



Title: How does the Oregon department of Transportation Identify Their Customers and Determine What They Want.

Course:

Year: 1994

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Report No: P94061

ETM OFFICE USE ONLY

Report No.: See Above

Type: Student Project

Note: This project is in the filing cabinet in the ETM department office.

Abstract: The focus on customer satisfaction is key to the success of any Total Quality Management strategy. In the manufacturing or the service industries, the external customers are easy to identify. The author suggests four imperatives to follow to help determine what their external customers want. These four legal imperatives are the: Legal Imperative, Policy Imperative, Political Imperative and Practical Imperative.

**How Does the Oregon Dept. of Transportation
Identify Their Customers & Determine What
They Want**

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EMP-P9461**

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EGMT 510

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March 8, 1994

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Executive Summary

The focus on customer satisfaction is key to the success of any Total Quality Management strategy. In the manufacturing or the service industries, the external customers are easy to identify. They are the consumers of the goods or the services that the industries provide. The quality of the product or service is ultimately judged by the consumer. [3] The customers wants and needs are reflected in the demands for the products or services. A low demand for a product or service indicates that customers are not satisfied. A high customer demand indicates a high degree of customer satisfaction with a product or service. [17]

But what about government? How does a branch or department of government identify who their internal and their external customers are and what do their customers want? For government to be committed to Total Quality Management, an essential attribute must be the ability to know what their customers wants and need. Generally, the external customers of any governmental organization is ultimately the individual taxpayer. However, all segments of the population in the United States and most of the industrialized world must pay taxes of some form to the government. The diversity of needs and wants of the taxpayer is only matched by the diversity of the general population itself. Therefore, if all taxpayers are the external customers of the government then how does the government know what the "customer" wants. To answer the question, I propose that governments have four imperatives to follow to help determine what their external customers want. These four imperatives are the:

- Legal Imperative
- Policy Imperative
- Political Imperative
- Practical Imperative

To narrow the focus of this study, I concentrated on the four imperatives applicable to the Oregon Department of Transportation and how these imperatives help guide ODOT in determining what their customers want.

[3] Evans and Lindsay, pg. 116

[17] Ross, pg. 5, 214-215

This paper is not an exhaustive study of all Federal and State legislation applicable to ODOT. It does give the major emphasis of the most important legislation that mandates the operations of ODOT in the area of satisfying customer needs. There are various boards and districts that are mandated by legislation but are not specifically mentioned in this paper. In summary, the four imperatives for ODOT are as follows;

- **Legal Imperatives** - Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991; Oregon Revised Statutes (ORS) 184, Executive and Transportation Departments; ORS 366-384, Highways Roads, Bridges, and Ferries; ORS 391, Highways, Roads, Bridges, and Ferries, Mass Transportation; ORS 197, Comprehensive Land Use Planning Coordination; ORS 374, Access Management; Oregon Administrative Rule (OAR) Chapter 660, Division 12, Transportation Planning Rule.
- **Policy Imperatives** - Transportation Policy Plan (i.e. Oregon Transportation Plan); Modal System Plans (e.g. Highway Plan, Aviation System Plan); Facility Plans (e.g. highway corridor plans, airport master plans); Project Plans; State Agency Coordination (SAC) Programs.
- **Political Imperatives** - Reaction to public complaints; Demands from the Governor and state legislators; Special interest groups and the media; and Jurisdictional transfer of existing transportation facilities.
- **Practical Imperatives** - Preservation and maintenance requirements of the existing system; Protection of the transportation system from natural disasters; safety upgrading of the existing system.

As in all organizations, ODOT also has internal customers. Within ODOT the various work units can be placed in the following three categories; administration, support, or field units. The internal customer definition for ODOT is the support units value the administration and the field units as their customers.

