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# Computerizing tax and customs administrations

Computerization is an important part of World Bank tax and customs projects. Drawing on completed and ongoing projects—especially the Philippines Tax Computerization Project—this note offers recommendations for project design and implementation.

A modern tax or customs administration depends on information technology. In few countries are tax and customs operations so limited that manual processing of returns and payments is adequate. Thus the Bank considers computerization to be an important element of capacity building in revenue administration. Of the 43 Bank projects with a major tax or customs administration component in the 1990s, 33 included partial or complete computerization of tax and customs.

The International Monetary Fund provides technical assistance to revenue administration reform efforts, but it cannot support the acquisition and development of hardware and software. Thus Bank projects for tax and customs computerization can be an ideal complement to IMF efforts. In recent years one of the most significant such projects has been the computerization of the Bureau of Internal Revenue and the Bureau of Customs in the Philippines. This note draws lessons from seven years of project implementation and from a workshop held in Manila in April 2000. The workshop was part of a powerful new evaluation instrument, the Intensive Learning Implementation Completion Report, that will target 30 percent of the Bank's portfolio. These new reports provide deeper analysis than regular Implementation Completion Reports, distilling best practices and lessons to improve project planning, design, and supervision.

#### Goals of revenue computerization projects

The most obvious potential benefit of computerization is more effective revenue collection due to better audit selection, easier detection of stop-filers and nonfilers, and faster payment and refund processing. This is also the main objective of most Bank computerization projects-whether in Hungary, the Philippines, Thailand, or elsewhere.

But while computerization seeks to enhance revenue, this should not be the sole objective of tax computerization projects. Information technology can also increase the transparency of tax and customs administrations and reduce corruption. It can improve taxpayer service. And it can revolutionize communications between tax authorities and the private sector, as well as the exchange of data with other government agencies.

By pursuing broader objectives, tax computerization projects can support fundamental changes in the vision, structure, and public perception of revenue administrations. The development of products like interactive Web services for taxpayers or an electronic data exchange system with other government agencies (such as the ministry of finance or the land registry) should be an essential element of the initial project design. This approach also avoids a situation like that in the Philippines, where a data exchange system was added only later

Better technology enables better revenue collection and can reduce corruption, improve service, and revolutionize public-private communications

in the implementation process—causing problems with coordination and ownership.

The narrow objectives of early tax and customs computerization projects resulted primarily from the characterization of these projects as information technology projects rather than as tax or customs projects. Emphasis was placed on providing hardware and software instead of using information technology to reform operations and institutions. To avoid that outcome, tax and customs computerization projects should not be designed as standalone projects. Ideally, computerization should be one component of a broader Bank effort to reform tax and customs organizations and procedures-as in the Latvia State Revenue Services Modernization Project-or linked to IMF technical assistance.

## Preparing a tax computerization project

Several considerations should be taken into account when preparing a tax computerization project.

#### procedures

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### Links to tax policy and administration reform

Because tax computerization projects are essentially tax administration reform projects, their timing depends on the status of legal and administrative reforms of the tax system. Major tax policy reforms during project implementation can seriously affect a project's duration and success. Ideally, tax computerization should follow and support tax policy reform.

A sound diagnosis of the revenue administration and its reform needs should be carried out before launching a project. This diagnosis must include a detailed evaluation of organizational structures, work processes, and reporting requirements. Streamlining administrative procedures and simplifying tax forms are important elements of tax and customs reform in almost all developing countries, and must be addressed as an initial part of the project or as a prerequisite for computerization. The Banks computerization projects have not always emphasized the importance of the sequencing of reform efforts. Instead projects have simply assumed—as in the Philippines Tax Computerization Project—that the government would initiate the needed administrative reforms without agreeing on a clear strategy and timetable.

#### Software development

Most Bank tax computerization projects imply in-house development of new tax administration software. Until recently this approach was unavoidable because very little tax software was available. But developing such software is costly, time-consuming, and difficult, as the Philippines's experience shows. Among the significant risks are an unqualified system developer, a lack of cooperation between the developer and the tax administration during development, and problems with system maintenance and updates.

In the Philippines computerization of the customs administration was much less problematic than computerization of the tax administration because the Bureau of Customs relied on a standard software package, ASYCUDA, developed by the United Nations Conference on Trade and Development and used by more than 60 countries. A new version of ASYCUDA, ASYCUDA++, was developed for the Philippines under the Bank computerization project and is being maintained by UNCTAD for worldwide use.

On the tax side, software known as the Integrated Tax System and Internal Administrative System was designed exclusively for the Philippines tax administration, and the full design and maintenance risk will be borne by the Bureau of Internal Revenue. Today various software packages are available for the integrated computerization of tax administrations as well as for the computerization of specific functions and services, such as taxpayer risk analysis and electronic filing. Future projects involving tax computerization should use standard tax administration software to the greatest extent possible.

