

Developing a Foundation for Strategy at Seagate Software

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Seagate Software provides tools and applications for managing and accessing information. In 1995, Seagate Technology began building the company using a strategy of acquiring software companies with synergistic products for information, network, and storage management. After over a dozen acquisitions, it needed to integrate them into a single company with a common vision and a shared sense of values. To help, Seagate used value-focused thinking to create and organize a complete set of company objectives based on discussions with key individuals, originally from several different acquired companies. The discussions also provided a list of issues and decision opportunities to address. Seagate used the objectives as a foundation for talking about the desired properties of vision and mission statements and creating several possibilities for each. The process and the resulting vision and mission statements contributed to creating a single company with clear, agreed-upon direction.

Seagate Technology is the largest manufacturer of disc drives and components in the world. By 1993, Seagate's annual revenues were \$3 billion. In August

1993, Al Shugart, the chairman of the board and CEO of Seagate, outlined his plan for company growth through the end of the century. The plan was for Seagate to

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grow to \$6 billion in revenue. Of the growth from 1993, \$1 billion was to be in the core hardware business (for example, disc drives), \$1 billion was to be in component sales (for example, magnetic heads), and \$1 billion in software. The intent of Seagate's expansion is succinctly stated by Mr. Shugart in the 1997 annual report [Seagate 1997, p. 22]:

I want people to use our hardware and software products because they want to, not because they have to. These products will help people do their jobs better and faster, and let them get home to their families and lives sooner. With the achievement of this goal, the twenty-first century will be even more amazing than the twentieth century, and Seagate will do well as a result.

The software business represents a distinct but synergistic expansion from Seagate's hardware base. Seagate's strategy for building the software business was to acquire software companies with products for information, network, and storage management. To guide the acquisition strategy, Shugart hired Steve Luczo of Bear Stearns to be senior vice-president of corporate development and provided \$1 billion for acquisitions [Hammett 1994]. The first acquisition in May 1994 was Crystal Computer Services of Vancouver, British Columbia, which created Crystal Reports and Crystal Info. Since then, Seagate has made over a dozen acquisitions.

As Seagate purchased companies, it needed to integrate them into a single company with a single vision and mission and set of values. This was particularly important because some of the former companies had been competitors and others were working in distinctive niche business areas. In late 1995, I began working

with Steve Luczo to help in this integration and to provide some guidance to facilitate coordinated decision making. In 1996, Seagate Software, Inc., a wholly owned subsidiary of Seagate Technology, was created as the organization to include and integrate all the software businesses.

Approach

I conducted several structured discussions with top managers at both Seagate Technology and Seagate Software. First, I gathered perspectives about the objectives for Seagate Software and issues facing the organization in separate discussions with various individuals, including Al Shugart, Steve Luczo, Don Waite (CFO of Seagate Technology), Terry Cunningham (currently president and CEO of Seagate Software and general manager of the Network and Storage Management Group), Ellen Chamberlain (senior vice-president and CFO of Seagate Software), and Greg Kerfoot (chief strategic officer of Seagate Software and general manager of the Information Management Group). The individual discussions allowed each participant to fully express his or her viewpoints.

I then combined all of the stated objectives into a logical structure that indicated their relationships to each other (that is, which objectives influenced the achievement of other objectives) and provided a set of strategic objectives to guide all decisions. The complete set of objectives was used for several purposes:

- Specifying additional issues to be addressed;
- Identifying decision opportunities that could be pursued; and
- Developing preliminary versions of a

vision statement and a mission statement.

I conducted the next round of individual meetings to prioritize the issues and to clarify opportunities to pursue. Also, I gathered feedback on the vision and mission statements in order to modify them appropriately. The results provided useful insight to Seagate Software management for strategic thinking and for subsequent action.

Strategic Objectives

I conducted discussions to elicit objectives for Seagate Software with 12 individuals. I followed the general format prescribed for value-focused thinking sessions [Keeney 1992]. Each meeting lasted about one hour. At the beginning of each meeting, I told the participant that I would document the discussion and send him or her a written copy for review, modifications, deletions, and additions within a week. I wanted to show the participants that their stated objectives matter, because we are going to work on and work with the results.