What else should ODOT do to define what their external customers, the taxpayers, want? The following are strategies that ODOT may pursue to increase their focus on customer service:

- The use of a toll-free "800" number for customer complaints.
- Provide customer service training for all customer-contact employees.
- Benchmark with other world-class organizations to compare their public involvement and customer feedback systems.
- Perform regular surveys of customers and employees.
- Use Customer Satisfaction as a criteria in the Department's performance measurement system.

The Oregon Department of Transportation is dedicated to providing total quality service to their customers. By following the legal, policy, political, and practical imperatives as well as implement an effective customer feedback mechanism, ODOT can confidently consider its products and services as meeting the wants and the needs of their customers, the taxpayers.

Why is Customer Service so important to TQM?

In any organization it is the customer that ultimately determines the need and the quality of a product or service. It is the amount of customer loyalty that ultimately determines whether an organization has repeat business and increased market share. Thus it is the customer that determines whether an organization survives in the market place. An organization committed to Total Quality Management then must have customer satisfaction as their first priority. [17] The Malcolm Baldrige National Quality Award, established by the United States Congress as Public Law 100-107 in 1987, uses seven categories to determine an organizations total quality commitment. These are:

1. Leadership
2. Information and Analysis
3. Strategic Quality Planning
4. Human Resources Development and Management
5. Management of Process Quality
6. Quality and Operational Results
7. Customer Focus and Satisfaction.

The first six categories revolve around "Customer Focus and Satisfaction" and are linked to it as illustrated by the following diagram. [5]

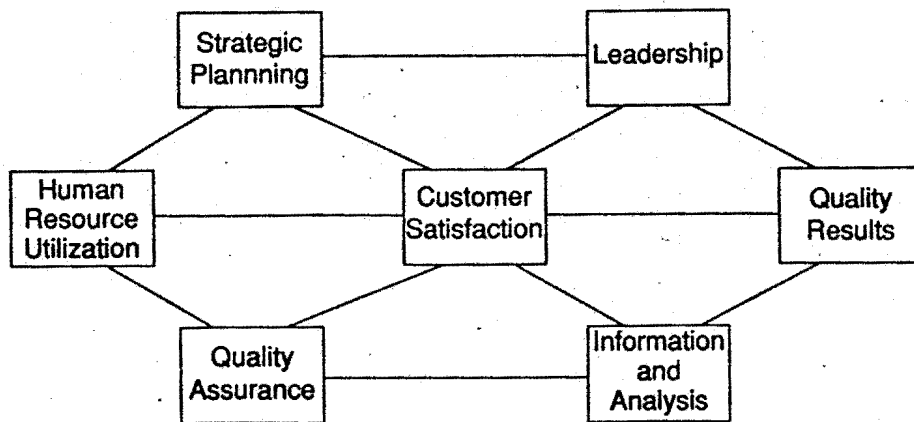


FIGURE I-1. Key relationships among Baldrige categories.

The total number of points assigned to the "Customer Satisfaction" criteria in the Malcolm Baldrige National Quality Award is 300. The maximum number of points for all seven criteria is 1000 points. Therefore satisfying the customer is clearly the focus of an organization committed to Total Quality Management.

The "Customer Satisfaction" category consists of eight other subcategories. These are:

1. Determining Customer Requirements and Expectations
2. Customer Relationship Management
3. Customer Service Standards
4. Commitment to Customers
5. Complaint Resolution for Quality Improvement
6. Determining Customer Satisfaction
7. Customer Satisfaction Results
8. Customer Satisfaction Comparison

Of these eight categories, "Determining Customer Requirements and Expectations", "Customer Relationship Management", and "Complaint Resolution for Quality Improvement" makes up 105 points of the 300 points total for this category. This gives emphasis to the concept that knowing what the customer wants and needs, how an organization interacts with their customers in determining what they want and need, and how an organization uses customer complaints to continually improve their product and service is central to obtaining customer loyalty and satisfaction.

