

Caribbean Regional Technical Assistance Centre



**Strengthening Risk Management and
Audit Strategies to Improve Compliance**

**Ron Thomson
CARTAC Expert**

Paper presented at
Caribbean Organization of Tax Administration (COTA) General Assembly

Belize City, Belize
July 2008

TABLE OF CONTENTS

1. Purpose	4
2. The Importance of Tax Administration and the Need for Effective Management	5
3. An Overview of Risk Management in Tax Administration	7
3.1 What is Risk and What is Risk Management.....	8
3.2 Two Categories of Risk.....	8
3.3 Benefits of Risk Management.....	9
4. Managing Risk Within the Organization	9
4.1 Integrated Risk Management.....	9
4.2 Incorporating Risk Management in the Annual Strategic Planning Cycle	10
4.3 Risk Register.....	12
4.4 Priority Setting and Resource Allocation.....	12
4.4.1 <i>Risk Ranking Matrix</i>	13
5. Compliance Risk Management	14
5.1 Risk Identification.....	15
5.1.1 <i>Macro Analysis</i>	15
5.1.2 <i>Aggregate Analysis</i>	16
5.1.3 <i>Random Audit Samples</i>	17
5.2 System-Based Risk Assessment.....	18
5.2.1 <i>Data</i>	19
5.2.2 <i>Techniques for Systems-based Risk Assessment</i>	20
5.2.2.1 <i>Third Party Data Matching</i>	21
5.2.2.2 <i>Rules-Based Criteria</i>	21
5.2.2.3 <i>Financial Statement Analysis</i>	21
5.2.2.4 <i>Data Mining</i>	22
5.2.2.5 <i>Graphic Link Analysis and Pattern Matching</i>	22
5.3 Prioritizing Compliance Risk.....	23
5.3.1 <i>Weighted Criteria</i>	23
5.4 Understanding Non-Compliance Behavior.....	24
5.4.1 <i>Underlying Factors</i>	24
5.4.2 <i>Taxpayer Profiles on Compliance</i>	24
5.4.3 <i>Example of Transaction Visibility</i>	25
5.5 Strategy Development.....	25
6. Improving Compliance By Strengthening Audit Strategies	27
6.1 Strategies to Maintain the Tax Base.....	28
6.2 Strategies to Expand the Tax Base.....	29
6.3 Balancing Coverage and Highest-Risk Audits.....	29
6.4 Segment-Based Audits.....	29
6.5 Partnerships.....	30

7. Other Important Considerations in Risk Management	30
7.1 Business Planning.....	30
7.2 Executing the Plan.....	31
7.3 Sound Project Management and Monitoring.....	32
7.4 Evaluation of Results.....	32
8. Challenges	33

Appendix 1 – Case Study of Systems-Based Risk Assessment System	34
--	----

Appendix 2 – Compliance Strategies of Selected Revenue Administrations	35
---	----

Figures

1. Treasury Board of Canada’s Management Accountability Framework.....	6
2. A Common Integrated Risk Management Cycle.....	10
3. Risk Ranking Matrix.....	13
4. Compliance Risk Management Cycle.....	14
5. COMPASS System Showing Aggregate Risk Analysis.....	17
6. IRS Tax Gap Map, 2001.....	18
7. Elements of System-Based Risk Assessment.....	19
8. Hypothetical Research Environment for Risk Assessment.....	20
9. Graphic Linkage Analysis Example.....	23
10. OECD Model for Strategy Development.....	26

Tables

1. Taxes / GDP in Selected Countries.....	5
2. Net Misreporting Percentages for Individuals.....	25
3. Analysis of 2005 GCT Annual Filings.....	28
4. Audit Program Plan Template.....	31

Charts

1. Net GST Collections versus Consumer Expenditures On Domestic Goods and Services in Canada.....	16
2. Taxpayer Compliance Attitudes.....	25

1. PURPOSE

This document illustrates the principles and application of risk management and audit strategies and shows how tax administrations may use them to improve voluntary compliance levels. It has drawn from the best practices used in a number of countries.

It delineates a systematic, disciplined approach that ensures an administration's strategies and initiatives are reasoned, defensible and result in the most effective use of limited resources.

2. THE IMPORTANCE OF TAX ADMINISTRATION AND THE NEED FOR EFFECTIVE MANAGEMENT

The role of government has one purpose: to improve the lives of its citizens. And in today's world, it does so by the delivery of critical programs. These include providing basic infrastructure to programs aimed at making improvements in education, health care, defense and security, and social support.

But these programs come at a cost. So tax administrations play a key role in government success, as the collector of tax revenues¹. And we should make no mistake about it - tax administration is big business. The following table shows taxes collected for selected countries as a percentage of their gross domestic product.

Table 1 – Taxes / GDP in Selected Countries

Country	Tax / GDP (%) All taxes, all levels of government
Sweden	50.6
France	43.4
U.K.	35.6
Turkey	32.8
U.S.A.	25.6
Argentina	21.1
Mexico	19.0

Source: OECD

To put it in perspective, in 2003, total taxes collected averaged 36.3 percent of gross domestic product in Organization for Economic Cooperation and Development (OECD) member countries.² While tax ratios varied significantly, in the European region nine countries—Austria, Belgium, Denmark, Finland, France, Italy, Luxembourg, Norway and Sweden—had tax/GDP ratios of more than 40 per cent. In contrast, total tax revenues of Chile, China, India, Mexico, and Singapore were less than 20 per cent of GDP, while eight countries—Argentina, Ireland, Japan, Korea, Latvia, Lithuania, the United States, and South Africa—had tax ratios in the 20-30 per cent range.

Comparatively speaking, according to IMF statistics in the 2002-2006 reporting period, the Caribbean countries of Jamaica, St. Kitts and Nevis, St. Vincent and the Grenadines, and Trinidad and Tobago had total revenues (including social security contributions) averaging 33.6 percent of GDP, with the total taxes component averaging 24.4 percent of GDP.

In a perfect world, the revenues collected would reflect all taxes due and would come in voluntarily. But as far back as A.D. 300, the Roman historian Marcellinus wrote about

¹ This may include Customs and social contributions as well.

² The OECD reported this in their Comparative Information Series (2006). About eighty percent came from personal income tax, social contributions, corporate income/profit tax, and value added taxes.

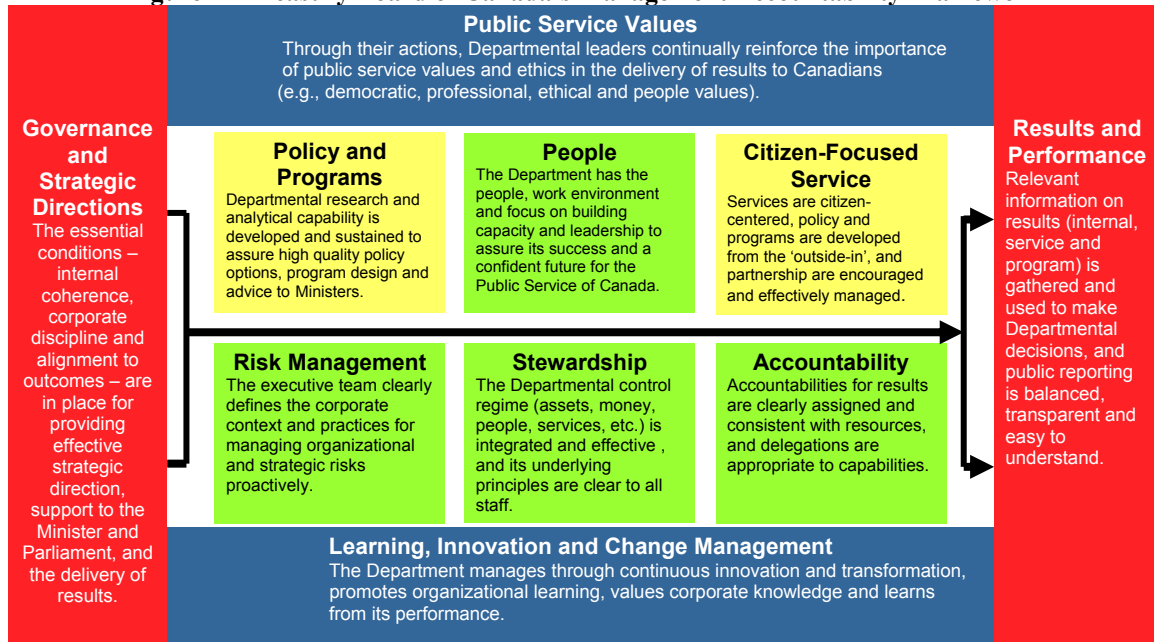
revenue administration efforts to ensure that local farmers paid their ‘fair share.’ While times have changed, tax gaps still exist, with a wide spectrum of underlying reasons ranging from lack of taxpayer understanding to willful evasion.