At the beginning of the substantive discussion, I asked each person to discuss any objectives, hopes, aspirations, desires, or plans he or she had for the organization. I encouraged participants to proceed in any way that seemed natural to them. Essentially, everyone could easily outline for five to 15 minutes his or her vision for the company. As they spoke, I made three lists: one for statements that indicated objectives, one for issues that should be addressed, and one for opportunities that could be taken.

After writing down each person's initial thoughts, I guided the discussion into areas that had perhaps been only lightly

covered. For instance, I might ask, "What are Seagate Software's objectives for its customers?" I was guided in identifying such areas by my general reading about the new business, prior discussions with Steve Luczo, objectives mentioned by previously interviewed individuals, and by an overall logical structuring of possible categories of objectives. For example, since the focus was on the software organization, one category concerned what was wanted from the software groups. Two other categories concerned objectives for Seagate Technology and for software employees to enable the software groups to achieve their objectives. Additional categories concerned stakeholders' objectives that would be better served if Seagate Software better achieved its objectives. The stakeholders were customers, software employees, shareholders, society, and Seagate Technology. One other important category was individual objectives. I would ask, "What professional or personal objectives do you hope to achieve by being part of Seagate Software?"

Why is this objective important?

As a result of the discussion, individuals would usually identify several additional items for each list. To clarify each objective and to understand it better, I would ask, "Why is this objective important?" Frequently, the response was that it would contribute to achieving other objectives. If these other objectives were not on the list, I would add them. Often, this process would lead to long chains. Better products lead to more sales, which lead to both

more satisfied customers and greater profits. This process of logically connecting objectives through means-ends relationships also helps to structure objectives and to indicate where employees working for part of the big company (that is, product development, service, sales, or hiring) fit in.

Besides asking why an objective was important, to increase my understanding of stated objectives, I would ask, "What exactly do you mean by this objective?" For example, if someone stated an objective as: "to provide the best product for customers," I would pursue the meanings of best product and customer. I wanted to clarify the exact meanings of objectives and to develop a complete set of objectives.

For every category, participants listed several objectives.

After each discussion, I sent the participant a written list of the objectives he or she had articulated and a preliminary means-ends objectives network relating all of the objectives. I encouraged each person to make additions and modifications. The summary letters gave participants an opportunity for feedback and clearly indicated that I had listened and considered their thoughts useful and important.

After all the discussions and feedback, I combined everyone's objectives and organized them into numerous categories (Figure 1). The initial enabling objective is for Seagate Technology to help the software companies to be successful. Better achieving this objective helps software to have the best employees, and pursuing both of these objectives helps the software units

create the best software organization. This in turn leads to better achievement of each of the stakeholder's objectives.

For every category of objectives, the participants listed several specific objectives. For example, managers at Seagate Technology listed many objectives for Seagate Software that indicated the breadth of their concerns and provided a basis for identifying the decision opportunities and issues facing Seagate Software (Table 1).

Issues and Opportunities

The in-depth elicitation and structuring of objectives brought out many issues that should be addressed and suggested opportunities for achieving various objectives. Examples of each with respect to the objective "Define Appropriate Strategy" are shown in Table 2.

The issues list typically consists of problems the company needs to address and the opportunities list contains suggestions for solving them. Paired with the issue of ensuring follow-up on software decisions is the opportunity of establishing a simple process to insure that decisions are implemented. Sometimes, the opportunity is an opportunity to make a decision among several alternative actions that should be evaluated. For instance, one might first ask what are the desired properties or objectives of a simple process to ensure implementation. Then, people may suggest several processes and discuss their pros and cons before choosing one.

My discussion partners identified most of the issues listed during the sessions to elicit objectives. They were aware of their shortcomings and as a result could readily suggest issues. On the other hand, structuring the objectives and examining them