In any public service agency there is a need to balance the conflicting needs of many different constituents. Because of the legal requirements put on public service agencies and the broad range of needs of the constituents, it is almost guaranteed that some customer will be dissatisfied. Many TQM efforts fail in the public sector because appropriate planning is not used to factor in the balancing of the needs of the customer in the TQM program. [18] The Oregon Department of Transportation has "Customer Service" as its top value as an organization but do not have a clear definition of what that means. The key strategy to defining and measuring customer service for ODOT is to institute a process of customer input and feedback, evaluating customer input to identify areas for improvement, train and empower employees to make continual improvements, and measure the effectiveness of the changes through additional customer feedback.

Who are ODOT's Customers?

K. Kim Fisher [4], management consultant, states that every manager should have a sense of urgency about meeting customer needs. He states that serving the customer is the thing that gives an organization a reason to exist. He states that customers include people who are internal and external to the organization, people who are end-users of their products, clients of their services, or downstream of their part of the business.

Applying Fishers definition for a customer, the Oregon Department of Transportation (ODOT) can identify their customers in the following ways:

Internal customers - This can include units and divisions within ODOT, the Oregon Transportation Commission, and the ODOT Management Team.

External customers - This can mean the Federal Highway Administration (FHWA), the Federal Transit Authority (FTA), the Federal Aviation Administration (FAA), and other federal agencies; other state agencies such as Department of Environmental Quality, Department of Land Conservation and Development Commission, State Police, etc. with which ODOT must coordinate their activities; and local jurisdictions that cooperate with ODOT.

End-users of ODOT product - Ultimately the end-user of ODOT's product, an effective and efficient multi-modal transportation system, is the taxpayers. Specifically, the end-users pay for the transportation system through the State or federal fuels taxes, weight-mile taxes, transit district taxes, vehicle licensing and registration fees, and drivers licensing fees. By this definition all the people who use the transportation system in Oregon and thus pay taxes or fees is ODOT's customer.

Clients of their services - This category could include the Oregon Legislature and the Governor of Oregon, construction contractors, suppliers, developers, the tourist and recreation industries, businesses, and communities that do business with ODOT. In a broader sense, national and international trading partners with Oregon depend on the transportation network to move Oregon goods and services to and from their markets. The international community could be considered a client and thus a customer of ODOT.

Downstream of their part of the business - Using this definition, a "customer" is extremely difficult to quantify. The Oregon Transportation System has far-reaching effects on the demographics, livability, mobility, prosperity, and economic vitality of the State. Transportation corridors become economic development corridors in the future. The actual "customer" effected by the transportation corridor has not been identified yet.

In summary, anyone who pays taxes or fees, uses the Oregon transportation system, relies on the transportation system, or ultimately affected by the transportation system can be considered an external customer of ODOT. With such a broad definition for its customers, how does ODOT determine what the customer wants and needs? Dennis J. Murray [7] examined the same question for Higher Education. One "customer" group of Higher Education was Society. He suggests that to know what the customer wanted, Higher Education must get closer to the customer through the use of surveys, focus groups, and advisory boards to solicit feedback. He also acknowledge that not all customers of a public service agency will be satisfied as their are legal requirements that the public service agency must follow. What then is the appropriate method of determining the needs of the customer of a public service agency?

Legal, Policy, Political, and Practical Imperatives

To answer this question, I propose that there are four imperatives that ODOT must consider to determine customer wants and needs. These are the Legal, Policy, Political, and Practical imperatives to determining the needs of ODOTs customers. I also propose that these four imperatives apply to all government agencies in determining the wants and needs of their customers.

Legal Imperative - This imperative means that there are Federal, State, and Local laws that govern how ODOT should determine its customer needs. As shown on the flowchart in Exhibit A, the Federal Regulations or laws are the all encompassing imperative guiding ODOTs activities including the process of determining external customer needs as well as defining what the customer needs.