The tax gap estimates of the US Internal Revenue Service (IRS) for their 2001 tax year further demonstrate the importance of revenue administration. With a voluntary compliance rate of 83.7 percent, the U.S. estimated its gross tax gap at 345B USD³. And they expected only 15.9 percent of this (55B USD) to be collected through further administrative actions.

With stakes like that, expectations on the performance of tax administrations have risen dramatically. Politicians are demanding accountability and results from government departments. And citizens aren’t far behind in their rising expectations. They want real value from government: services tailored to their needs, principled financial stewardship, as well as efficiency, effectiveness, fairness and transparency.

In response, governments have made efforts to become more accountable, transparent, and effective. Like the private sector, many governments now link their strategic direction to performance-based goals and objectives, and measure success based on the attainment of improved outcomes. For example, the Treasury Board of Canada’s *Management Accountability Framework* noted below, expects a direct link between the governance and strategic direction of Canada’s federal departments, and results and performance.

Figure 1 - Treasury Board of Canada’s Management Accountability Framework



Source: Treasury Board Secretariat of Canada

³ The IRS’s National Research Program (NRP) uses random audit selection techniques to produce statistically valid estimates of the tax gap. Estimates do not include the illegal economy.

The design of the framework contains ten interdependent management principles, underlining the integrated nature of modern management. One of the foundational components is *risk management*. The application of this technique provides the rigor necessary to ensure that decisions are well-reasoned and defensible and lead to both improved results and effective performance.

3. AN OVERVIEW OF RISK MANAGEMENT IN TAX ADMINISTRATION

The primary goal of tax authorities is to collect all the taxes payable, according to the laws they administer. Ideally, this is done in a manner that sustains confidence in the tax system, and promotes voluntary compliance.

But tax administration is a complex, difficult responsibility. Day-to-day priorities come up constantly, disrupting and conflicting with the capacity to stay the course in addressing long-term goals and objectives. Decision-making involves weighing factors having complex, interdependent impacts. Internal and external environments are continually changing, with uncertain consequences.

From an internal perspective, the administration has:

- Limited human resources to do the job, usually geographically dispersed across the country;
- Limited financial budgets with which to make capital expenditures and manage day-to-day business costs;
- Complex legislation allowing for some uncertainty in interpretation;
- Technology infrastructure and systems continually in need of upgrading and improvement;
- Varying staff competency levels, with a continual need for training; and
- Organizational cultures with diverse levels of staff motivation, productivity, empowerment and accountability.

From an external perspective, many factors may affect the administration:

- Rapidly evolving business practices, such as e-commerce, globalization, and complex company restructuring and transactions;
- Shifting public attitudes toward government and compliance issues such as acceptance of the underground economy;
- Demographic trends affecting population characteristics (e.g., language, culture, age, urban migration); and
- Economic trends affecting employment levels, as well as entry and exit from self-employed businesses.

The onus is on the tax administration, though, to be diligent in the way it manages its responsibilities. And understanding and managing risk is at the core of achieving its objectives.

3.1 WHAT IS RISK AND WHAT IS RISK MANAGEMENT?

First, let's recognize that risk is unavoidable and present in virtually every human situation. It is present in our daily lives, and in the daily affairs of both public and private sector organizations. Many accepted definitions of risk are in use. Generally, though, risk involves the uncertainty associated with a future event or situation that may result in an associated exposure to loss. Characteristics of risk include levels of vulnerability, severity or significance, as well as relative likelihood of occurrence.

From the context of tax administration, the starting point for identifying risk involves an understanding of the organization's objectives. *Anything that can negatively impact on the administration's ability to achieve its compliance objectives is a risk.*

A taxpayer's decision to comply or non-comply with tax legislation involves a risk-based decision process. In this case, the objective is obtaining an economic benefit by paying less tax than legitimately owing. The taxpayer bases their compliance decision on factors such as the amount of potential benefit, the likelihood of detection, and the consequences if discovered. At the end of the day, individuals formulate their own risk-reward equation that will accompany their socio-moral characteristics to help determine the actions they will take.

Risk management, then, is a formalized, systematic approach, based on sound analysis, designed to set the best course of action under the uncertainty of risk. The technique involves identifying, assessing, understanding, and acting on risks that impinge on the organization's ability to achieve its objectives. Risk management is not new, and is an integral component of good management and decision-making. Developing a mature risk management environment requires sustained commitment and increased levels of tolerance for change.

3.2 TWO CATEGORIES OF RISK

In managing risk, tax administrations must distinguish between two different categories of risk. Internal, or *organizational risks*, are risks that relate to the internal environment of the administration. Do the human resources of the administration have the right training and skill sets to achieve the organization's goals? Are the business processes efficient, effective and complete? Are IT support systems in place and functional? Is the infrastructure adequate?

Compliance risks represent a different category – one that is external to the organization. In general, they represent risks associated with such compliance issues as the underground economy, VAT fraud, non-registration, non-filing, aggressive tax planning and the like.

While the strategic approaches to these two categories of risk differ significantly, they compete for the same resources, both financial and human, in managing their respective risks. Thus, effective prioritization of risk becomes a critical component of effective risk management.

3.3 BENEFITS OF RISK MANAGEMENT

Risk management involves taking decisions leading to deliberate strategies and actions that mitigate the negative impacts of risk, while maximizing positive opportunities. Properly executed, its benefits:

- Provide assurance that the most effective use is being made of the organization's resources by focusing them on the most significant risks
- Ensure reasoned and defensible decisions, priorities and actions, reflecting the changing environment within which a tax administration operates
- Foster fairness and equal treatment of all taxpayers
- Focus the burden of audit to non-compliant taxpayers
- Result in the most effective means of improving voluntary compliance

4. MANAGING RISK WITHIN THE ORGANIZATION

4.1 INTEGRATED RISK MANAGEMENT

A tax administration's use of risk management is not complete unless it uses the technique to manage risk from an organization-wide perspective and incorporates risk information into its strategic direction-setting. One often uses the term "*integrated risk management*" to describe this approach, which examines and addresses risks both internal to the organization, as well as those originating externally to the organization. The approach is continuous, proactive and systematic and manages and communicates risks at the strategic, operational and project levels.

While the main focus of this paper relates to managing compliance risks (i.e., those risks taxpayers present to the administration), this chapter will examine the identification and prioritization of risks internal to the organization. Such a focus is necessary to ensure that the organization identifies and assesses significant risk areas associated with policies, plans, programs and operations, and that they address unfavorable impacts by putting appropriate measures in place. The approach does not focus only on the minimization or mitigation of risks, but also supports activities that foster innovation, so that the administration can achieve the greatest returns with acceptable results, costs and risks. Figure 2 below depicts a common model used in the practice of integrated risk management.

Figure 2 - A Common Integrated Risk Management Cycle



4.2 INCORPORATING RISK MANAGEMENT IN THE ANNUAL STRATEGIC PLANNING CYCLE

World practice among tax administrations is to embed risk management into their (annual) strategic planning cycle. The head of the administration and leaders of the key functional areas are responsible for making decisions that may confirm or re-calibrate the strategic direction of the organization. Their assessment will generally involve:

1. Scanning the external environment to identify emerging trends and likely events of relevance to tax administration;
2. Considering taxpayer and stakeholder views about the organization's direction;
3. Examining the strengths and weaknesses of key programs, and measures that may improve efficiency or effectiveness;
4. Identifying and assessing internal organizational risks, in particular examining human resource issues, IT systems, and gaps in business processes and programs; and
5. Identify and assess external opportunities and threats.

The *environmental scan* is a forward-looking assessment of key subject areas having the potential to affect revenue administration. These include the political arena; economic, business and demographic trends; public attitudes; advances in technology; and proposed legal or legislative changes impacting the goals of revenue administration. They may include:

- Statements by the Government of their priorities
- An analysis of the organization’s performance data
- Staff attitudes and ideas
- International developments
- Market research of taxpayer attitudes to the organizations performance
- Formal reviews of the organization.

Accounting for *taxpayer and stakeholder views* ensures that the administration has followed the principle of taking an ‘outside-in’ or client-focused view of its actions, which builds trust supporting the achievement of its goals. Many administrations have established advisory committees with large business, small business and industry-sector associations. Such committees allow an exchange of ideas relating to taxpayer compliance costs and policy development. The organization may also use taxpayer focus groups to better understand service needs, and help shape approaches to compliance.

In the course of monitoring initiatives and programs, leaders of key business functions *assess performance and identify areas of concern* as well as areas of strength. They examine weak performance to determine causes, as well as actions necessary to support improvement. Internal weaknesses and risks fall into categories such as:

- Human resources
- Infrastructure
- Technology support
- Business processes
- Accountability

Typical questions that may reveal risks or risk issues include:

- *Human resources* – are there competency and learning gaps in the organization’s workforce; deficiencies in resource levels resulting from workload increases or budget reductions; need for building leadership capacity; need for improved transfer of knowledge; support for corporate values (e.g., front-line attitude to taxpayers).
- *Infrastructure* – is there adequate floor and desk space; easy taxpayer access to service centers.
- *Technology* – is the communication and networking infrastructure adequate; are there gaps in IT support systems; adequate quality assurance, back-ups and disaster recovery.
- *Business Processes* – are the rigor, efficiency and effectiveness of business processes adequate or do they pose risks, including processes for staffing, financial controls, policy development, compliance risk identification (registering, filing, reporting and

remitting), return processing, redress, risk-based enforcement and business resumption/disaster recovery.