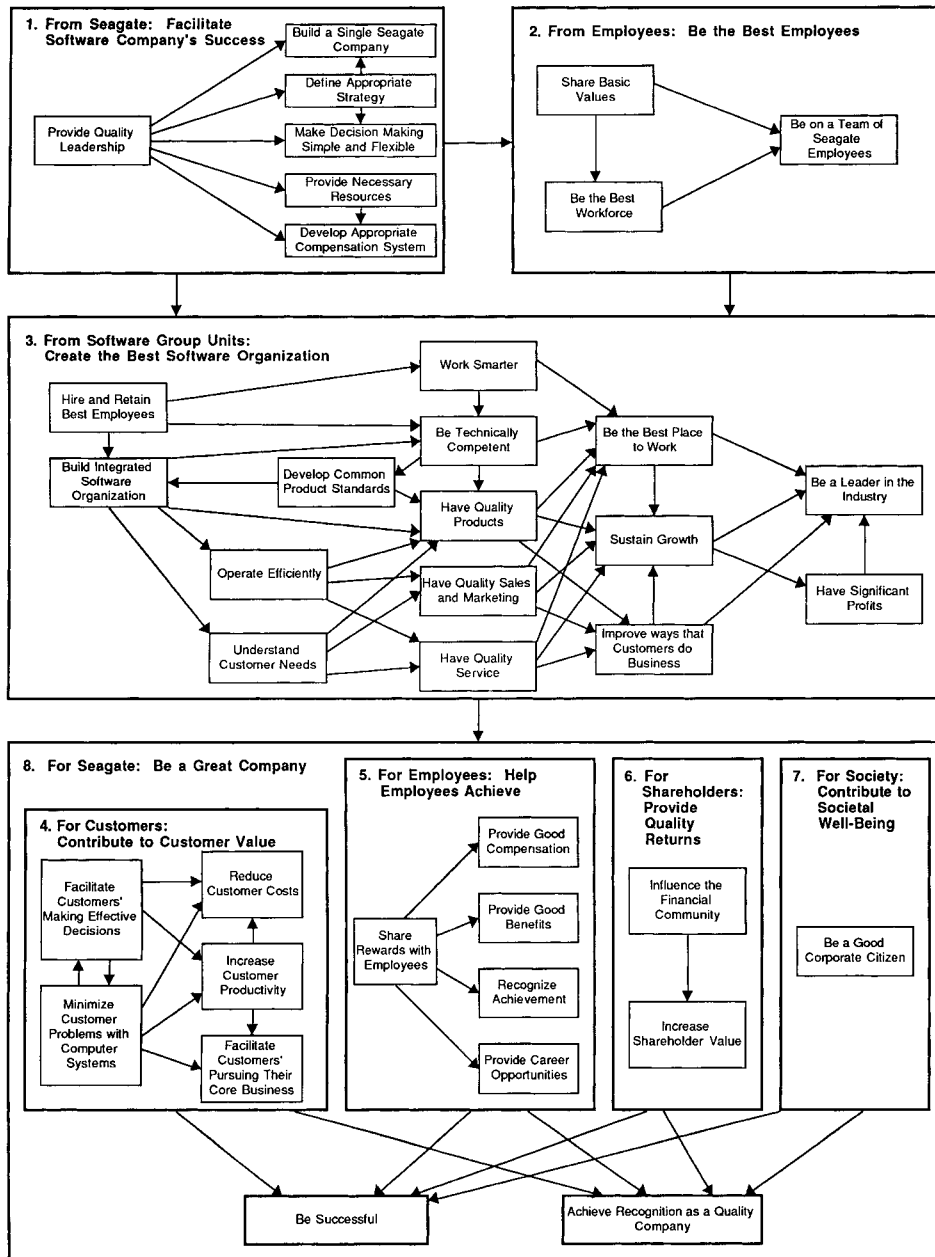


Figure 1: In this diagram of the means-ends objectives network for Seagate Software, the major objectives are represented by large numbered boxes with component categories of objectives in smaller boxes. An arrow from one objective to a second objective indicates that better achieving the former objective influences the achievement of the latter objective.

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Major Objective 1: Facilitate the Software Company's Success

Objective 1A. Provide Quality Leadership

- Provide leadership. (Cu23)
- Form the right management team. (Co6)
- Provide a strategic vision. (Kr24)

Objective 1B. Build a Single Seagate Company

- Minimize the likelihood of divisiveness within Seagate. (W11)
- Improve the relationship between the software organization and Seagate. (Ke15)
- Facilitate cooperation between hardware and software. (Kr16)
- Integrate the software company emotionally within Seagate. (Sh18)
- Leverage the ability to meet the mission. (A3)

Objective 1C. Define Appropriate Strategy

- Develop a winning technical strategy. (A6)
- Develop a sound overall business strategy. (A8)
- Develop a good overall software strategy. (Ke16)
- Help the separate software companies to excel in their specialities. (M14)
- Help the separate software companies to define their own objectives. (L2)
- Help the software companies to implement their own objectives. (L3)
- Help the software companies to achieve their original objectives. (L4)
- Help the software companies to achieve the overall software group strategy. (L10)
- Encourage community service. (Sh20)
- Be the first to acquire and successfully integrate software companies. (Y6)