[7] Murray, pgs. 245-247

Federal Legislation

The enabling Federal legislation that is in force today is the Intermodal Surface Transportation Efficiency Act of 1991, Public Law 102-240. The law is commonly referred to by its acronym of ISTEA. In Sec. 2, Declaration of Policy: Intermodal Surface Transportation Efficiency Act, it states the needs of the "customers" in several broad categories;

- develop a National Intermodal Transportation System that is economically efficient and environmentally sound
- provide a National Highway and Defense Highway system consisting of interstate, principal arterials, and intermodal transfer facilities
- provide a public transportation system that achieves national goals for air quality, energy conservation, international competitiveness, and mobility for elderly, persons with disabilities, and economically disadvantaged persons
- operate and maintain the National Transportation System with insistent attention to innovation, competition, energy efficiency, productivity, growth, and accountability
- the National Intermodal Transportation System shall be adapted to "intelligent vehicles", "magnetic levitation systems", and other new technologies where feasible
- funding for the system comes from Federal apportionments and reimbursements from the Highway Trust Fund.

A significant statement is included in Sec.2 of the ISTEA concerning listening to the customer. It states;

"Social benefits must be considered with particular attention to the external benefits of reduced air pollution, reduced traffic congestion and other aspects of the quality of life in the United States."

What process does the ISTEA legislation require the states such as Oregon to follow to determine the social and external benefits to their external customers or the taxpayers?

- The ISTEA legislation requires in Sec. 1024, Metropolitan Planning, the designation of a metropolitan planning organization or MPO for metropolitan areas over 50,000 population. The objective of the MPO is to cooperate with the State in developing transportation plans and programs for the

development of transportation facilities including bicycle and pedestrian facilities. The membership of the MPO shall include local elected officials, officials of agencies which administer or operate major modes of transportation in the metropolitan area and appropriate State officials. In large urban areas there can be more than one designated MPO if agreed by the MPO and the Governor. However, each MPO is to consult and to coordinate their planning activities with other MPO in the same metropolitan area as per Sec. 1024 (e).

- Each MPO is to prepare and update a long range plan for its metropolitan area. The long range plan is to address transportation facilities in a 20 year forecast period, include a financial plan to implement the long range plan, and to assess capital investment required to carry out the plan. In Sec. 1024 (g)(4), the ISTEA legislation requires the participation of interested parties. Before they can approve a long range plan, the metropolitan planning organization shall

"provide citizens, affected public agencies, representatives of transportation agency employees, private providers of transportation, and other interested parties with a reasonable opportunity to comment on the long range plan, in a manner that the Secretary deems appropriate".

This requirement is restated in Sec. 1024 (h)(1), Transportation Improvement Program, Development.

- In Sec. 1025, Statewide Planning, the ISTEA requires that all States coordinate their transportation planning activities with the Metropolitan Planning Organizations. In subsection (c), each State is required to undertake a continuous transportation planning process that includes as a minimum twenty items which includes the following items related to customer service;

" (5) The transportation needs of nonmetropolitan areas through a process that includes consultation with local elected officials with jurisdiction over transportation.

(6) Any metropolitan area plan developed pursuant to section 134.

(11) The overall social, economic, energy, and environmental effects of transportation decisions.

(12) The effect of transportation decisions on land use and land development, including the need for consistency between transportation decision-making and the provisions of all applicable short-range and long-range land use and development plans."

There are no further requirements of the States by the Intermodal Surface Transportation Efficiency Act of 1991 for processes to determining the needs of the customers or the taxpayers. In summary, ISTEA requires the States to coordinate their planning activities with Metropolitan Planning Organizations or local elected officials, allow public comment and review on the transportation plan, and consider social, economic, energy, environmental, and land use and development effects caused by the States transportation decisions. The specific planning process to determine customer needs and wants is left up to the States.