- *Accountability* – are the organizational accountabilities adequate (e.g., program gaps, capacity); are clearer accountabilities needed; and does the performance management regime need improvement.

4.3 RISK REGISTER

The results of the assessment lead to decisions about the most concerning risks. The administration always has options about how to handle given risks. They may accept a risk without further action, completely address it, mitigate the risk by taking some action, or transfer the risk (as in the case of legislative recommendations to close tax loopholes). Many administrations maintain a risk register they use to monitor the status of risks over time. The register typically contains:

- Definition of the risk
- Source of the risk
- Mitigation strategies already in place
- Severity of the residual risk (the risk that remains after the mitigation strategies)
- Comments that further define the risks or its future impact

4.4 PRIORITY SETTING AND RESOURCE ALLOCATION

Effective revenue administration must establish priorities and allocate resources appropriately to them. In a dynamic environment with resource constraints, this means assessing the relevance of existing activities and the relative importance of programs and initiatives that compete for available resources. New or emerging risks can result in the need to shift resources from existing programs to new initiatives.

In assessing internal risks, the management team develops proposals and must then prioritize them in a way most likely to optimize the use of the organization's resources and the outcomes of their actions. Resource requirements of proposals will invariably exceed those available. In any given year, for example, there may be proposals such as:

- Opening a new service channel for improving taxpayer service
- Implementing a new compliance strategy to address the underground economy
- Developing a collections call centre to improve the efficiency and effectiveness of revenue collections
- Implementing a new IT system to gain resource efficiencies

The proposals for each of these hypothetical initiatives would need to state human resource requirements, capital expenditures, operating budgets, training plans, and future-year resource savings. They would have a multi-year focus and state assumptions, constraints and risks.

The administration needs a sound analytical basis for determining priorities and an effective process for allocating and funding resources to ensure proper alignment of resources to strategic goals and objectives. Selecting the right technique for prioritizing risk is largely a function of the precision of information available for making decisions and management style. The more objective the approach taken, the more likely decisions will be defensible and correct. The most common technique for priority setting is the risk ranking matrix, discussed below.

4.4.1 Risk Ranking Matrix

When rating risk, conventional risk management theory considers the certainty (or probability) of a risk occurring, and an assessment of the consequences should it happen. The two dimensions allow the construction of a matrix for assessing the importance of the risk. The use of this technique (see Figure 3) is widespread and, for example, used by the Australian Tax Office.

Figure 3 - Risk Ranking Matrix

<u>Risk Likelihood</u>	<u>Consequence</u>				
	<i>Extreme</i>	<i>Serious</i>	<i>Prejudicial</i>	<i>Minor</i>	<i>Negligible</i>
Almost Certain (~95%)	Critical	Severe	High	Major	Significant
Probable (~80%)	Severe	High	Major	Significant	Moderate
Possible (~50/50)	High	Major	Significant	Moderate	Low
Unlikely (~20%)	Major	Significant	Moderate	Low	Trivial
Rare (~5%)	Significant	Moderate	Low	Trivial	Trivial

This approach provides a rational, transparent approach to priority setting by assessing the severity of individual risks. The risk ranking matrix categorizes risk into eight levels of relative importance: critical, severe, high, major, significant, moderate, low and trivial. In examining the matrix, one sees the higher the likelihood of occurrence and the more severe the consequences, the more important managing the risk becomes. Risks almost certain to occur, with extreme consequences, are highlighted as critical, and should be managed at a strategic level. The lower the severity of the risk, the less likely further action is required.

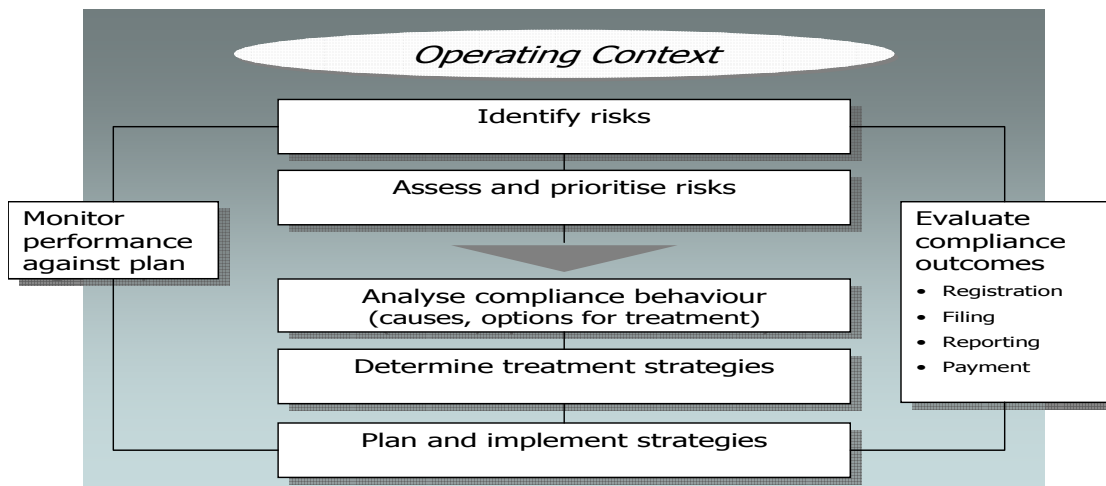
Decisions to take action should also consider the trade-offs between the cost of reducing a risk and the level of risk. No risk mitigation strategy should cost more than the risk against which it protects. So some important risks may have to be accepted, while less important risks with low-cost solutions may be managed at an operational level.

5. COMPLIANCE RISK MANAGEMENT

The mission statement for most tax administrations around the world contains a reference to either ‘achieving compliance’ or ‘collecting taxes due’. While risks internal to the organization may significantly impact on the ability to succeed in the mission and therefore the administration must address them, at the end of the day operations must focus on achieving compliance. Further, compliance relates to four key areas: proper registration, filing, reporting of correct taxes owing and timely remittance of taxes due. The task of achieving compliance is highly complex and while long-standing programs such as audit continue to play a key role, a more rigorous and analytical basis for prioritization and strategy development is necessary to improve the odds.

Compliance risk management is a disciplined approach to identify key compliance risks and develop and execute appropriate strategies for addressing them. The administration can use the process for addressing short-term operational solutions to improve voluntary compliance, or in the strategic planning cycle to contribute to the broader, strategic approach. The following figure depicts the OECD model for compliance risk management.

Figure 4 - Compliance Risk Management Cycle



Source: OECD

The compliance risk management cycle requires a clear understanding of the environment in which the tax administration operates (i.e., its operating context). Eight processes complete the cycle:

1. Identifying risks to the tax base – including those at a high level (e.g., underground economy, globalization, legislative weakness), by broad compliance

- category (e.g., registration, filing, reporting, remitting) or at the taxpayer or account level.
2. Assessing and prioritizing risk – determining where compliance is most vulnerable or where is the tax gap the greatest.
 3. Analyzing compliance behavior – understanding the underlying cause of the non-compliance, and what facilitates it.
 4. Determining treatment strategies – choosing strategies that may improve controls, make recommendations for legislative change, change resource allocation strategies, or leverage strategic partnerships.
 5. Planning and implementing the strategies – articulating the tasks, the resource requirements, the communication and training necessary, the timeframes, the expected outcomes, and then implementing the strategies in an operational environment.
 6. Monitoring performance against the plan – following sound project management practices to keep the plan on target.
 7. Evaluating outcomes – measuring success against pre-determined performance indicators and using the results to make future improvements.

The discussion in this chapter will focus to the identification, assessment and prioritization of compliance risks, and the development of strategies to address them.

5.1 RISK IDENTIFICATION

World practice in compliance risk identification generally focuses on four main approaches for identifying compliance risks, namely (1) macro economic analysis, (2) aggregate analysis of particular taxpayer segments (e.g., industry sectors) (3) analysis based on statistically valid random samples, and (4) system-based or taxpayer-based risk assessment.

Some tax administrations, given sufficient resource levels and access to the right skill sets, identify risk using all four techniques. They generally have analytical work units having a multi-discipline staff mix of competencies, including economics, accounting, audit, statistics, data mining and informatics.

Virtually all administrations use at least one of the approaches.

