

Creating a High Performance Service Organization: A Case Study

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In recent years, quality management techniques have once again captured the imagination of management in industries around the globe. However, while the techniques have a ready and obvious use in work process redesign, their application to organizational change is less obvious. A recent Arthur D. Little engagement demonstrates that „rethinking the business“ requires integrating the quality-based redesign of work processes with organizational restructuring and resource allocation – while maintaining a clear focus on the interests of customers, employees, and owners. In this article, we demonstrate a process for linking the best theories of organizational design with the practical application of quality concepts to lay the foundation for a High Performance Business.

In the engagement described here, Arthur D. Little helped improve the organizational effectiveness of the Marketing and Supply Department of Lagoven, S.A., one of the operating subsidiaries of Petroleos de Venezuela, (PDVSA) the national oil company of Venezuela. We found it particularly challenging to undertake this work in a service organization, where the application of quality concepts has been more difficult than in the manufacturing world. For example, in a service organization, what exactly should be measured? Even more difficult, how can the organization ensure that it sustains and improves its key quality attributes – those that add value to the services it provides to its customers – while at the same time improving employee satisfaction and financial performance? In this article we describe the assignment, focusing on the challenges and problems encountered, on the methodologies used, and on the techniques used to achieve engagement and commitment at all levels of the organization.

The Challenges Facing Lagoven’s Marketing and Supply Department

Lagoven plays a major role in the Venezuelan oil industry, producing a million barrels per day of crude oil, more than 40 percent of Venezuela’s output. Half of this crude is refined at Lagoven’s Amuay refinery. The rest is sold on the international market, as are the petroleum products from the Amuay refinery that exceed domestic market needs.

Lagoven’s Marketing and Supply Department, which consists of approximately 100 professional staff members, is responsible for the international marketing of both the crude and the products, as well as for crude and product movements from Venezuela and for the management of Lagoven’s tanker fleet. Its role is to ensure and maintain reliable market outlets and to achieve the highest possible revenues for Lagoven’s crude and products. Lagoven’s Marketing and Supply Department has few capital assets. Its ability to perform depends primarily on highly skilled and motivated staff.

In today’s extremely competitive and volatile oil markets, achieving success is difficult enough for most oil companies. The quality of Venezuela’s crude – which is very heavy and high in sulfur and metals – exacerbates these difficulties. To market this crude oil successfully requires an organization that is highly flexible and responsive to each customer’s needs and concerns and has a deep knowledge of customer operations.

In addition, the management of Lagoven’s Marketing and Supply Department recognized the need for:

- Significant growth in its international marketing activity
- A strong focus on customer satisfaction to achieve that growth
- Strong motivation and enhanced empowerment to satisfy intelligent, highly skilled employees

As it reviewed these challenges, management recognized that success would require creating a state-of-the-art organization, which would entail significant changes in organizational structure, work processes, human resources, and information systems. Management also recognized that, to be successful, change would have to come from within the Department, rather than from above. As Charles Handy has said, „Intelligent people prefer to agree rather than to obey.“

To achieve its objectives, Lagoven’s Marketing and Supply management decided to seek external assistance. They needed advisers with extensive knowledge of the international oil business, experience in introducing organizational change, and practical experience in using quality management techniques. Quality techniques were particularly important because Lagoven’s corporate management was committed to the introduction of Total Quality Management, and since early 1990 had vigorously pursued a quality philosophy. „Calidad Lagoven“ banners hang in every Lagoven office. Lagoven’s Marketing and Supply management saw quality as the key to reorganizing the Department as a High Performance Business.

Accordingly, management commissioned a joint Arthur D. Little/Lagoven effort. The challenge to the team was to define opportunities for broad-based organizational improvement – with the extensive use of quality management philosophy and techniques.