Objective 1D. Make Decision Making Simple and Flexible

- Permit efficient and flexible decision making in software organization. (Sh24)
- Allow software organization flexibility to meet overall Seagate goals. (Ke17)
- Minimize external control of the software group. (Cu6)
- Minimize bureaucracy from headquarters. (Cu26)
- Minimize bureaucratic interference. (Co21)
- Provide flexibility to manage software companies. (Ch7)
- Have Seagate Software rather than hardware make functional approvals. (Ch25)

Objective 1E. Provide Necessary Resources

- Provide sufficient financing. (Sch11)
- Provide resources if needed. (Cu3)
- Provide added value. (Cu5)
- Provide the necessary resources. (Co4)
- Be value-added to software companies. (Ch5)
- Put the right infrastructure in place. (Ch1)
- Put human-resources infrastructure in place. (Ch3)

Objective 1F. Develop Appropriate Compensation System

- Institute a fair compensation system. (W10)
- Provide some compensation in the form of equity. (W12)
- Provide just financial rewards for contributions. (Sch15)
- Provide financial rewards consistent with those in the software industry. (Ke18)
- Tie financial rewards to the group's performance. (Ke19)
- Tie incentive payments to the success of the software business. (M17)
- Provide incentives to retain the management team. (Co7)

Table 1. In this list of the strategic objectives of Seagate Technology that would positively influence Seagate Software's integration and development, the individual who stated each objective is indicated in parentheses (by letters) along with which objective this was on his or her list (by numbers). This allowed all to see where their concerns fit in and that they were included. Table 1 also clarified that each participant provided at least one of the strategic objectives.

Strategic Issues

The need to ensure thorough follow-up on decisions the software group makes.

The need for a policy on how to prioritize development tasks and how to allocate those tasks across Seagate Software companies.

The need to decide whether one software company or three will focus on information management, storage management, and network management.

Strategic Opportunities

Develop principles for how Seagate Software will be run to set expectations for people and groups.

Establish a simple process to ensure that decisions the software groups make are implemented.

Carefully examine the pros and cons of having a president of Seagate Software during its formative stage.

Clearly articulate the objectives to be fulfilled by such a person.

Modify and reach consensus on the vision and mission. Do this as part of software management meetings (perhaps involving Al Shugart and Don Waite) so everyone knows that all are in this together as a team. As a basis, use the draft vision and mission statements.

Table 2. In-depth elicitation and structuring of objectives brought out many issues that should be addressed and suggested opportunities for achieving various objectives, among them these examples of issues and opportunities to help define appropriate strategy.

helped me to see opportunities. For each objective, I tried to define opportunities that might help Seagate to better achieve that objective. In addition, I reviewed each issue and tried to identify opportunities open to Seagate to address it.

Together we identified 59 issues and 28 opportunities. The participants agreed that most had some merit but that all could not be addressed at once and that some were much more important than others. A prioritization was needed.

In April 1996, I conducted simple evaluations of the issues and of the opportunities. Six individuals then leading the software management team each filled out a questionnaire to categorize the issues and opportunities as follows:

- (1) Top priority—very important and should be addressed now;
- (2) Important—valuable and necessary for Seagate Software and should be addressed within three months;

(3) Worthwhile—would be useful and contribute to Seagate Software and should be addressed within six months;

(4) Not worthwhile—would not likely yield benefits worth the effort;

(A) Is already being addressed; and

(X) Issue or decision opportunity is not clear.

To get an indication of the group's priorities, I averaged the numerical rankings and neglected any of category A or X in these averages. There is no strong theoretical justification for averaging individual rankings. However, averaging ranks in this case makes common sense, since the number of items to which an individual could assign each priority number was not limited, and the average rank indicates the group's high-priority items without finally prioritizing among them.

Key software managers reviewed the ranking and chose to take action regarding several of the highest priority issues and

opportunities. To provide a flavor for these, I will describe three high priority issues:

(1) Articulate a clear business strategy with objectives specified and manage the achievement of these objectives well. This should position us in the market and clearly indicate who our competitors are. We need to paint a picture of what we want to look like in the future and clearly state the principles we intend to operate under to get there.