5.1.1 Macro Analysis

Macro-economic analysis approaches provide high-level indicators of compliance levels. In the United Kingdom, the administration uses macro analysis to estimate the VAT tax gap and establish targets against which the performance of compliance strategies can be compared.⁴ They used two separate, yet complementary approaches:

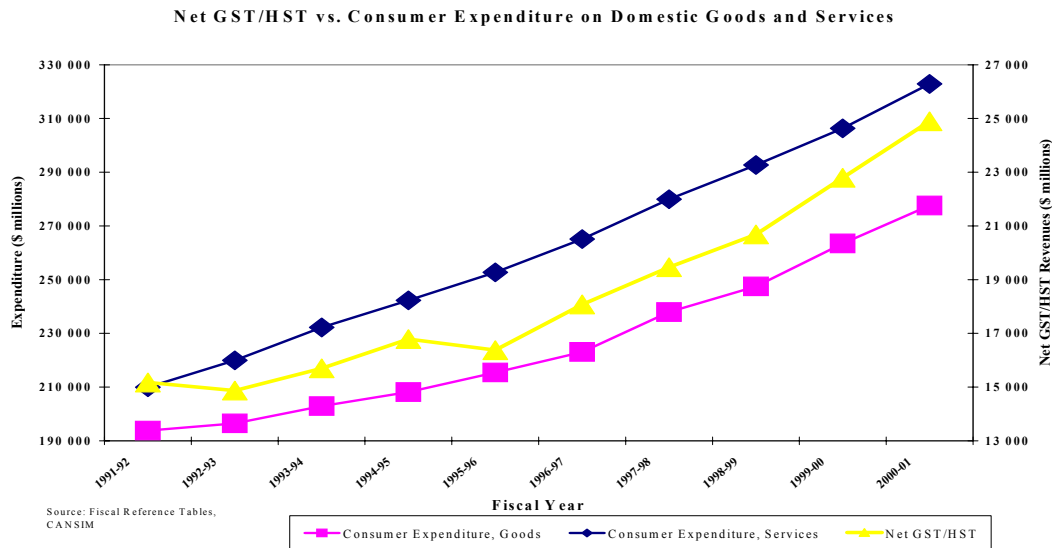
- ***top-down***, the difference between theoretical amount of VAT that should be due and actual VAT receipts = “VAT Gap”

⁴ This was presented in the HM Revenue & Customs document “Measuring Indirect Tax Losses – 2005”

- **bottom-up**, operational and intelligence data to corroborate top-down approach and attribute losses to specific problem areas.

The Canada Revenue Agency (CRA) compares net Goods and Service Tax (GST) collections against consumer expenditures on goods and services. This, supplemented with further analysis, permits a reasonable assessment of whether GST compliance levels are declining (expenditure rate growth exceeds collection growth rates) – see Chart 1. They used this indicator in conjunction with other macro indicators in Canada’s *Compliance Measurement Framework* to assess different segments of compliance risk.

Chart 1 - Net GST Collections versus Consumer Expenditures on Domestic Goods and Services in Canada



Source: Fiscal Reference Tables, CANSIM

5.1.2 Aggregate Analysis

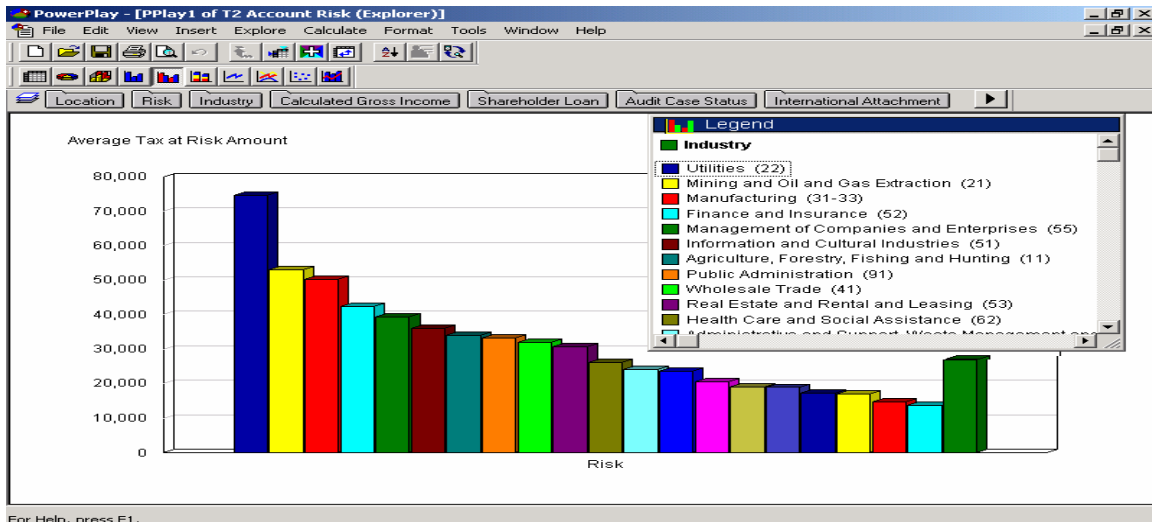
Most tax administrations perform some aggregate analysis to help direct their compliance efforts to taxpayer segments of greatest risk. Common among these analyses are those that focus on the tax performance of industry sectors. The definitions of sectors vary from administration to administration, but generally taxpayers having like industry codes are grouped together (e.g., the retail sector may encompass several industry codes, all of which relate to retail operations with business practices and profit margins that make them comparable for grouping).

Analyses may focus on a single industry sector or may compare compliance risks across different industry sectors. Analysis generally leads to compliance projects or more audit emphasis on sectors with highest risk.

The example in Figure 5 demonstrates how compliance staff at the Canada Revenue Agency may use their Compliance Measurement, Profiling and Assessment System (COMPASS) to identify industry sectors in their geographic districts having the highest

per capita tax risks. They perform this analysis by aggregating the tax-at-risk estimates for all taxpayers (from their taxpayer-based risk assessment systems) and grouping them in the respective industry sectors.

Figure 5 - COMPASS System Showing Aggregate Risk Analysis



Source: Canada Revenue Agency

5.1.3 Random Audit Samples

Random samples provide statistically valid estimates of non-compliance. Taxpayers are selected for audit using techniques such as simple random selection or stratified random selection (e.g., stratified by industry sector, geographic region). Within the sample (or its strata), all taxpayers have the same probability of being selected for audit.

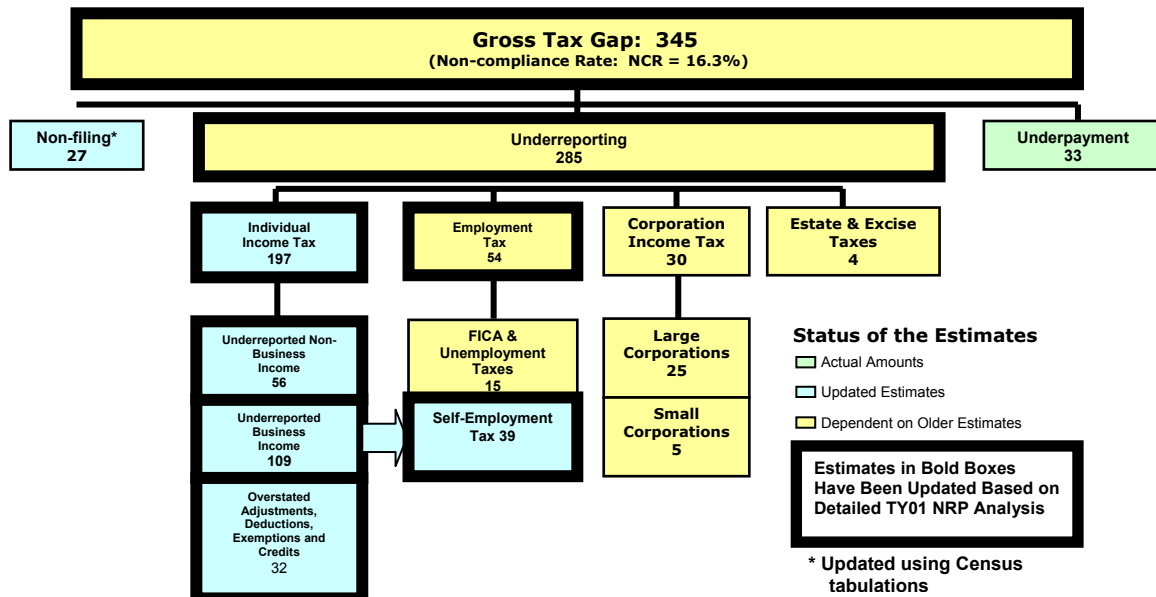
The US Internal Revenue Service (IRS) uses random audits to measure non-compliance among different groups of taxpayers, develop and validate audit selection models, identify emerging trends and forms of evasion, and quantify the “tax gap”-see Figure 6. As shown, they estimate the overall non-compliance rate at 16.3 percent with a gross tax gap of 345B USD, the bulk relating to underreporting of taxes due on filed returns. Further breakdowns show major gaps with underreported business income of individuals and a concentrated gap of \$25B among a relatively small number of large corporations. This analysis provides a framework for developing strategic compliance initiatives and a benchmark against which one can measure progress.

