

United States General Accounting Office Washington, D.C. 20548

General Government Division

B-249779

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April 26, 1993

The Honorable Lloyd Bentsen
The Secretary of the Treasury



Dear Mr. Secretary:

Total Quality Management (TQM) is a management approach that strives to achieve continuous improvement of quality through organizationwide efforts based on facts and data. TQM also focuses business processes on meeting the needs of customers, both internal and external. Although TQM traditionally has been associated with private sector organizations and their efforts to remain competitive and profitable, in recent years federal organizations have been attempting to implement TQM to cope with budget restrictions and better serve the public.

We recently surveyed federal installations to determine the extent of their use of TQM and learned that 68 percent of the installations surveyed were implementing TQM.1 installation, as defined by the Office of Personnel Management, is a unit with a specifically designated head who is not subject to on-site supervision by a higher level installation head and who has been delegated some degree of authority in the performance of personnel management functions. Our survey covered over 2,800 installations, such as Social Security offices, military depots, and Internal Revenue Service centers. We included 144 installations of the Department of the Treasury in this survey, and the purpose of this correspondence is to provide you a brief summary of the results as they apply to Treasury as well as to compare Treasury results with the results of all surveyed federal installations. We believe this information--particularly data on barriers to TQM--can be useful in your planning and as a baseline for judging future efforts.

GAO/GGD-93-30R, TQM Implementation at Treasury

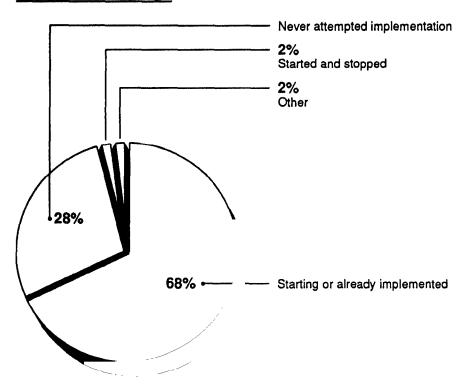
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¹Ouality Management: Survey of Federal Organizations (GAO/GGD-93-9BR, Oct. 1, 1992).

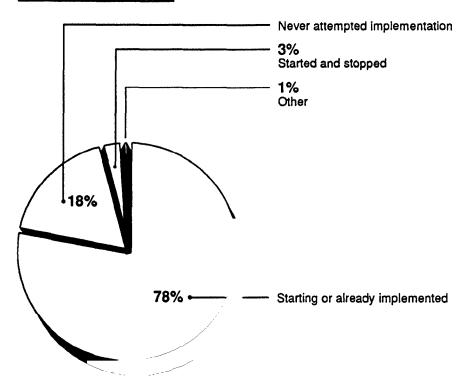
STATUS OF TOM

Figures 1 and 2 show the percentage of government installations and Treasury installations implementing TQM. As figure 1 shows, about 68 percent of the federal installations responding to our survey reported they were starting or already implementing TQM. Figure 2 shows about 78 percent of the Treasury installations responding to our survey were starting or already implementing TQM. Additionally, about two-thirds of the remaining Treasury installations reported that they planned to implement TQM.

Figure 1: Percentage of Government Installations
Implementing TOM



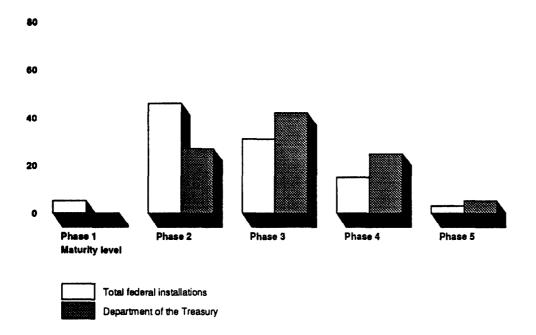
<u>Figure 2: Percentage of Treasury Installations</u>
<u>Implementing TOM</u>



To obtain a picture of the status of federal TQM efforts, we asked installations to report their efforts in terms of a five-phase maturity scale. Maturity definitions ranged from Phase 1, preliminary TQM efforts, to Phase 5, institutionalized efforts that are achieving significant benefits (see enc. I for definitions). As figure 3 shows, 51 percent of the total federal installations responding to the survey reported being in Phase 1 or 2; none of the Treasury installations reported being in Phase 1, and 27 percent reported being in Phase 2. The fact that fewer Treasury installations were in the early phases of TQM reflected the average age of Treasury's efforts; all but 22 percent of the installations implementing TQM reported beginning TQM efforts over 2 years ago.