State Legislation

As is the case with the Federal legislation, the Oregon Revised Statutes (ORS) and the Oregon Administrative Rules (OAR) states clear mandates and requirements for the Oregon Department of Transportation to include or incorporate processes to determine customer needs in their transportation improvement plans and defining what the customer wants in their transportation system.

The ORS Chapter 184 defines the Oregon Benchmarks that have the potential to yield a high return on human investment including greater worker productivity and future monetary savings. In ORS 184, Sec.4, the Oregon benchmark relating to transportation states two mandates: reducing or stabilizing the time required to commute to work in urban areas, and increasing multiple occupancy vehicle use. ORS 184.618 states that the primary duty of the Oregon Transportation Commission is to:

"develop and maintain a state transportation policy and a comprehensive, long-range plan for a multimodal transportation system for the

state which encompasses economic efficiency, orderly economic development, safety and environmental quality."

The development of the Oregon Benchmarks by the Oregon Progress Board included a series of public meetings. The Oregon Legislature adopted the Oregon Benchmarks in 1991.

The ORS Chapter 197 establishes the Land Conservation and Development Commission (LCDC) and its authority to adopt land use planning goals which the cities, counties, state agencies and special districts must comply. It also establishes the Department of Land Conservation and Development to administer the statewide planning program. LCDC adopted 19 statewide planning goals. Many of these goals affect transportation. Goal 12 (Transportation) is the most important statewide planning goal to ODOT. The rule is intended to reduce reliance on the automobile and assure that the planned transportation system supports a pattern of travel and land use in urban areas that will avoid air pollution, traffic, and livability problems. LCDC adopted an administrative rule, OAR 660, Division 12, to provide more specific direction on how Goal 12 and other goals affecting transportation must be applied. This rule is referred to as the Transportation Planning Rule.

In OAR 660-12-050 (2)(b), it requires "a process for citizen involvement, including public notice and hearing, if project development involves land use decision-making. The process shall include notice to affected transportation facility and service providers, MPO's, and ODOT" in the development of Regional Transportation System Plans.

In ORS 197.180 all state agencies are to coordinate their planning responsibilities under the state land use program through a State Agency Coordination Program (SAC). This means that certain transportation improvement projects require the development of an environmental impact document. The development of the environmental impact document involves an extensive public involvement process including hearings, information meetings, meetings with elected and other public officials, and sometimes litigation.

Local Legislation

The local legislation applicable to ODOT is the requirement that ODOT's Transportation System Plan must comply with the local comprehensive land use plan. There are no laws at the local level that requires ODOT to follow any

FEDERAL REGULATIONS

ISUWA
Clean Air Act
Etc

OREGON TRANSPORTATION PLAN

Policy Framework
Modal Plans - HW, Bikes/Trail,
Aeronautics, Transit
Corridor Plans

Oregon Benchmarks
Goal #2
Transportation
Planning Rule

Statewide and Region
Strategic Goals

Policy Directives
Objectives

WORK PLANS
BUDGETS

particular procedure to determine what their local customers want other than what is required by the Federal and State legislation.

Practical Imperative

The Legal Imperative, i.e. the ISTEA, ORS, and OAR, states specific requirements for the ODOT in regards to including public involvement in their planning process. In the Policy Imperative, the public agencies such as ODOT have developed internal policies defining how they are to solicit and incorporate public involvement or customer feedback in their planning decisions to comply with the requirements of the Legal Imperative.