Random audit programs of this magnitude are rare across tax administrations, given the number of audits required to provide estimates of adequate precision, and the opportunity costs associated with directing compliance resources away from more cost-effective actions.

While several countries have random audit programs for estimating compliance “rates”, random audit programs for estimating tax gaps are most appropriate in countries with

large taxpayer populations and internal resources sufficient to justify the strategic value of the program.

Figure 6 - IRS Tax Gap Map, 2001



Source: US Internal Revenue Service

5.2 SYSTEM-BASED RISK ASSESSMENT

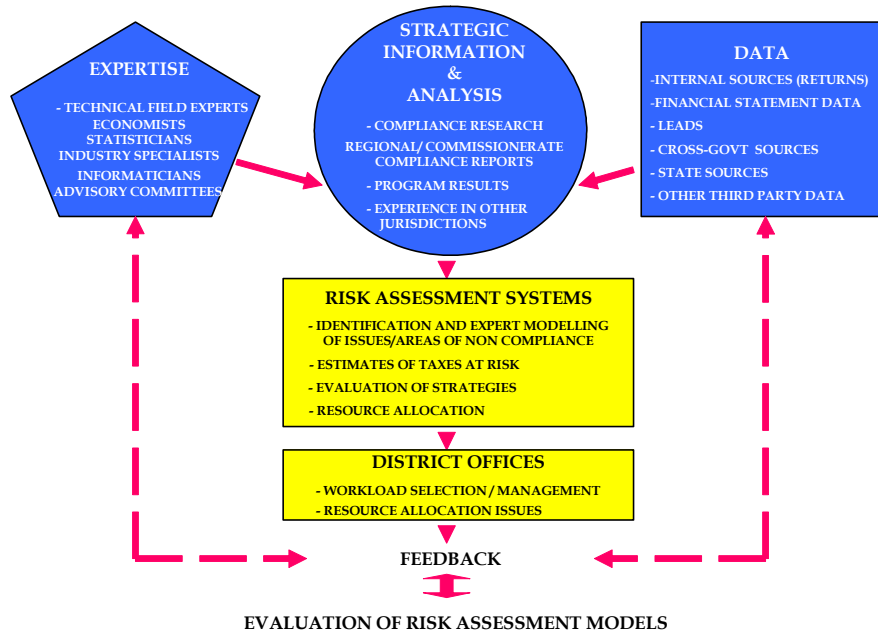
System-based risk assessment processes examine every taxpayer and assign a score indicative of the risk of non-compliance. They are the most common form of compliance risk identification across tax administrations, particularly given their direct link to operational compliance programs such as audit.

Tax administrations develop risk assessment systems to help prevent fraud at the registration phase, to identify non-filers by computer matching third-party data, to support selection of risk-based audits, and to identify the type of action necessary in debt collection cases. State of the art systems create 'whole-of-client' views that, for example, link major shareholders to the corporations they control and use business numbers to link taxpayers across tax types (e.g., income taxes, VAT taxes and others).

One can use the results of system-based risk assessment systems to aggregate risk across industry sectors, geographic areas or other statistical or demographic breakdowns. Some systems assess risk on a market segment basis, reflecting the fact that risks differ across different segments. For example, risks associated with the largest companies are more complex and technical than those associated with cash-driven corner stores.

As noted in Figure 7, three key elements are necessary to develop strong system-based risk assessment systems: data, analytical expertise, and strategic information to focus attention to emerging areas of highest risk.

Figure 7 - Elements of System-Based Risk Assessment



5.2.1 Data

Without sufficient data, it is not possible to make the inferences necessary to identify risk. For example, one of the most difficult determinations to make is whether a taxpayer under-reports business income. With only tax declarations, this is virtually an impossible task without first doing an audit. However, with access to financial statement data, asset-based ownership information or third-party data from Customs, the task becomes more manageable. Effort spent on bringing key data together pays dividends to the administration.

Placing data in a relational database best supports the risk identification and risk estimation processes. The database should typically include:

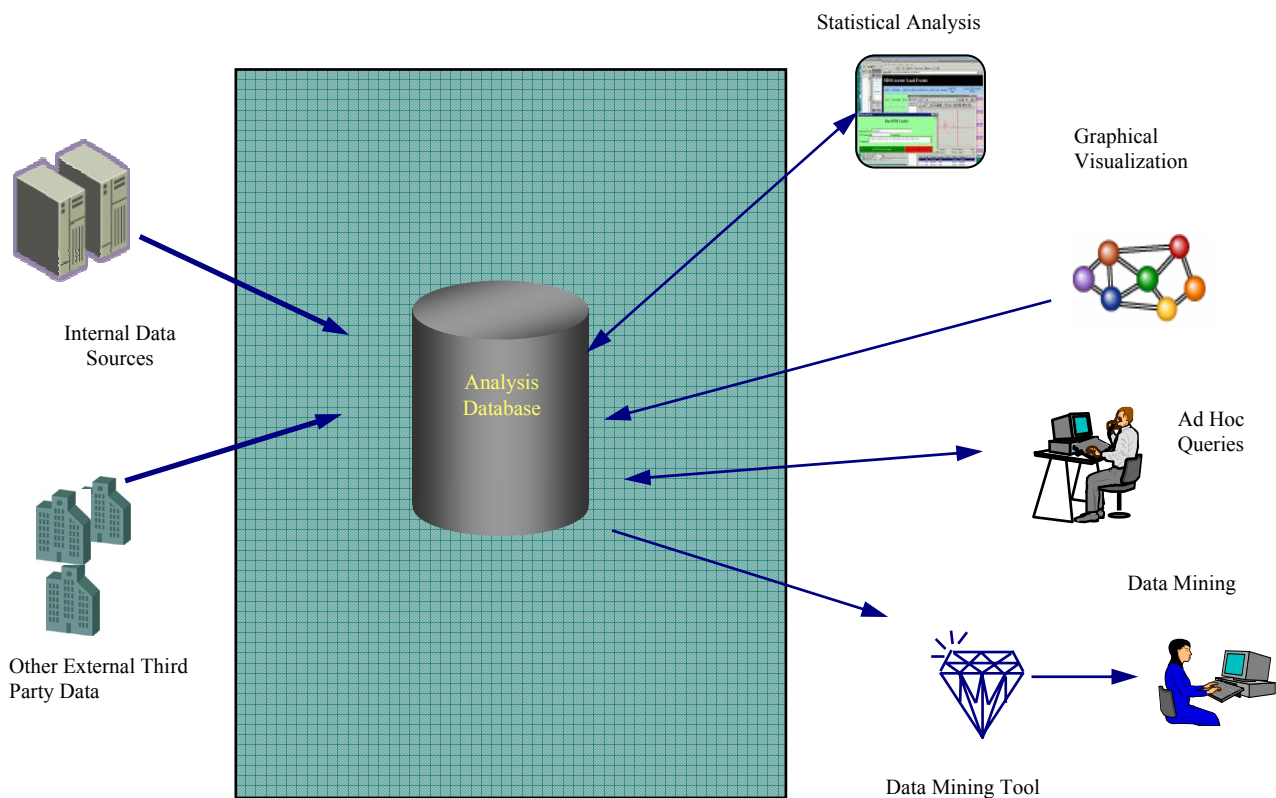
- Multi-year tax return information of all types (income tax, profits tax, VAT, etc.);
- Financial statement information from businesses, including line items from income and expense statements, balance sheets, and reconciliation statements;
- Custom data;
- Industry classification coding;
- Third party data such as asset ownership data, internal leads from audit, invoices for cross-checking, taxpayer-supplied leads;
- Links to other government-level data files;
- Internally developed databases useful for assessing risk, such as financial norms on revenues and profits by industry sector, economic regions, and size of business; and
- Previous audit or case compliance history including penalties.

In first developing system-based risk assessment systems, one of the most frequently missing data sources relates to audit results. This information is necessary to validate the efficacy of risk scoring models, to measure performance and to identify system gaps.

To facilitate research into risk identification, proper computer hardware and software infrastructure is important. Such infrastructure can be incrementally developed, and in the long-term, the development of a compliance laboratory is ideal.

Figure 8 depicts a well-developed research environment, which is operational in a number of tax administrations. The research environment provides risk assessment staff with access to linked data as well as the tools to test out their compliance hypotheses.

Figure 8 – Hypothetical Research Environment for Risk Assessment



5.2.2 Techniques for System-based Risk Assessment

Several techniques exist for identifying compliance risk at a taxpayer level. They range from basic to highly sophisticated, from requiring minimal data and infrastructure to having data warehousing and highly technical software tools. The range permits the tax administration to choose a technique that is appropriate for their circumstances today, while incrementally building to a more ideal (but cost-effective) level in the future. Appendix 1 provides a short case study on the development of a system-based VAT risk

assessment system for a CARICOM country that had recently implemented the VAT tax, which will allow improved and more defensible targeting of audit cases.