Figure 3: Status of TOM

100 Percent of organizations with TQM efforts



In our survey of federal installations, we asked respondents about the extent of their involvement in 43 activities commonly undertaken by organizations involved in TQM. Such activities include providing training in TQM tools for employees, establishing quality councils or steering groups, and establishing problem-solving teams. Installations reported that their involvement in these activities increased as maturity increased. In other words, installations identifying themselves as more mature in TQM also more frequently said they were doing the 43 activities commonly associated with TQM.

Comparing Treasury installations' involvement in these activities with reported maturity phases, we discovered that Treasury generally reflected the same trend as in the total survey--that

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is, as Treasury installations' maturity increased, they more frequently reported doing TQM activities. For example, 61 percent of the Phase 2 Treasury installations provided training in TQM tools for employees, whereas 96 percent of the Phase 4 and 100 percent of the Phase 5 installations provided such training (there were no Phase 1 installations reported by Treasury respondents).

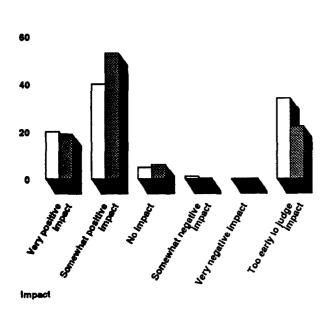
BENEFITS OF TOM

We considered benefits in two ways: (1) effect on external customers as reflected by overall organizational performance and (2) effect on internal customers as reflected by internal operating conditions. We asked respondents to assess TQM's effect on organizational performance in terms of productivity, reductions in costs, quality of products and services, overall service to customers, customer satisfaction, and timeliness. depict the overall impact, we developed an index that is the average of responses to our questions on the degree of impact. Figure 4 compares Treasury and total federal responses and shows that 72 percent of the Treasury installations reported positive benefits, very few saw either no impact or a somewhat negative impact from TQM, and 22 percent felt it was too soon to judge benefits. These results were similar to the overall federal survey results, although Treasury respondents indicated higher benefits than the total federal survey.

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Figure 4: Impact of TOM on Performance

100 Percent of respondents

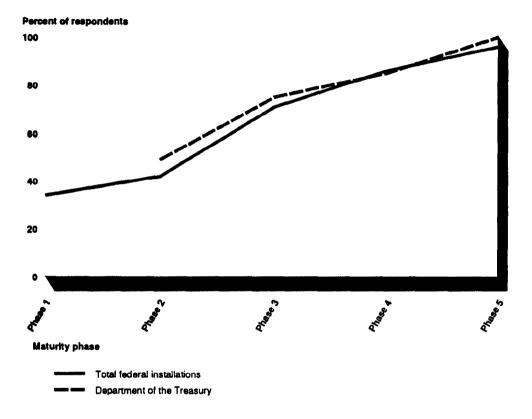


Total federal installations

Department of the Treasury

Reported benefits increased as maturity increased. We compared the composite index of responses on external benefits with maturity phases and learned that more mature installations reported greater benefits. Figure 5 shows, by maturity phase, the percentage of total federal respondents and the Treasury respondents reporting somewhat to very positive benefits. We found Treasury results were very similar to total federal results.