The Application of Quality Techniques

Members of the joint Arthur D. Little/Lagoven project team were carefully chosen to ensure that the team had strong industry understanding, functional organization skills, and a deep knowledge of Lagoven's markets, customers, capabilities, and work processes. Strong facilitation skills and a keen understanding of both quality philosophy and the practical application of quality techniques also proved essential in the day-to-day conduct of the assignment, as the team used these techniques extensively to ensure that the recommendations focused on doing „right things right.“

Quality philosophy dominated the conduct of this assignment. The team:

- Focused on satisfying the needs of customers, employees, and owners
- Viewed and analyzed work as a series of processes and developed an organization structure to support those processes
- Aligned human resources, information systems, and performance measurement to meet the requirements of the work processes
- Gained strong support for change at all levels of the organization, from senior management to work groups

Quality techniques, which are simple both in concept and application, provide an extraordinarily strong framework within which to achieve consensus among the diverse members of a team and within an organization. The team continually used a wide variety of quality techniques. *Brainstorming*, for example, allowed each member of the team to express his or her views freely; *multivoting* helped the team decide what was most critical; *flowcharting* ensured that work processes were clearly understood; and *root cause analysis* defined the real origins of breakdowns.

Above all, the team maintained a triple focus on the interests of customers, employees, and owners. This triple focus formed the basis for the criteria used to facilitate choices. In addition, the team found it needed to introduce two practical criteria – controllability and doability – to handle the constraints that arise in developing a program for organizational change. Successful reorganizations are the art of the possible; ignoring the limits of the possible only causes frustration.

The Route Map

The team followed a route map for creating a High Performance Business, the broad outline of which is shown in Exhibit 1.

Diagnostic Review. In the diagnostic review phase, we conducted some 120 interviews with internal and external customers and suppliers. We interviewed most professional staff members in the Department, as well as representatives from the parent company and other Lagoven Departments and PDVSA subsidiaries with which Marketing and Supply has relationships. The diagnostic review created a common understanding and source book of knowledge about the Department's operations. It also documented customer, employee, and owner concerns for subsequent analysis.

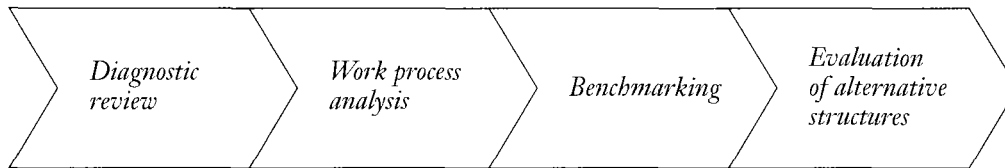
This initial diagnostic step is of critical importance. This is the time to capture and record the experience, knowledge base, and concerns of the organization. It is also an opportunity for the organization itself to relearn what it actually does and how it does it. The diagnostic review thus provides the basis for defining the key work processes for subsequent analysis. The diagnostic review also provides an opportunity for the firm's staff to reflect on what is important to them. Issues that should be given priority attention are highlighted, while inconsequential issues are set aside and „uncontrollables“ are identified for appropriate action.

A critically important part of the diagnostic review was a series of interviews with Lagoven's key external customers to obtain performance feedback. Most organizations simply have no effective way of capturing the views of their most important stakeholders – their customers. Many organizations think they know what their customers feel and want, when in fact they don't. How can they keep customers satisfied?

As important as understanding external customer needs is the recognition that there are internal customers and suppliers for every step in the work process. The corporation must be viewed as a series of customer/ supplier relationships, each of which is a vital link in the work process chain. Only by taking care of its internal customers can the organization improve its orientation toward its external customers.

Exhibit 1

The Route Map for Creating a High Performance Business



Work Process Analysis. In the work process analysis step, the team examined the 10 key work processes in the Department (Exhibit 2), forming a work group for each process. Each work group included staff with direct involvement in the specific process, drawn from all functional areas of the Department, and thus provided the basis for a collective assessment of problems, causes, and improvement opportunities for each process. Each of the work groups was facilitated by Arthur D. Little and Lagoven team members to:

- Identify the customers for each process
- Understand customer requirements
- Flowchart the current processes
- Define breakdown points
- Rank improvement opportunities
- Understand the origin of problems
- Identify support requirements, including performance measurement, human resource management, and information systems

Exhibit 2

Key Work Processes

- Crude marketing and supply
- Products marketing and supply
- Asphalt marketing and supply
- Bunkers marketing and supply
- Marine transportation
- Short- and long-term planning
- New business development
- Recruitment
- Training
- Staff performance evaluations

For example, the team looked closely at the process by which new business ideas are generated, analyzed, developed, and implemented. This activity is complex and crosses many organizational boundaries. The work group identified several key improvement opportunities for this process, including assigning clear ownership, improving the corporate memory for opportunities, assigning responsibility for implementation, and incorporating the process in the annual planning cycle.

