranking for each proposal but to discuss their ratings and to try to reach a group consensus for each proposal.

Step 4 Priority team report ratings (5 minutes)

Students select a leader to report their final rankings either on a blackboard or on a transparency using the priority team assessment form provided in the teacher's manual.

Step 5 Discuss results (10-15 minutes)

As a class, students should compare and contrast the rankings of each group. Where there is disagreement across groups, students should be asked to explain the rationale behind their ratings. The intent is not to reach a class consensus but rather to explore how different groups interpreted the information.

The one proposal that there is likely to generate the biggest disagreement is proposal #1 (My Life with Dalai Lama). Astute students will reject this proposal for not meeting the must objective of having "no adverse effect on other operations." They will point out that the company has plans to open a theme park in mainland China, and the Chinese government would frown upon a film on the Dalai Lama since he is a focal point for resistance to China's control of Tibet. This is based on an actual incident involving the Disney Corporation. Under pressure from the Chinese government, Disney withdrew active support of filmmaker Martin Scorese's biographical account of the Dalai Lama's life entitled "Kundun" in 1997.

After discussing the differing results, the students should be encouraged to discuss the value of using this kind of approach to select and prioritize projects. Here it should be emphasized that this approach reduces the role that organizational politics can play in project selection and aligns projects with the strategy and objectives of the firm.

If the class includes students from industry, then this would be an opportune time to ask them how their organization selects and prioritizes projects and whether such a system would be appropriate for their organization.

In general, this exercise has proven to be a fun and easy exercise to implement and does a good job of demonstrating how a project priority system can be used to select projects that meet the objectives of a firm.

Variation on the exercise:

To conserve time, Step 2 can be skipped and the students can immediately work in groups to rank the proposals.

TP 2-1

Priority Team Assessment Form
Group Rankings

#	Title								
1	**Dalai Lama**								
2	**Heidi**								
3	**Year of Echo**								
4	**Escape - Rio J**								
5	**Nadia!**								
6	**Keiko**								
7	**Grand Island**								

X = Eliminated; 1 highest ranking, 2 second highest, ……

Project Priority Evaluation Form

Must objectives		Must meet if impacts	1	2	3	4	5	6	7
Meets all safety and environmental standards		Y = yes N = no N/A = not applicable							
PG or G rating		Y = yes N = no N/A = not applicable							
No adverse effect on other operations		Y = yes N = no N/A = not applicable							
Want objectives	**Relative Importance 1–100**	**Single project impact definitions**	Weighted Score	Weighted Score	Weighted Score	Weighted Score	Weighted Score	Weighted Score	Weighted Score
Be nominated for Best Picture of the Year	**60**	0 = No potential 1 = Low potential 2 = High potential							
Generate additional merchandise	**10**	0 = No potential 1 = Low potential 2 = High potential							
Create a new, major animated character	**20**	0 = No potential 1 = Low potential 2 = High potential							
Raise environmental concerns	**55**	0 = No potential 1 = Low potential 2 = High potential							
Generate profit greater than 18%	**70**	0 < 18% 1 = 18–22% 2 > 22%							
Advance state of film animation	**40**	0 = No impact 1 = Some impact 2 = Great impact							
Provide basis for new theme ride	**10**	0 = No potential 1 = Low potential 2 = High potential							
		Total weighted score							
		Priority							

Case
Fund Raising Project Selection

The objective of this in-class exercise is to demonstrate how a project priority system can be used to select and prioritize projects according to an organization's objectives and strategic plan. The exercise is an alternative to the Film Prioritization case featured in this chapter. The exercise involves a class on project management and the priority team's decision to review and prioritize different fund raising proposals. The priority system used is consistent with the one described in Chapter 2.

This exercise is based on the author's experiences using fund raising projects to teach project management fundamentals and is based on actual projects and proposals.

Step 1 Introduction (10 minutes)

Students read the case and ask questions before starting step 2. Students who have read Chapter 2 have few problems understanding what they are supposed to do. For those who did not, you may have to explain the difference between a "must" and "want" objective and that they are to multiply the impact rating with the relative importance score. For example, if the proposal is considered to have a high potential for earning more than $1,000, then it would receive a weighted score of 180 (2 x 90). Proposals which fail to meet a "must objective" are to be rejected without further evaluation.