(2) Instill a sense of urgency with all employees about achieving the mission so Seagate Software can maximize its chances for success.

(3) Make employees understand that execution is more important than what they say they will do or could do. Follow-through on decisions of the software group is crucial.

Three of the high-priority opportunities were the following:

(1) Involve the key individuals of the software companies in defining appropriate strategy. Give the different groups freedom to operate combined with responsibilities for contribution.

(2) Modify and reach consensus on the vision and mission. Do this as part of software management meetings so everyone knows that all are in this together as a team. As a basis to begin, use the draft vision and mission statements.

(3) Set up a forum where different software companies can share their knowledge and experience and learn from each other's successes and mistakes.

In coming up with issues and opportunities and in prioritizing them, value-focused thinking offers some advantages

not typically stressed in most strategy-setting procedures. The purpose of strategy is to develop plans to best achieve the overall objectives of the organization [Porter 1980]. Value-focused thinking offers concepts and procedures people can use to identify and structure all of these objectives. These procedures give all key players a voice and allow them to learn from each other, which presumably strengthens support for the strategies that emerge.

With a clear structure of objectives, as in Figure 1, executives can see how to best evaluate and identify proposed strategies. For example, if the strategy is to ensure quality products, then one should identify what components of that strategy affect any of the objectives contributing to that objective. In short, one can identify strategic alternatives by creating ways to achieve the means objectives that lead to the stated objective. Value-focused thinking also gives people a common basis for evaluating possible strategies. They can consider the objectives potentially influenced by the strategies for this purpose. If they are looking at broad strategies, then they can use the strategic objectives of the firm. For Seagate Software, this could be objectives four through seven in Figure 1.

Vision and Mission

As the Seagate Software organization was being formed, it had no vision or mission statement. The vision should be a snapshot of what Seagate Software wants to be at the end of the century, and the mission should be a statement of how to achieve the vision. Both are important, and together they should form a succinct statement of the result of achieving the ob-

jectives well (the vision) and how this will be done (the mission). Stephen Covey, the author of *The Seven Habits of Highly Effective People* [1989, p. 143], said, "An organizational mission statement—one that truly reflects the deep shared vision and values of everyone within that organization—creates a great unity and tremendous commitment."

In developing the vision and mission statements, we went through several steps: we listed the elements of information we might include, we specified different ways to communicate those elements, we developed prototype statements incorporating those elements, we reviewed and appraised the proposed statements, we developed different drafts, we appraised again, we selected an initial draft statement, and we reworded and edited it. Since the processes were similar, let me just state the draft vision statement that resulted from this process and then discuss the mission statement in more detail.

The draft vision statement was: *Seagate Software's vision is to be the world's leading producer of network, storage, and information management products.*

For the mission statement, we identified the elements listed in Table 3. To illustrate different ways to communicate an element, consider the following alternative ways suggested to communicate the value of the service provided:

- V₁: Better utilize information to make better-informed decisions;
- V₂: Reduce the time and cost and improve the effectiveness of using information;
- V₃: Make appropriate information accessible, manageable, and easy to use from any

- computer terminal;
 - V₄: Put the power of information under the control of the individual computer user;
 - V₅: Manage information to make more effective decisions;
 - V₆: Use the power of information to make more effective decisions; and
 - V₇: Enhance effective decision making.
- We constructed several prototype mission statements from these elements. Four of these are indicated in Table 4.

The firm has acted upon almost all of the highest-priority issues and opportunities.

With the prototypes, we were able to systematically review elements and decide which to include. In discussions with software managers, we decided to eliminate elements E, S, L, P, and C. The benefits to employees (E) and to stockholders (S) follow from achieving the technical mission represented by V and T, elements we thought should be included. A leader element (L) is in the vision and need not be repeated. Describing the general product areas (P) and stating that service was for customers (C) both seemed obvious and would contribute little. The mission statement should state Seagate Software's mission (M) and include the need to win customers (W) to emphasize its importance for maximizing the firm's chances of success.

Next, we developed several prototype mission statements that included just the M, V, T, and W elements. After discussing these, we selected an initial draft: "Seagate

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M: State "Seagate Software's mission"

V: Value of service provided

T: Technology-specific focus of Seagate Software

P: Products-general area

W: Need to win customers

C: Mention that service provided is for customers

E: Benefits to employees

S: Benefits to shareholders

L: Be the leader

Table 3. We identified these possible elements of a mission statement for Seagate Software.