Senior management participated in reviewing and analyzing this work process and committed itself to implementing the recommendations for change. The team found that quality techniques helped to break down hierarchical barriers,

ensured that each person had a voice, created ownership of results by all participants, and focussed attention on the important issues.

When this step was undertaken for the ten key work processes in the Department, it created an extraordinary degree of buy-in to change how work was done and how the work groups were organized.

Benchmarking. In the benchmarking step, the team selected a number of oil marketing, trading, and marine organizations for analysis and interviews. Benchmarking is a powerful tool for assessing what works and what doesn't, but it must be used carefully. It is essential to prepare a clear set of questions focused on the issues of interest and to select benchmark candidates where the processes work well. Furthermore, benchmarking is not a panacea. All organizations are different, and practices that fit in one environment and culture may not be transferrable to another. Conducted with care, however, benchmarking can be a powerful tool in organization studies – and one that provides a strong reality check.

Evaluation of Alternative Structures. The diagnostic review, the work process analysis, and the benchmarking generated a powerful array of information. At this stage, the team used this information to develop a number of alternative organization structures with functional, geographical, customer group, and business unit orientations. Each alternative structure was elaborated sufficiently to allow the team to evaluate its particular benefits and constraints.

The team then rated the alternatives, using quality criteria based on customer, employee, and owner satisfaction, as shown in Exhibit 3. To arrive at the ratings in each box, the team defined the generalized criteria in greater detail and used multivoting techniques to weight them. Clarifying the exact meaning of the criteria is a critical part of this process. To ensure consensus, it is essential to avoid peer pressure in the multivoting and rating process and to be willing to discuss each issue extensively.

Exhibit 3

Generalized Criteria for Ranking Alternative Organization Structures

<i>Criteria</i>	<i>Structural alternatives</i>			
	<i>A</i>	<i>B</i>	<i>C</i>	<i>D</i>
<i>Customer satisfaction</i>	•••	•••	••	••
<i>Employee satisfaction</i>	•••	•••	••	••
<i>Owner satisfaction</i>	•••	••	•	•
<i>Doability/controllability</i>	••	•	••	•
<i>Overall ranking</i>	1	2	3	4

Key: ••• *High* •• *Medium* • *Low*

This process revealed that one structure would be significantly better than the others in terms of the key quality attributes. The selected structure grouped together people who work together, to provide a strong customer and market orientation and to reduce internal barriers in the work processes to a minimum. Moreover, the team recommended that these newly formed work groups be provided with „ownership“ of their activities and real accountability for their success. The team felt that any potential drawbacks to this organization structure could be minimized through process solutions.

Linkage to Vision and Mission

The team tested its initial recommendations for consistency with the Department's vision and mission. The team and senior management refocused the Department's vision and mission statements and confirmed that the new structure was consistent with the key strategic thrusts of the Department.

Quality thinking broadened the mission of the Department to include playing the leadership role within Lagoven in defining the nature and direction of the company for the future. As the „eyes and ears“ of the company in international markets, the marketing and supply organization and associated support systems had to provide correct, timely, and appropriate market signals to the entire Lagoven organization.

The mission statement was refocused around the quality attributes – maintaining a strong focus on satisfying customer requirements; attracting, retaining, and motivating the highest-quality employees; and operating with a strong commercial and „bottom line orientation.

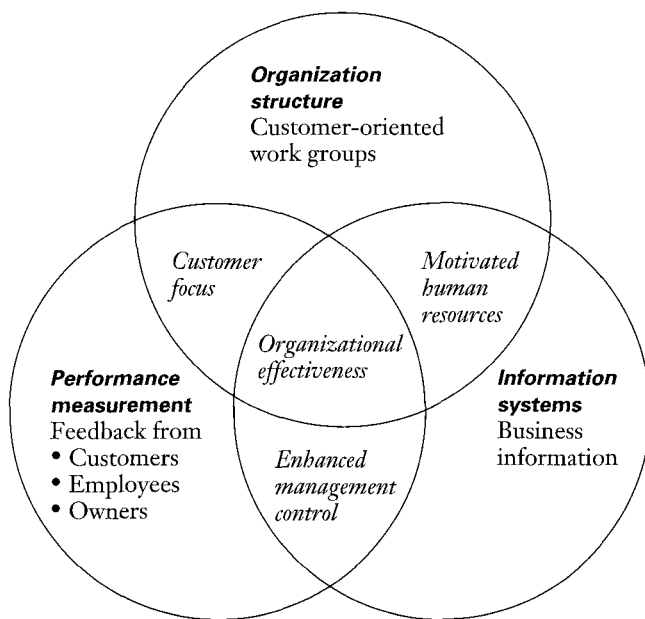
Andres Sosa Pietri, president of PDVSA, had articulated the industry’s role as „world leader in the energy and petrochemical sectors, recognized as the preferred supplier and for technical capability and the excellence of its staff... a commercial company, oriented toward productivity and profitability.“ Consistency with the overall vision and mission of the „owner“ (PDVSA) was therefore clearly established.