The policy that gives a framework for all of ODOT's activities for the next 20 years is the Oregon Transportation Plan (OTP). The OTP is intended to meet the requirements of ORS 184.618 as stated earlier. It also meets the requirements of the State Agency Coordination Program, the Transportation Planning Rule, and the Intermodal Surface Transportation Efficiency Act. There are two parts to the OTP; the Policy Element and the System Element. Although there are no ODOT policies that stated the public input process had to be done exactly this way, the OTP was developed with the use of 5 advisory committees involving over 70 citizens. They were involved in developing the goals and policies included in the OTP. The public reviewed the Policy Element at 25 public meetings as well as numerous meetings with regional and local officials, business and civic organizations and others. The Oregon Transportation Commission held two more public meetings before the OTP was adopted. At each of these public meetings, a consultant hired by ODOT gathered and recorded public comment, organized the comments relevant to the 5 advisory committees, and fed the information back to the committees for their use. If a consistent theme was encountered from the public during the public meetings, this theme would be factored in to the development of the OTP. Each advisory committee was chaired by a member of the Oregon Transportation Commission. Therefore the authority was at each advisory committee to include relevant public input into the Oregon Transportation Plan.

Also included in the Oregon Transportation Plan are Planning and Performance Guidelines that supplement the requirements of the ISTEA, Oregon Revised Statutes, and Oregon Administrative Rules for planning and developing policy. In Policy guideline 18 of the OTP it states;

"Develop programs that ensure the opportunity for all citizens, businesses and state agencies to be involved in all phases of the transportation planning process.

- a. Make information about proposed transportation policies, plans and programs available to the public in an understandable form."

The attached Exhibit A shows the relationship of the Federal and State Regulations to the Oregon Transportation Plan.

In ODOT's vision statement dated January 29, 1993 to the Members of the 1993 Legislative Assembly [10], "Customer Service" is listed as the top value. The value statement is;

"Our customers are the public. We value our customers and are committed to providing quality service and customer satisfaction".

For ODOT's internal customers, the Director issued a directive that everyone in the Department should be serving a customer, either internal or external. The Director defined a customer as a person who is relying on your service. The directive does not have the same weight as Department policy but they do express an expectation of all employees and give some definition to the value of internal customer service. Ross [17] states that the key to external customer satisfaction is to start with internal customer satisfaction. Each internal unit is to look how they effect others in the chain of service. The internal customers must be satisfied but the focus should always be the organizations external customers.

Political Imperative

This imperative refers to the special attention that State and Federal legislators, the Federal Highway Administration, the Governor, and local elected officials get when they call or write ODOT about a specific want or need. Dennis J. Murray [6] found in his identification of customers for Higher Education that elected officials were a special category of customers because of their influence on funding and support for the institutions of higher

[10] ODOT, budget pg. 9

[17] Ross, pg. 213

earning. This is also true for the Oregon Department of Transportation. Sometimes it is more effective to contact ODOT through an elected official than singularly as a citizen.

The Director of ODOT has issued guidelines for the return of correspondence to our customers. The guidelines are 7 to 10 days for an elected official and 14 days for the general public. We realize this is contrary to the expectation that government is to treat and serve its customers equally as stated by A. Keith Smith [16]. However in the balancing of the needs of different constituencies, politics is a factor that tips the scales of how ODOT will conduct business or provide service.

Practical Imperative

The Practical Imperative refers to ODOT carrying out the mandates for building, operating, and maintaining the State Transportation System as per ORS 366 to 384, Highways, Roads, Bridges, and Ferries. [12] In the carrying out of their operations and maintenance duties, ODOT personnel develop new and better ways to repair, replace, or safety upgrades of the existing facilities. ODOT must respond quickly to protect the system from natural disasters and acts of the public enemy. However, it is still necessary to comply with all established laws, rules, and guidelines when carrying out these duties but it is not necessary to gather public input or involvement when making decisions as to how and when to maintain the transportation system. Therefore, the Practical Imperative is the asking of the question, "Is this activity related to maintaining or operating the existing transportation system?" If the answer is "yes", then there is generally no need to go through a formal public input process. However, ODOT should still gather customer input and surveys on their maintenance, construction, and traffic operations and use this input to look for continual improvements in their operations of the State Transportation System. Friedman [5] states that customer feedback must be continuously used to encourage and motivate the organization for change. Without this feedback, the customer-driven organization will lose its momentum and motivation for continuous improvement.