Step 2 Individual assessments (10 minutes)

Students use the Project Priority Evaluation Form provided in the text to assess and rank the six proposals on their own.

Step 3 Priority team assessments (15-20 minutes)

Students meet in small groups of four to five students to collectively assess and rank the six fund raising proposals. Students should be instructed to not simply vote or calculate the average ranking for each proposal but to discuss their ratings and to try to reach a group consensus for each proposal.

Step 4 Priority team report ratings (5 minutes)

Students select a leader to report their final rankings either on a blackboard or on a transparency using the priority team assessment form provided in the teacher's manual.

Step 5 Discuss results (10-15 minutes)

As a class, students should compare and contrast the rankings of each group. Where there is disagreement across groups, students should be asked to explain the rationale

behind their ratings. The intent is not to reach a class consensus but rather to explore how different groups interpreted the information.

After discussing the differing results, the students should be encouraged to discuss the value of using this kind of approach to select and prioritize projects. Here it should be emphasized that this approach reduces the role that organizational politics can play in project selection and aligns projects with the strategy and objectives of the firm.

If the class includes students from industry, then this would be an opportune time to ask them how their organization selects and prioritizes projects and whether such a system would be appropriate for their organization.

In general, this exercise has proven to be a fun and easy exercise to implement and does a good job of demonstrating how a project priority system can be used to select projects that meet the objectives of a firm.

Variation on the exercise:

To conserve time, Step 2 can be skipped and the students can immediately work in groups to rank the proposals. Alternatively, students could do Step 2 before class.

What really happened?

As noted in the text this exercise is based on actual projects proposed by students in our project management classes. With the exception of Raffle for Life additional information can be found about these and other projects at http://business.oregonstate.edu/faculty-and-staff-bios/erik-larson. The Raffle of Life proposal was rejected for failing to meet the "must objective" of providing opportunity to experience and learn about project management. The lack coordination involved in conducting a raffle was deemed inadequate.

Hoops for Life raised $1,575. There were several Asian Americans on this project team who were active in State wide Asian American community. They used their contacts and social capital to attract teams from up and down the Willamette Valley.

Singing for Smiles raised $607. The night spot they hosted their event did not allow them to charge a cover fee and they had to rely on donations from patrons. They were not able to capture the imagination of the campus and relied on regular Karaoke participants.

Halo for Heroes raised $1,458. This event has been done twice with the second one attracting several participants from the first event. A key to their financial success was switching from individual competition to team competition.

Hold'em for Hunger raised $705. This is one of several poker projects. Others raised between $405 to $1,010. Students realized that they would have made much money if they had used product donations instead of cash for prizes.

Build your own Box raised $110. To promote the event and counter the argument that students would be having fun at the expense of the homeless, three members of this team actually went homeless for three nights and were featured in local newspaper and news. On the night of the event a severe rain storm hit the campus and only three participants showed up.

TP 2-2

Priority Team Assessment Form
Group Rankings

#	Title								
1	**Hoops 4 Hope**								
2	**Singing for Smiles**								
3	**Halo 4 Heroes**								
4	**Raffle 4 Life**								
5	**Hold'em 4 Hunger**								
6	**Build your own Box**								

X = Eliminated; 1 highest ranking, 2 second highest, ……

Project Priority Evaluation Form

Must objectives		Must meet if impacts	1	2	3	4	5	6	7
Be safe, legal, & comply with University Policies		Y = yes N = no							
Earn at least $500		Y = yes N = no							
Can be completed within 9 weeks		Y = yes N = no							
Opportunity to learn Project Management		Y = yes N = no							
Want objectives	**Relative Importance 1–100**	**Single project impact definitions**							
Earning potential	**90**	0: 500–750 1: 750–1500 2: >$1500 3: >$2000							
Fun	**30**	0: None 1: Some fun 2: A lot of fun							
Increase awareness of charity	**30**	0: No potential 1: Low potential 2: High potential							
Resume worthy	**40**	0: No potential 1: Low potential 2: High potential							
Be featured on local TV news	**40**	0: No potential 1: Low potential 2: High potential							
		Total weighted score							
		Priority							

Supplemental Case
Jarvis Communication Corporation

This case was included in the first two editions of the book and is included here so that teachers can hand it out or post it on the web for class discussion.