Linkage to Measurement and Resources

Changing the organization structure is, in itself, insufficient to improve organizational effectiveness. Measurement systems and resources must be intimately linked to the new structure (Exhibit 4).

Exhibit 4

Linkage of Organization Structure and Support Systems



Lagoven’s marketing and supply activities required performance measurement consistent with the new organization structure; information systems to provide support to the basic work processes; and, in common with other skill-based service organizations, continuous attention to human resources.

Performance Measurement. Mason Haire of the Institute of Industrial Relations at the University of California has often been quoted as saying, „What gets measured gets done.“ He adds, „If you are looking for quick ways to change how an organization behaves, change the measurement system.“

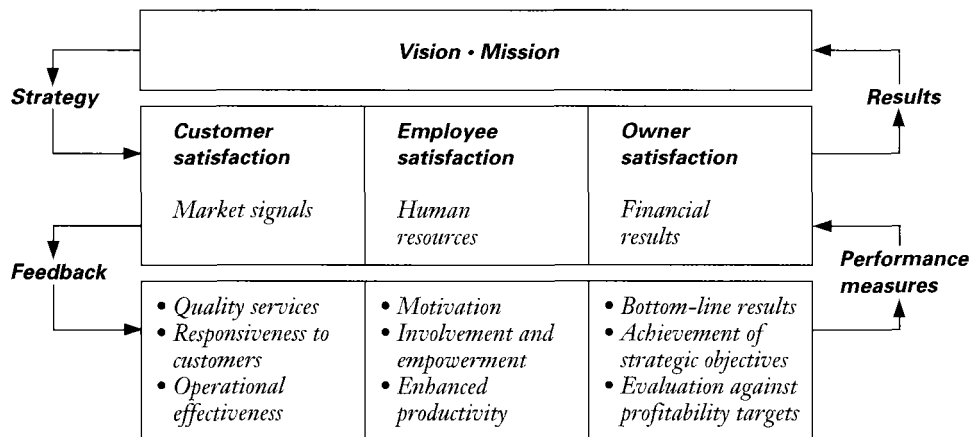
Early on, the team identified the need for a broader performance measurement system in the Department to provide customer, employee, and owner-related measures (Exhibit 5). The team devoted a major effort to creating a realistic, readily understood, timely, and relevant system that could be used by the new organization.

Measurement in complex businesses, particularly service organizations, is not easy. It is essential to capture the softer, process-related measures of service as well as the harder and more readily understood results measures of

financial and physical performance. Even hard measures can prove elusive when the product is a non-fungible heavy crude oil for which there are no ready market references. Moreover, performance measurement must be flexible to accommodate changes in the market environment.