5.2.2.1 Third Party Data Matching

The most basic technique for identifying compliance risk involves the matching of third party data to tax declaration information. This technique usually provides an excellent return on investment, as it often provides a fact-based adjustment to taxes owing without labor-intensive intervention. Furthermore, when taxpayers are aware of its application, it promotes compliance, particularly from the risk-averse.

Typical examples of third-party data matching include:

- Matching tax information slips to internal master files to identify non-registrants and non-filers;
- Cross-matching selected invoices to identify VAT non-compliance, including fraud and missing traders;
- Matching employer-supplied data to employee declarations;
- Matching Customs data to VAT data.

5.2.2.2 Rules-Based Criteria

Traditional rule-based criteria allow researchers to test their compliance theories using common language rules. Most revenue administrations, including the UK, US, Australia and Canada, use rule-based risk identification. For example, one can identify unreported income when it appears the taxpayer's source of funds is not adequate to support his/her lifestyle. This may be determined through comprehensive data analysis using a variety of tests and criteria including:

- A source and application of funds test
- A comparison of the taxpayer's reported family income to the neighborhood profile
- An analysis of family income in relation to the purchase price of assets.

Most often, the administration will use the knowledge of experienced auditors to develop risk-indicative rules or criteria. One identifies at-risk taxpayers by testing the criteria against the database.

Often criteria will be dependant on financial ratio analysis and other industry benchmarking (e.g., standard profit margins, liquidity ratios etc.) Since these ratios can change over time, one needs to give attention needs to updating the risk rules. Similarly, legislative changes may necessitate adjustments.

5.2.2.3 Financial Statement Analysis

Financial statement analysis is an organized approach for extracting information from the financial statements that is relevant to understanding the financial health and reasonableness of the income and asset reporting of a business. From a tax administration perspective, one can use it for identifying risk.

Financial ratios of importance include the following categories:

- Liquidity (e.g., current ratio)
- Efficiency (e.g., inventory turnover)
- Equity position (e.g., debt to equity)
- Profitability (e.g., gross and net profit ratios)

Year-on-year comparison can also point to anomalies indicative of non-compliance, as can significant individual items on either the income and expense statements or the balance sheet. Further, one can use financial statements to reconcile (for the most part) the input tax credits and taxable supplies for annualized VAT declarations.

5.2.2.4 Data mining

Data mining is a process of exploration and analysis, by automatic means, of large quantities of data in order to discover meaningful patterns and rules⁵. Typical techniques employed include neural networks and regression trees. With a given set of data, the data mining software is asked to distinguish the characteristics of taxpayers that have been non-compliant (usually on the basis of past audit results) from those that are compliant. The software can analyze thousands of characteristics simultaneously, and find non-intuitive patterns in the data that can be used to provide new criteria for identifying non-compliance. One study from Canada found that data mining could detect highest-risk Goods and Service Tax cases four times more productively than their traditional approaches.

5.2.2.5 Graphic Link Analysis and Pattern Matching

Identifying aggressive tax planning requires analysis of business structures using *graphic linkage analysis* software (see Figure 9). This US example, when complemented with *pattern matching* software, can find occurrences of similar business structures, and give better estimates of non-compliance in such complex cases. The technology also supports identifying a variety of other types of non-compliance, including multi-cell VAT fraud where related accounts claim small VAT refunds.

⁵ Berry and Linoff, “Mastering Data Mining”, 2000

2. Aggressive tax planning
3. Goods and service tax, most especially fraud
4. Debt collections

5.4 UNDERSTANDING NON-COMPLIANCE BEHAVIOR

The key to developing effective compliance strategies lies in the ability of the administration to understand the root causes of the non-compliance and the factors that would both facilitate and mitigate the behavior. Strategies that only target symptoms will never provide a long-term change in the underlying issues. The following discussion examines examples of factors and analysis used in tax administrations to support this understanding.

5.4.1 *Underlying Factors Affecting Compliance*

Several underlying factors shape a taxpayer's attitude to compliance. Some to consider include:

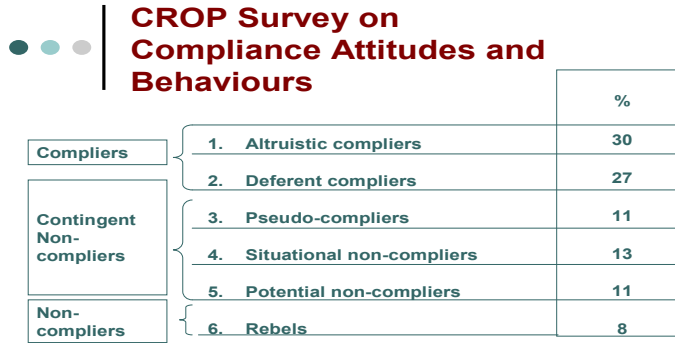
- *Business profile* – including structure (e.g., sole trader, partnership, company, trust), size and age of the business, type of activities it carries out, focus (e.g., local versus international), financial data and capital investment
- *Industry factors* - The definition/size of the industry, profit margins, cost structures, industry regulation, levels of competition, seasonal factors and infrastructure issues
- *Sociological factors* - Cultural norms, ethnic background, attitude to government, age, gender, educational level
- *Economic factors* – Investment, interest rates, tax burden, government policies, inflation, markets
- *Psychological factors* - Risk aversion, greed, trust, values
- *External factors* - Opportunity to evade

5.4.2 *Taxpayer Profiles on Compliance*

Taxpayer attitudes, and, more valuably, the trends in those attitudes provide behavioral indicators of compliance. Tax administrations can use statistically valid surveys, typically conducted by outside firms, to measure this. For example, the Canada Revenue Agency (CRA) engaged a private sector company, who surveyed Canadians by posing a series of questions about their attitudes to compliance. By clustering responses, they developed three main categories and three sub-categories. The survey classified fifty-seven percent of the population as compliers, thirty-five percent as contingent non-compliers, and eight percent were categorized as rebels.

Strategies for compliers generally focus on service solutions, while contingent non-compliers tend to be risk-averse and strong risk assessment processes and increased visibility form good compliance strategies for them. Rebels are not risk-averse and strong audit and investigation programs are necessary to address this group. This type of information helps develop tailored strategies, and supports more informed distributions of resources between taxpayer service and compliance enforcement programs.

Chart 2 – Taxpayer Compliance Attitudes



Source: CRA

5

5.4.3 Example of Transaction Visibility in Understanding Non-compliance

A U.S. study found a significant relationship between compliance and transparent information reporting (e.g., third-party slips for reporting income – see Table 2). The U.S. study demonstrated clearly that the more visible the information reporting, the less likely there will be misreporting.

Table 2 – Net Misreporting Percentages for Individuals

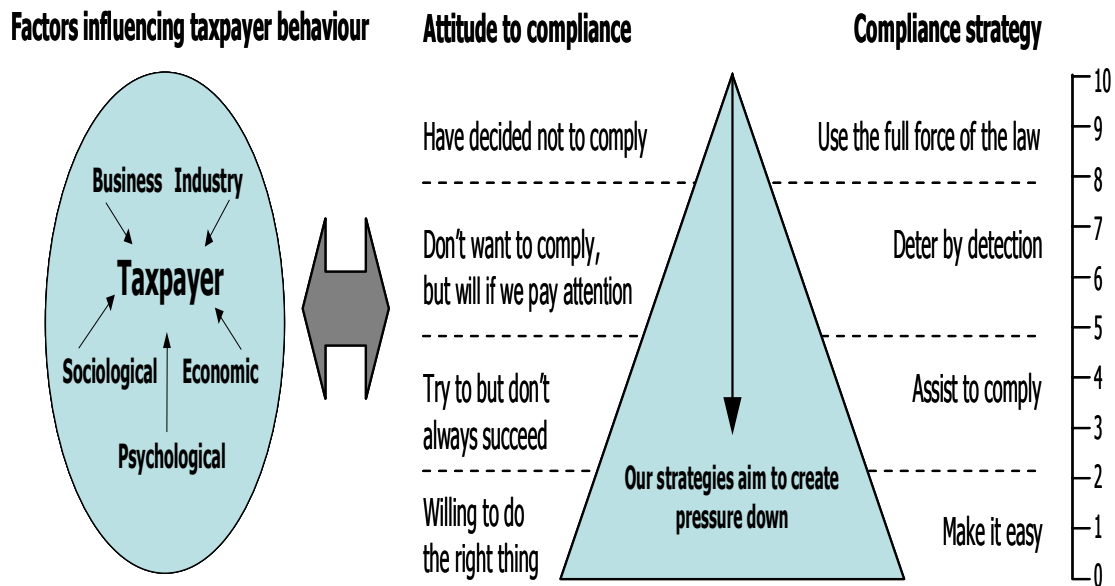
Category	Net Misreporting Percentage
1. Substantial information reporting and withholding	1.2%
2. Substantial information reporting	4.5%
3. Some information reporting	8.6%
4. Little or no information reporting	53.9%

Source: US Internal Revenue Service

5.5 STRATEGY DEVELOPMENT

The following figure is an OECD model for understanding the linkages between the general categories of compliance behavior and the types of strategies that best support the compliance objective. Appendix 2 provides a further sample of compliance strategies of selected countries.