Background

Jarvis Communication is a start-up firm that develops, manufactures, and markets a miniature telephone. Last year's sales revenue was $6.5 million, resulting in its first profitable year in its first three years of business. The phone is unique because it is only two inches long, weighs two ounces, and a miniature receiver is worn in the ear. The phone speaker and microphone carry out all the normal functions of a phone (except dialing) without the use of a mouthpiece. The phone uses bone conduction technologies that detect small, minute vibrations in the skull when a person talks. The phone sells for $99. Jarvis's markets have grown quickly and have become worldwide; analysts believe the market will grow 50 percent per year for the next five years.

Most of the development of the miniature phone was done by the founder, Ms. Carly Jarvis, an electrical engineer. She is also the primary source for more than 20 new products already designed with accompanying engineering drawings. Jarvis believes innovation in modes of telecommunications is the key to future success of the company. She believes quality is number one; profits and returns to stockholders will follow.

Only last month the company purchased a small circuit board company that specializes in bonding small silicon chips on printed circuit boards. Jarvis Communication stock sells over the counter. Management is thinking it will be necessary to become listed on the New York Stock Exchange if large expansion becomes desirable.

Management

The company employs 120 people and is organized in a matrix form to facilitate the project environment. Every employee behaves as if quality is an obsession. Jarvis believes the management style should be collegial, the workplace environment should be one employees enjoy, and the company should provide products that make life easier and more productive. Marketing is responsible for direct and original equipment manufacturer (OEM) sales. Engineering is responsible for design and improvement of all products. Manufacturing controls production and product quality.

Future

External. The market for telecommunication products is expected to grow by 20 percent for the next seven years. Although Jarvis Communication has no competitors today, many new entrées in the market are expected in the near future. Time to market will become more important with each passing day. Keeping a flow of new products will be necessary to survive. Strategic alliances with computer and communications firms appear inevitable as the industry and product lines develop. The biggest threat comes from the Orient.

Internal. The most exciting new product prototype is the cordless miniature telephone. This phone will allow people to walk around and use their hands while wearing the phone. The phone fits in the ear and requires the user to carry a small pack about the size of a chewing gum pack and weighing approximately one ounce. Marketing expects to sell the phone for $150. The next step is setting up for manufacturing large quantities as quickly as possible. Manufacturing is asking, "Do you want the new phone good, fast, or cheap? Pick any two."

Another product is a miniature phone that uses voice-activated technology for computers—to dial customers and to record and transmit data. This prototype has been demonstrated with the Apple line of computers. Because the phone uses bone conduction technology (not air), background noise is virtually filtered out, so sound is significantly improved over traditional phones. Marketing believes this phone can sell for about $200.

Other products designed, but not developed as prototypes, are listed here:

1. Voice imprint documentation.
2. Miniature programmable phones to hold more than 100 telephone numbers.
3. Special sets for major surgery operations to send and receive instant information, for example, to and from Mayo Clinic or Texas Cancer Clinic. This product is dubbed the "socially conscious" product.
4. Voice-activated cellular phone communications for the military and police, the elimination of the traditional microphone, voice activation, and ability to "wear the phone" all have attracted many classes of target customers.
5. Reduction of printed circuit board size by 75 percent by the new acquisition has unlimited potential.

Jarvis Communication management feels now is the time to prepare for full-scale manufacturing and a marketing thrust into the communications and computer industries. The company currently has $2 million in cash reserves to start this effort. Additional funds for future expansion are available through stock issues.

Jarvis has asked your management team to develop a mission statement, three major goals, and objectives for Jarvis Communication. She also wishes each functional area to develop four key objectives that support your corporate objectives. Be prepared to justify the document you submit to her.

The Jarvis Case Teaching Tips

This group exercise case is used to demonstrate the difficulty of writing missions, goals, and objectives within the limitations of the internal and external environments. Students often need gentle prodding on differentiating among missions, goals, and objectives—during the exercise. One of the major points of the exercise is to have the student recognize the linkage among mission, goals, and objectives. Another point is to allow the student to review some of the characteristics of "good mission" statements. The Jarvis Company is small, by most standards, and depends on Ms. Jarvis for all development. Student groups will be all over the map in terms of what the organization should be doing in the future. When the groups report to the class, other groups will take issue with the

ability of Jarvis Company to achieve goals. The class discussion varies depending on student background. Wrap up should include a discussion of the difficulty of doing such an exercise in the real world. Another question can center on the value of mission, goals, and objectives in the real world. What happens if these are not present?