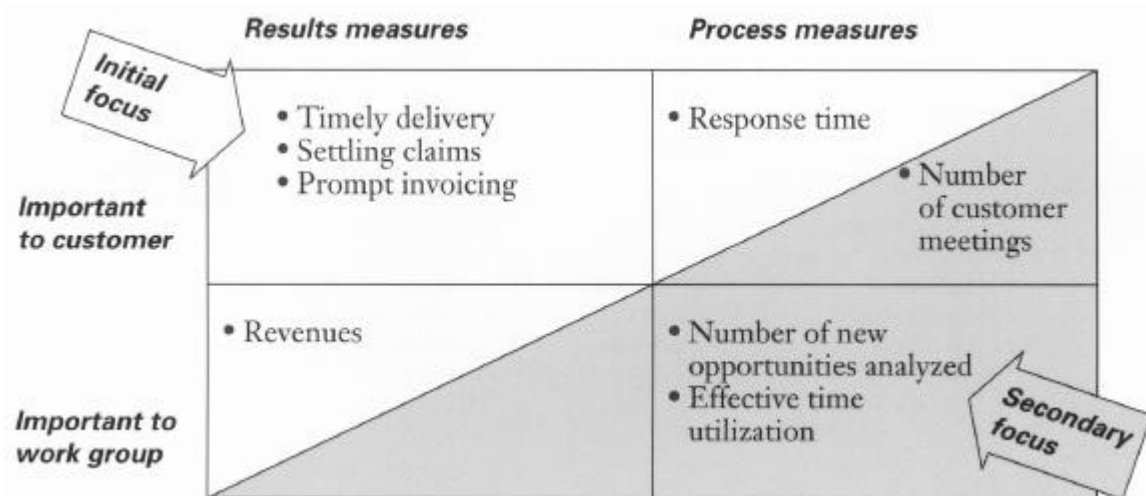
The team recommended regular measures of customer satisfaction through customer surveys, together with process measures of customer orientation such as response to customer complaints, number of customer meetings, and the effectiveness of invoicing and claims settlement (Exhibit 6). In addition, the team recommended regular surveys of employee satisfaction, together with process measures related to staff utilization and performance.

Exhibit 5
Performance Measurement



Information Systems. In today’s oil market, up-to-date information systems are a critical success factor. Part of the team’s vision became a commitment to creating an information-based organization, defined by management authority Peter Drucker as „a knowledge-based organization composed of specialists who direct and discipline their own performance by means of organized feedback, delivered through information systems, from customers, colleagues, and supervisors.“

Exhibit 6
Examples of Customer-Oriented Performance Measures



The team recommended a comprehensive information systems development project. In the subsequent architecture design phase, an integrated information system was designed to deliver primary support to day-to-day work processes, while providing appropriate reporting and performance measurement of relevant business information to Departmental management.

Human Resources. As a result of its close knowledge of the Department's staff, developed during the diagnostic review phase, the team became convinced that a major issue in reorganizing was to realize the very high value of the human resource. Highly skilled, academically endowed, strongly knowledge-based, and capable, these people needed an environment which would empower, nurture, and challenge them, creating a real partnership between staff and management.

The team came to believe during this assignment that the work groups had demonstrated their capability to accept and thrive in a culture of consent. Using quality techniques, the team scrutinized the key human resources processes – including recruitment, training, performance evaluation, and career development – and made recommendations for improvement.

Commitment to Change

The challenges of introducing organizational change should not be minimized. Change is always difficult. Success rests on careful preparation and strong commitment. This assignment was successful in achieving a high degree of involvement by people at all levels of the organization. This buy-in by staff and management alike meant that the team's recommendations for change had universal support.

To achieve senior management support, the team included senior managers in the diagnostic review and the work process analysis. Senior management reviewed the results of the customer interviews and benchmarking analyses and participated in the selection of the appropriate organizational structure. They also took the lead in redefining the Department's vision and mission, developing the transition plan, and allocating staff resources. Frequent review sessions and a final two-day off-site review helped ensure buy-in and sign-off as the work progressed.

By the end of the assignment, change had also become embedded in the work groups. Because the staff members participating in the work process analyses could immediately recognize improvement opportunities, they could continuously improve these processes, even while the assignment was under way. With the full commitment of management, transition planning then focused on the removal of constraints to change.

Summary

Our work with Lagoven's Marketing and Supply Department demonstrated that the principles of the High Performance Business – which emphasize understanding the needs of customers, employees, and owners and aligning processes, resources, and organization structure to meet those needs – can provide a very powerful approach to improving organizational effectiveness in a service organization. In addition, quality management techniques can be extremely helpful in developing broad-based recommendations for changing the organizational structure and improving work processes and their related support systems. Above all, such techniques ensure the progressive commitment and buy-in of people at all levels of the organization, which is a prerequisite for the successful improvement of organizational effectiveness.

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Armando Ascione, a mechanical and civil engineer, has worked for Lagoven, S.A. for 10 years, most recently in the Marketing and Supply Department, focusing on international sales and planning. A key member of the project team, he is currently responsible for transition management in the Department.

Ana Gonzalez, who is quality advisor to Lagoven's Marketing and Supply Department, was a major participant in the project. She has experience in organizational design and has been in the Venezuelan oil industry throughout her career.