Figure 5: Respondents Reporting Increased Organizational Performance

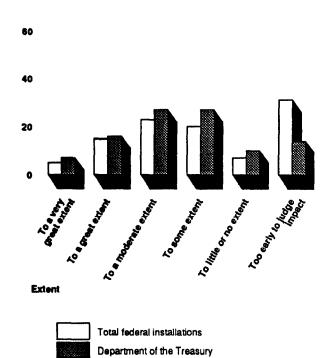


For internal operating conditions, we asked the installations to identify the impact of TQM on each of 13 internal operating conditions, such as communications and labor-management relations. To illustrate the benefits, we developed an index in the same manner as for the organizational performance indicators.

Figure 6 compares the Treasury and total federal responses. Only 14 percent of Treasury respondents said it was too early to judge results, as opposed to 31 percent of the total federal respondents. The percentage of Treasury installations reporting positive impacts on internal operating conditions may reflect the extent and maturity of Treasury's TQM efforts.

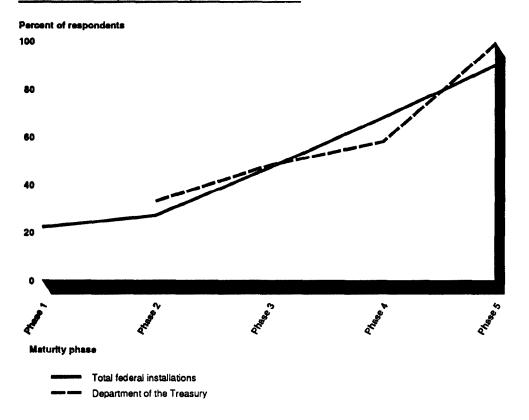
Figure 6: Extent of Positive Impact on Internal Operating Conditions

100 Percent of respondents



In a manner similar to the overall organizational benefits, we compared the composite index of benefits with maturity phases and noted that reported internal conditions improved as maturity increased. Figure 7 shows the percent of respondents reporting a moderate to very great positive impact, by maturity phase, for both the Treasury and the total federal respondents.

Figure 7: Respondents Reporting Positive Impact on Internal Operating Conditions



BARRIERS TO TOM

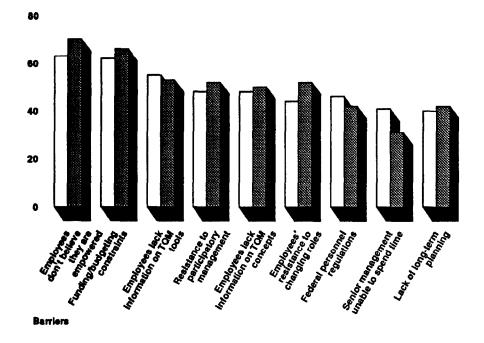
We asked all the federal installations we sent our recent survey to about the significance of 21 potential barriers to implementing TQM that had been identified through our research. Nine barriers were said to be moderate to very major problems by 39 percent or more of the total federal respondents.

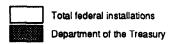
Figure 8 compares Treasury responses for the same category of barriers identified in the total federal survey and shows the percentage of Treasury respondents who reported these categories were barriers. It should be noted that many of the top nine

barriers reported by the total federal respondents were related to employee issues, such as (1) employees do not believe they are empowered to make changes, (2) employees lack sufficient information on how to use TQM tools, and (3) employees lack information and training on TQM concepts and theory.

Figure 8: Respondents Reporting Barriers Were Moderate to Very Major Problems to Implementing TOM

100 Percent of respondents





Six of the Treasury's top nine barriers were also among the top nine barriers reported by all federal respondents. The three barriers reported among the Treasury's top nine that were not included in the overall top nine were (1) management unfamiliar

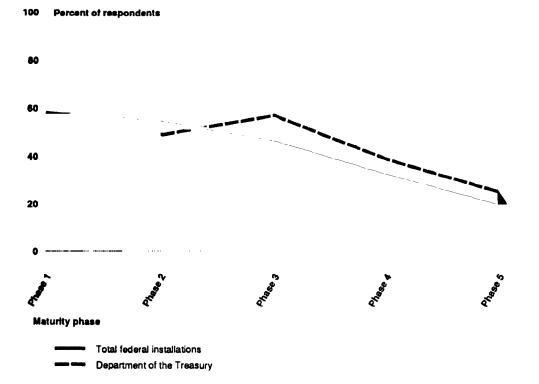
or uncomfortable with statistics and measurement techniques, (2) measures of satisfaction from external customers difficult or impossible to get, and (3) insufficient support for TQM among installation managers. Table 1 lists the top nine barriers reported by Treasury respondents.