[18] Smith, pgs. 45-48

[12] ORS 184

[5] Friedman and Dumesic. pg. 101-108

What should ODOT do more of to improve customer service?

We have seen that a public service agency such as ODOT has four imperatives to follow to determine what their customer wants and need. These four imperatives are the Legal, Policy, Political, and Practical Imperatives. The Legal and Policy imperatives states many times the expectation that ODOT provide opportunities and a process to gather and use customer input into their planning process. This has been done through the use of public meetings, advisory committees, and data gathering by consultants. The Legal Imperative establishes in a broad sense what the customers want in a State Transportation System and ODOT's role in developing and operating the system. There are directives defining the importance of internal customers at ODOT. The Political Imperative is available for the customers to use as they work through their elected officials and ODOT. But what other strategies should ODOT try to improve customer service?

William A. Band [1] found that the use of toll-free "800" numbers for customer complaints is a very effective method of gathering complaints and other forms of customer feedback. He found that 53% of the companies that he surveyed used the "800" numbers to obtain customer feedback. The Oregon Department of Transportation should install a toll-free number in the Portland Metropolitan area to gather feedback regarding the operations, maintenance, construction, and planning of the transportation system. The feedback should be logged and categorized for use in future planning. Larry Chonko [2] suggests that customer-driven organizations should make it easy for customers to complain. The toll-free number would be easy for the taxpayers to use. Gouillart and Sturdivant [6] states that customers can only be counted on to give information and feedback but it is the organization that must use this information to get insight as to how to improve customer service.

Friedman and Dumesic [5] suggests that organizations that want to shift to a customer-driven organization should engage the entire organization,

[1] Band, pg. 15-16.

[2] Chonko, pg. 26-27.

[5] Friedman and Dumesic, pg. 102-103

including top management, in a customer-focused mission. This includes training in customer service and relations to the "point of contact with the customer" personnel in your organization. ODOT should institute a program to provide this training to the Motor Vehicles Division, Highway Maintenance, and Highway Construction offices and crews. Larry Chonko [2] also suggests that customer-contact employees should be given problem-solving authority along with customer service training.

ODOT should benchmark with other world-class organizations to compare their public involvement and customer feedback systems. A. Keith Smith [18] states that by benchmarking with other external providers top management can be mobilized to try new and innovative methods to improve customer service. Strategies to try are customer surveys, interviews, complaint forms, dial-in voting on issues, and the toll-free hotlines. Customer requirement measurements can also be developed through benchmarking with other external organizations.

ODOT performed two employee surveys, one in 1988 and another in 1991. Regular surveys of employees should be done. The results of the employee survey should then be compared to the results of customer surveys and identify common and uncommon trends. Friedman and Dumesic [5] states that common perceptions from inside and outside the organization is a clear mandate that something is going very well or that a change is needed. Uncommon evaluations by both the public and the employees also suggest an investigation into the causes. In differing perceptions, top management should consider the customer evaluation as having more weight in the decision to change.

However, ODOT should and will implement a customer feedback mechanism through its performance measurement system. This customer feedback will be in the form of contractor evaluation ratings, customer surveys of truck operators, AAA members of Oregon, random household surveys, and fliers handed out to motorists.

[2] Chonko, pgs. 26-27.

[16] Smith, pgs. 45-48.

[5] Friedman and Dumesic, pgs. 102-103.

The Oregon Department of Transportation will use this information in two ways. The first is in the overall performance measurement matrix to gauge improvements in program effectiveness. The second is to synthesize the information to formulate changes in policies or procedures to satisfy the demands of the majority of the external customers.

In conclusion, determining who your customer is and defining what they want from a public service agency such as ODOT is a complex process. It involves reviewing and knowing the legal ramifications, policy and political considerations, and the use of sound Total Quality Management theories and concepts to determine if a public agency is truly meeting the needs of their customer, the taxpayer.

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