Figure 10 – OECD Model for Strategy Development



In the model above, one can see the factors that contribute to a taxpayer's attitude to compliance on the left. These lead to their attitude and behavior in relation to compliance. The administration's role is to apply the right strategy to the underlying attitude.

- A. For those whose attitude to compliance is that they are **willing to do the right thing**, or for those who **try but don't always succeed**, the general responses are as follows:
1. *Make their obligations clear.* This means being transparent, making things easy to understand, simple and non-confusing. It also includes determining whether the law is clear, that material is in simple language, and that there are relevant guides and service support (i.e., web, telephone, publications etc.).
 2. *Make it easy to comply.* Making it easy to comply includes all initiatives an authority might take to improve service delivery. For example, many administrations have expanded the range of electronic services (e-services) and have seen a rapid increase in the number of taxpayers and tax advisers taking advantage of the ease and convenience they provide. In many countries, the administrative burden of tax compliance falls more heavily on small businesses than on large businesses. This has prompted authorities to increase efforts to simplify administrative requirements, including exploring ways of more closely aligning tax reporting to the natural systems businesses use for their own banking, accounting and financial reporting. Such initiatives have the potential to save businesses time and cost and improve the reliability of information received by the authority.

3. *Simplify tax laws.* Where the tax laws are overly complex or where interpretation difficulties exist, the administration should pursue recommendations for improving the law.
4. *Have fair re-dress processes.* If a taxpayer does not see the tax system as fair, then even the most altruistic person can alter their attitudes. Fair appeal and re-dress processes are key elements to maintaining confidence in the system. As well, taxpayers must see the administration as having integrity.

B. For those who are **risk-averse, but would otherwise not want to comply**, the general responses of the tax administration are as follows:

1. *Develop an audit program based on sound risk assessment and make your activity visible.* The administration should develop a credible enforcement program based on sound risk assessment, and communicate it at every opportunity. The perception that the administration will detect taxpayers if they engage in non-compliant behavior serves as a strong disincentive to (especially) the risk-averse.
2. *Require information reporting to bring visibility to transactions.* With a strong cash economy, efforts to bring visibility to business activity can be effective. A common example in other administrations deals with information slips for construction sub-contract work. The visibility of the slip and the knowledge that a taxing authority has a copy changes the risk equation for taxpayers that may already be risk averse.
3. *Be visible with industry and other professional associations, and form partnerships to leverage compliance actions.* For example, association newsletters can present an opportunity to raise compliance issues from the administration's point of view.

C. For those who **willfully choose to non-comply**, the response is straightforward:

1. *Strong, consistent enforcement actions with the full use of sanctions.* Sound, systematic risk assessment efforts are helpful in identifying high-risk non-compliance of this type.

6. IMPROVING COMPLIANCE BY STRENGTHENING AUDIT STRATEGIES

Audit is one of the longest standing and accepted compliance strategies in tax administration. The program provides visibility to the compliance and enforcement arm of the administration and in so doing, offers deterrent value to non-compliance. It is commonly accepted that if taxpayers see an effective audit program in operation, more revenues and better compliance from all taxpayers will be the result.

Tax administrations do not have sufficient resources to perform thorough, on-site audits of the activities of all taxpayers or comprehensive cross-checking of all invoices. Therefore the administration must design the Audit Program to deploy audit resources in a risk-based way, with a view to achieving the most compliance possible. Risk-based

audit programs also help **maximize revenue recoveries**. In Canada, audit cases identified as having high-risk have been shown to produce 4 – 10 times the average recovery.

The compliance objectives of an audit program are typically designed to:

- Target the highest-risk taxpayers for audit and enforcement action, creating a level-playing field so compliant businesses are not at a competitive disadvantage.
- Target a broad cross-section of industry sectors and communities, creating a visible presence for the administration among the business community. Such a presence, in and of itself, promotes compliance.
- Ensure that the tax base is protected by focusing attention on the relatively small group of taxpayers (normally large businesses) that represent the largest portion of the tax base.

6.1 STRATEGIES TO MAINTAIN THE TAX BASE

Governments rely on tax collections to fund key programs. And they rely on the tax administration to ensure that they carefully manage and maintain the existing tax base to the extent they have control to do so.

Analysis consistently shows that a large percentage of the tax base is concentrated in a relatively small percentage of the taxpayer population. Table 3 (below) shows the distribution of VAT tax in Jamaica. An analysis of their GCT registrants who filed using the standard return showed that 99.3 percent of net payables in 2005 were concentrated in about 10 percent of the registrant population and a further 1.3 percent of the population accounted for about 70 percent of net refunds.

Table 3 - Analysis of 2005 GCT Annual Filings (Standard Return)
Distribution of Payables / Refundables

Payable / Refundable Range	Number Accounts	%	Amount (\$)	
			Payable / Refundable	%
Greater \$100M	33	0.2	11,326,330,547	48.0
\$10M - \$100M	289	1.5	7,280,910,830	30.9
\$1M - \$10M	1,646	8.7	4,820,409,612	20.5
\$250K - \$1M	2,257	11.9	1,151,750,555	4.9
\$25K - \$250K	4,083	21.5	427,043,876	1.8
\$1 - \$25K	3,615	19.0	29,983,348	0.1
\$0	2,928	15.4	0	0.0
-\$1 - \$25K)	1,912	10.0	-14,973,332	-0.1
-\$25K - \$250K)	1,538	8.1	-141,400,463	-0.6
-\$250K - \$1M)	468	2.4	-227,190,417	-1.0
Less -\$1M	254	1.3	-1,070,090,176	-4.5
Total	19,023	100.0	23,582,774,380	100.0

Source: ICTAS

Because this concentration of the tax base is typical for tax administrations, one of the most common audit strategies is to develop a highly effective **Large File Program**, and to ensure that the tax base is protected by maintaining high audit coverage rates in this important segment of the taxpaying population.

6.2 STRATEGIES TO EXPAND THE TAX BASE

From a tax administration perspective, the underground economy manifests itself in underreported sales, failure to register, failure to file, and gap filing (coming in and out of the tax system).

While the standard audit program typically addresses underreporting on filed returns, in developing tax administrations, programs to expand the tax base by ensuring proper registration and filing can be lacking.

World practice is to have specific programs that target these key areas of non-compliance. While the staff competencies necessary to perform this function are not as technical as for standard audit, the program is typically organized in the broader category of compliance programs.

Additionally, several administrations use audit staff to perform ‘community visits’, which target quick on-site visits to businesses to ensure that they are registered and filing. The visits also promote the development of stronger business relations with taxpayers, build trust in the system and support a level playing field so non-compliant businesses do not create a disadvantage to compliant competitor businesses.

6.3 BALANCING COVERAGE AND HIGHEST-RISK AUDITS

Finding the correct balance between audit coverage and devoting resources to highest-risk audits is one of the most difficult questions an audit program has to answer. Audit recognizes that its coverage is critical to maintaining a broader visibility and therefore has a ‘ripple’ effect across the taxpayer population. On the other hand, recoveries are greatest in audits of the most egregious cases of non-compliance. The problem comes from the fact that the more non-compliance in a case, the longer the time to complete an audit, and the longer the time to complete an audit, the lower the coverage rate.

Audit programs have tried to balance these competing interests through the use of more efficient types of audit, such as desk audits or single-issue audit projects. In the development of the audit plan for a given year, the administration determines what it is willing to accept as an audit coverage rate for given taxpayer segments. It then develops a plan that balances high-hour, full audits (or investigations for the most egregious cases) with lower-hour, single-focused audit types. This approach ensures both minimum coverage, as well as sufficient effort devoted to highest-risk cases.

6.4 SEGMENT-BASED TARGETING

Most tax administrations will place particular emphasis in their annual audit plan on a specific taxpayer segments. The segments can change from year to year. The focus often relates to a particular industry sector (e.g., tourism, professionals). However, they may use other segments, depending on their risk-identification findings. For example, several countries have recently developed programs to focus more attention on high wealth individuals, particularly where many linkages exist to other tax entities (see the previous discussion on graphic linkage analysis).

6.5 PARTNERSHIPS

While not specifically an audit strategy, partnerships can provide leverage to the goal of achieving compliance. The administration can develop partnerships at an inter-governmental level, with industry associations or with tax preparers, to name a few. The administration can establish special advisory committees (e.g., Large Business Advisory Committee). These partnerships provide opportunities for data and information sharing, for sharing specific compliance (or taxpayer) concerns or generally to build trust in the tax administration.