#### Capacity to absorb the project

Computerization is a complex task in a revenue administration with computer-illiterate staff, inappropriate business processes, and badly designed procedures. This raises the question of whether computerization should occur all at once or in stages. The Philippine Bureau of Internal Revenue was overburdened by the task of computerizing the entire tax administration in just six years. This process involved developing, testing, and distributing 14 modules of the Integrated Tax System, changing administrative procedures, establishing training centers and training more than 6,000 staff members, and setting up an infrastructure for taxpayer support.

Major computerization projects should divide such efforts into smaller pieces. This can be achieved through the appropriate sequencing of computerization tasks, such as registration or audit selection, or by limiting the project to computerizing a small number of offices in key revenue regions, rolling out to other local or regional offices at a later stage.

#### Change management

An efficient change management strategy is another precondition for successful tax computerization. Completed projects show that change management activities should start early in the implementation stage, that change management activities should target taxpayers and tax administration officials equally, and that international consultants may be needed for change management programs if high-quality local consultants are not available.

A major and essential task is the dialogue with taxpayers to explain the impacts and advantages of tax computerization. Otherwise, projects may encounter misunderstandings and opposition. In the Philippines such problems caused an 80 percent suspension in tax return filing during the testing phase of the system.

#### Leadership commitment

Senior managers must be committed to computerization and modernization during project preparation and design. No multiyear project is immune to major changes in the senior management of the implementing agency, resulting in disruptions and redefinitions of priorities. But the impact of such changes can be reduced if a clear implementation strategy—including an activity plan and implementation benchmarks—has been agreed with the client government. In the Philippines, following changes in the leadership of the Bureau of Internal Revenue, the implementation strategy for the computerization project went through two rounds of heavy changes. This could have been avoided if a clearer project implementation plan had been available.

#### **Project implementation**

Three elements of project implementation require careful consideration.

#### Implementation plan

The lack of a detailed project implementation plan was a major weakness in the Philippines and in several other Bank tax and customs computerization projects. Clearly identified project milestones, actions needed to achieve those milestones, and target dates for delivering outputs are critical to allow for timely and adequate intervention in case of implementation problems.

#### Supervision

Tax and customs computerization projects should be driven by priorities for administrative reform—not by information technology arguments. This point has a direct bearing on a project's supervision needs. Supervision must involve both information technology experts and tax administration experts throughout project implementation. This is necessary to identify early deficiencies in project implementation, which can be related to information technology or to problems with tax policy and administration. Ideally, a change management expert should be involved in at least part of these supervision activities.

#### Procurement

Procurement is a major hurdle in projects involving large-scale information technology. Equipment specifications must be both detailed and flexible, taking into account the short lifecycle of hardware. A number

A detailed project implementation plan is crucial of factors contributed to successful procurement in the Philippines Tax Computerization Project: the input of information technology experts familiar with procurement problems, the use of a company with extensive procurement expertise as the project's procurement consultant, and the demanding invitation for bids, requiring a turnkey contract and international experience with similar projects.

#### **Project sustainability**

An information technology system is a major investment-one with budgetary and human resource implications that extend far beyond the life of a project. According to IMF data, a tax administration usually requires an information technology budget that is about 10 percent of the total tax administration budget for years in which major changes are not occurring. During periods of major change that share increases to 15–20 percent—and sometimes more. There is a substantial risk that, without changes in the budget allocation, a tax administration will not be able to maintain and modernize its computer system. There are several ways to address such concerns:

- The government can commit to provide sufficient financial resources for the system in the future.
- The tax administration can, through an agreement with the government, be allowed to retain a fixed percentage of additional taxes collected through the use of the computer system.
- The tax administration can be given autonomy in budget, personnel, and procurement matters, as with a number of autonomous revenue authorities in Latin America and Africa.

High turnover among information technology staff is another challenge for a computerized tax administration. In most countries public salaries are not competitive with private salaries, and information technology experts normally find ample job opportunities in private enterprises. There are only two ways to deal with this issue: by exempting information technology staff from salary laws (preferably, through a condition in the initial project agreement) or by outsourcing information technology activities. Outsourcing requires a feasibility study to identify quality concerns and costs.

#### Links to other public sector reforms

Revenue administration computerization projects should be seen in the broader context of public sector reforms. They touch on issues such as the government's overall strategy for information technology, the revenue agency's autonomy in maintaining information technology systems, civil service laws and procurement policies, and communication and cooperation among government agencies. Tax and customs computerization is often a country's first exposure to a major computerization project in the public sector. Lessons from tax and customs computerization can provide incentives-and disincentives-to exploit opportunities for electronic government in other agencies.

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If you are interested in similar topics, consider joining the Tax Policy and Administration Thematic Group. Contact Michael Engelschalk (x87764) or Anna Hansson (x38485), or click on Thematic Groups on PREMnet.



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