Seagate Software is committed to being the world's technology leader in software management: to provide superior growth and profits for shareholders, to allow customers to better utilize their information to make better informed decisions, and to attract and reward quality employees. (L, P₁, S₁, C₁, V₁, E₁)

Seagate Software's mission is to develop and integrate quality products for information, storage, and network management that reduce the time and cost and improve the effectiveness of using information. (M, T₁, V₂)

To make appropriate information accessible, manageable, and easy to use from any computer terminal. (V₃)

Seagate Software's mission is to develop and integrate quality products for information, storage, and network management that reduce the time and cost and improve the effectiveness of using information and that win customers and keep customers by providing superior products and service. (M, T₁, V₂, W₁, P₃)

Table 4. Following each of these prototype mission statements, the elements each includes are indicated.

Software's mission is to develop and integrate quality products for information, storage, and network management that win and keep customers by reducing the time and cost and improving the effectiveness of using information." In refining the statement with software management, we eliminated "and improving the effectiveness" and "quality" from the statement. "Reducing the time and cost of using information" was the means to improving effectiveness, and it remained in. Quality was understood by all—what other products would one want to deliver? The final draft mission statement was "Seagate Software's mission is to develop and integrate products for information, storage, and net-

work management that win and keep customers by reducing the time and cost of using information."

Perspective

How do you know if you have done a good job of creating and organizing the objectives and outlining a mission statement? For this, go back to the original intent: to help integrate several previously separate software companies into a single company with a common vision and shared set of values. If all the key individuals essentially agree with the objectives and mission, then I would conclude that a contribution was made. There was such agreement. Nobody suggested that important objectives were missing or argued

that listed objectives were not in Seagate Software's interests. This indicated that the objectives seemed appropriate. Also, it is not only the product but the process that matters. Most participants felt that as a result of the process we followed, they better understood the perspectives of their colleagues and broadened their views a bit, perhaps after considering the full range of objectives suggested.

By documenting both the process and product of identifying objectives and creating mission and vision statements, we increased the opportunities people had to recognize inadequacies and provided them with a basis for modification and improvement. At this stage, people generally felt that the objectives, mission, and vision were all clear enough. Other critical issues and opportunities, many of them identified in this work, needed attention.

What Has Happened

I conducted the process described between November 1995 and August 1996. During and since that time, Seagate's various software acquisitions have been integrated into Seagate Software, Inc. In this process, the firm has acted upon almost all of the highest-priority issues and opportunities. By early 1997, after several combinations of companies and groups, an organizational structure appropriate for a single company emerged. Terry Cunningham was chosen as president of Seagate Software, which consists of just two groups: Network and Storage Management, and Information Management. Steve Luczo is now chief executive officer of Seagate Technology and chairman of the board of Seagate Software.

The gross software revenues in 1996

were over \$140 million, and in 1997, they were over \$200 million. Through 1996, the focus of the software group was on acquisitions and integration of the acquired companies. Now the focus is on internal growth and coordination of activities within Seagate Software and with the hardware part of Seagate Technology.

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Stephen J. Luczo, Chief Executive Officer, President, and Chief Operating Officer, Seagate Technology, 920 Disc Drive, Scotts Valley, California 95066, writes: "Beginning in 1994, I had the responsibility to build the software group of Seagate Technology. Our strategy was to acquire existing software companies with complementary products in storage, network, and information management. Over the next year, we acquired several companies, each with a different culture, focus, and business style. To succeed, we needed to integrate these companies into a single organization with a common vision and objectives. The work of Ralph L. Keeney, described in "Developing a Foundation for Strategy at Seagate Software," helped significantly.

"The in-depth discussions Ralph had with me and essentially all key participants in building the software organiza-

tion clearly articulated the concerns of each. His organization and communication of our objectives back to us clearly indicated the common purpose we held. By developing, listing, and prioritizing the issues, we identified actions to help achieve those objectives and opportunities that we could pursue. We have followed up on many of the issues and opportunities. The process of pushing our thinking to develop draft vision and mission statements helped to focus our thinking on our shared future and how to get there.

“A major theme at Seagate Technology is that “Information Must Serve, Not Rule.” Ralph’s work with us was a single case in point; the information he elicited and organized contributed to integrating our organization and guiding our decision making.”