7. OTHER IMPORTANT CONSIDERATIONS IN RISK MANAGEMENT

The best risk analysis and the most effective strategies will not amount to much if they are not executed properly. The risk management cycle clearly notes the need for:

- Effective planning processes
- Efficient execution
- Sound project monitoring and management; and
- Post-implementation evaluation for reporting and learning purposes.

7.1 BUSINESS PLANNING

Once priorities and initiatives are decided, supporting business and project plans are necessary to ensure that decisions lead to the correct actions. Improvements in revenue administration are only realized when program actions aligned to the strategic priorities are properly implemented. Sound business planning is the glue linking strategies and actions together, and is critical to program execution.

Table 4 (below) is an example of an operational audit plan that shows targeted coverage rates and number of audits by program and audit type. Standard hours represent the average number of hours to complete an audit in the noted category.

Table 4 - Audit Program Plan Template

Program Type	Number of Taxpayers	Target Coverage (Percent)	Audit Type and Number of Audits		Standard Time (Hours)	Total Audit Hours (Number of Audits x Standard Time)	
Large File	100	35%	Comprehensive	35	320	11200	
			<u>Subtotal</u>	<u>35</u>		<u>Subtotal</u>	<u>11200</u>
VAT	600	30%	Comprehensive	60	100	6000	
			Full	60	45	2700	
			Project / Desk	30	13	390	
			Refund	30	13	390	
			<u>Subtotal</u>	<u>180</u>	<u>Subtotal</u>	<u>9480</u>	
CIT	400	20%	Comprehensive	20	100	2000	
			Full	20	50	1000	
			Project / Desk	10	18	180	
			Refund	10	18	<u>180</u>	
			<u>Subtotal</u>	<u>80</u>	<u>Subtotal</u>	<u>3360</u>	
PIT (business) & other tax types	1,200	10%	Comprehensive	40	60	2400	
			Full	30	30	900	
			Project / Desk	10	25	250	
			Refund	40	10	<u>400</u>	
			<u>Subtotal</u>	<u>120</u>	<u>Subtotal</u>	<u>3950</u>	
All Audits			<u>TOTAL</u>	<u>415</u>		<u>TOTAL</u>	<u>27,990</u>

7.2 EXECUTING THE PLAN

An old adage says organizations need to ‘do the right things’ and they need to ‘do things right’. This aptly describes the relationship between strategy and execution. Doing the right things means understanding the changing environment affecting good revenue administration and developing the appropriate strategies and priorities to address them. Doing things right requires strong execution of agreed program plans in support of prioritized strategies and goals. Without effective execution even the best laid plans will be ineffective.

Effective program execution is difficult, but several keys to success exist. The length of time taken to execute a program strategy typically is measured in years and this contributes to challenges in retaining adequate focus throughout the timeframe. Managers and staff responsible for implementing the strategies are continually presented with situations competing for their time and attention. In addition, program execution is complicated because it involves many people across different business functions, often geographically dispersed across the revenue administration. They must operate in an integrated fashion, moving at the right speed and the right time in relation to others. Cross-organizational dependencies, such as dependencies on the development of IT support systems, further complicate achieving results.

Keys to success in this complex environment include:

1. Strong leadership
2. Clear accountabilities
3. High-performance business culture
4. Effective communication and cross-organizational coordination
5. Sound practices for monitoring and correction

7.3 SOUND PROJECT MANAGEMENT AND MONITORING

Monitoring results against the plan should be an ongoing activity. Early detection of problems allows managers to analyze the underlying reasons and take corrective action. Monitoring requires regular communication and sharing of information between team managers and their staff. Staff must have a clear understanding of what is expected of them, both for the duration of the fiscal year as well as more immediate timeframes. The use of shorter-term targets can be helpful in managing this. Actual outputs (e.g., number of audits, overdue taxes collected) should be captured, compared to expected results and reported regularly.

Successful program implementation depends upon *early identification of variation*, analysis of the reasons behind it, and implementation of corrective actions.

7.4 EVALUATION OF RESULTS

Performance evaluation allows revenue administrations to improve decision-making and be more accountable. Suppose, for example, a particular initiative targeted improved compliance with the underground economy. If, after concerted effort, the performance measures showed that the strategy did not impact compliance levels, analysis would be necessary to understand the underlying reasons and alternate strategic approaches would need to be developed. In this way, performance evaluation is critical to improving performance.

Higher-level measures are typically *outcome-based*, meaning they relate to the impact or effect the administration's actions have had against the intended goals. For example, achieving higher voluntary compliance levels is an outcome linked directly to the strategic goal of securing the tax base. Typical measures include:

- *Outcomes*, such as compliance levels;
- *Key outputs* - the taxes recovered through organizational actions has typically been used as a high-level measure;
- The *efficiency* and *effectiveness* of processes – efficiency being the relationship of outputs to inputs (e.g., taxes collected per unit cost); effectiveness as the relationship of outcomes to inputs (non-compliance rates of targeted audits compared to non-compliance rates from random audits).

Operational performance measures put a greater focus on outputs, or counts of the actions of the revenue administration and the results of those actions. Operational performance measures typically include:

- *Outputs*, the number of audits performed and the results of those actions
- The *quality* (accuracy) of actions (e.g., usually by quality assurance sampling)
- The *timeliness* of the administration's actions measured against service standards

8. CHALLENGES

Tax administration is a complex and dynamic responsibility. While having rigorous, formal processes like risk management are critical to achieving success, the day-to-day journey is always challenging. On a regular basis, leaders are faced with new issues, conflicting priorities, taxpayer and stakeholder complaints, and emerging commitments. Balancing the long-term strategic direction with the conflicting short-term priorities is a challenge and staying the course is a testament to real leadership.

Among other challenges, one can include:

- Mid-stream changes to resource levels (\$, human)
- Commitment to developing and mentoring new leaders
- Need for managing and implementing organizational change
- Lead times that extend beyond expectations, especially for IT development
- Processes for developing a common understanding of strategic direction across the organization

But challenges create opportunities, and processes like risk management provide the keys to successful tax administration.

Appendix 1 – Case Study of Systems-Based Risk Assessment System

Context

The country in question had just recently implemented a VAT. Taxpayers were entitled to apply for a refund if their monthly return was in a credit position. No meaningful processes had been established to identify refund claims that were ‘at risk’. All refund requests had to be reviewed. In the review process, staff had to navigate through several individual screens to make a determination as to whether an audit was necessary prior to payment of the refund.

The capacity of the information technology section was limited, but some minimal level of development was possible.

Approach

The solution team analyzed the data that was readily available for making a risk-based decision. They then established a series of criteria they felt were indicative of compliance risk. They identified six categories of risk, four of which were available for the task at hand:

- Past compliance behavior – including the examination of a taxpayer’s filing and remittance history, and audit results from all applicable tax types.
- Trend Analysis – examining period to period trends (up to one year); for example, did the proportion of zero-rated or exempt supplies increase? Did input credits for capital items result in increased sales in the future?
- Leads and other third-party matching – for example, comparing Customs information to VAT return reporting.
- Common Sense Criteria – for example, refunds claims beyond a reasonable threshold, refunds used against accounts in arrears or continuous refunds in a sector that should normally have net tax payable.

From these categories, the team developed twelve specific risk parameters. They designed a taxpayer profile report that contained all the information necessary to examine all twelve criteria and make a decision. The report was a single page per taxpayer.

The team documented a business process to be followed, and designed a spreadsheet on which to document their decisions.

Appendix 2 - Compliance Strategies of Selected Revenue Administrations

Country	Issue	Strategy
Australia	Unreported income among construction subcontractors	Withholding of tax was required of construction subcontractors, along with information reporting by the contractor. This brought greater visibility to work transactions that were not previously transparent.
Sweden	General compliance	Four-pronged strategy: <ul style="list-style-type: none"> • Concerted effort to catch most egregious evaders • Preventative approach of auditing new businesses even when risk potential appears low • Follow-up on taxpayers having significant past non-compliance • Focus on public ‘hot spots’ e.g., evaders who claim social benefits
United Kingdom	Self-employed business expenses	The administration provided information on common misunderstandings relating to deductible expenses against business income to self-employed individuals who prepared their own tax returns and had been identified as ‘at risk’.
United Kingdom	Evaders	The administration ran an amnesty program eliminating normal penalties for businesses that had failed to register for VAT. The amnesty program was professionally advertised, had a clear end date, and a promise to crack down on the offence after the amnesty period. Over 3,000 businesses took advantage and paid tax arrears of more than 19 million pounds sterling
United States	Tax Shelters	A comprehensive approach was developed to address tax shelters that included: <ul style="list-style-type: none"> • Expedited guidance identifying abusive transactions; • Improved disclosure requirements to provide greater transparency; • Increasing the number of audits of tax shelter promoters as well as thousands of audits of high-income individuals and corporations who entered into potentially abusive transactions; and • Legislation to limit abusive transactions and increase penalties.