Table 1: The Top Nine Barriers Reported by Treasury Respondents as Moderate to Very Major Problems

Barriers to implementing TQM	Percent
1. Employees do not believe they are empowered to make changes.	70
2. Funding/budgeting constraints.	66
3. Management unfamiliar or uncomfortable with statistics and measurement techniques.	55
4. Measures of satisfaction from external customers difficult or impossible to get.	55
5. Employees have insufficient information on how to implement TQM and use TQM tools.	53
6. Employees' resistance to changing roles or changing organizational structures.	52
7. Resistance to moving toward a participatory style of management.	52
8. Employees have insufficient information and training on the theory, concepts, and design of TQM.	50
9. Insufficient support for TQM among installation managers.	49

Figure 9 shows a composite index comparing Treasury responses for the nine major barriers reported by the total federal respondents, by phase. It illustrates that as maturity level increased, both Treasury installations and the total federal installations surveyed viewed barriers as being less troublesome and significant.

Figure 9: Respondents Reporting Barriers Decreased With Maturity Level



SUMMARY

Our survey of federal TQM efforts indicated that as installations invested more time and effort in TQM activities, they matured in the implementation of TQM, found that the barriers became less difficult, and reaped greater benefits. Although some differences were reported between Department of the Treasury TQM experiences and those of all federal respondents, overall Treasury respondents' message generally appeared to be similar.

We have enclosed a copy of our report <u>Quality Management: Survey of Federal Organizations</u> (GAO/GGD-93-9BR, Oct. 1, 1992) to provide information on the background; results; and objective, scope, and methodology of the total survey.

We hope you will find this information useful in guiding your quality management initiatives and in improving service to your customers under today's budget constraints. We will make copies of this correspondence available to others upon request.

The major contributors to this correspondence are listed in enclosure II. If you have any questions, please call me on (202) 512-8387.

Sincerely yours,

J./William Gadsby

Director, Government Business

Operations Issues

ENCLOSURE I ENCLOSURE I

PHASES OF TOM IMPLEMENTATION

PHASE 1 - DECIDING WHETHER TO IMPLEMENT TOM

Management is researching or deciding whether to implement TQM, but no formal decisions or activities have been initiated by top management. A few employees may have attended quality conferences or network meetings, but the installation as a whole has yet to be informed or involved in a TQM project.

PHASE 2 - JUST GETTING STARTED

TQM efforts are in the early planning and implementation phase. Management has made a formal decision to start TQM and has communicated this to the organization. The organization's mission and vision have been articulated. A few quality structures, such as quality councils, steering committees, or teams, have been established, and some awareness training has been given. Preliminary quality planning has been done. Pilot programs or newly initiated installationwide efforts to improve quality are included in this phase.

PHASE 3 - IMPLEMENTATION

Specific TQM processes designed to improve quality are in place. TQM training for management and employees is beyond the orientation/awareness stage and focuses on TQM tools and techniques and team-related activities. Measures of quality and productivity have been identified and specific goals have been set.

PHASE 4 - ACHIEVING RESULTS

The installation has a sustained TQM effort and has begun to achieve and document significant results. Systemic, crossfunctional, and/or organizational achievements from the TQM effort have been realized.

ENCLOSURE I ENCLOSURE I

PHASE 5 - LONG-TERM INSTITUTIONALIZATION

The installation has incorporated all of the principles and operating practices of TQM throughout much of the organization. The installation has documented substantial improvements in quality and customer satisfaction resulting from these efforts and is making consistent and continuous improvement throughout. An installation in this phase may have been recognized as a Quality Improvement Prototype Award winner or may be a recipient of the President's Award for Quality.

ENCLOSURE II ENCLOSURE II

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