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## Highlights

- Apply analytics to produce better business results now and in the future
  - Create responsive relationships with taxpayer using mobile, social and cloud
  - Align business and IT goals to maximize operational efficiencies
  - Deploy systems and services to the cloud to reduce costs
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# Tax revenue management and economic vitality

*Using technology and data to maximize government revenue*

The management of tax revenues continues to challenge governments around the world. Budgets are limited, and yet government employees are asked to provide more services to taxpaying populations. The cost of government is rising, yet tax revenues are not keeping pace. While citizens demand more from government, officials are restricted by budgetary limitations and a lack of political force in the legislative bodies to address the issue of declining revenues.

There will always be significant challenges to tax revenue management. Administrations shift, laws change, expenses must be minimized. Systems and software are outdated. Yet governments must continue to gather revenue, as efficiently as possible. Considering these significant obstacles, what are the options? Simply put: broader application of the latest technologies.

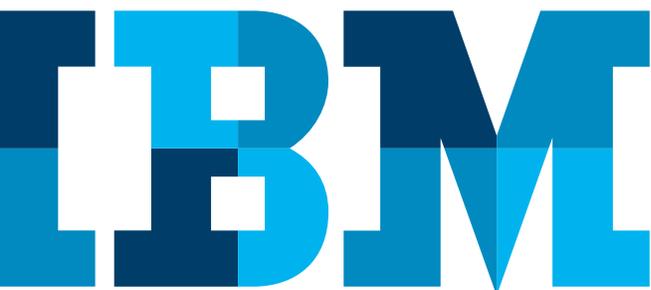
Government agencies will always be limited by financial resources. Rather than dwelling on what is certain, these agencies must focus on what can be changed. What can be changed is the way technology is applied to the problems. Broader application of analytics, effective use of social and mobile technologies, and use cloud computing for efficiency and effectiveness can dramatically improve tax administration effectiveness.

## Drivers for change

At the current time, there are five major drivers of change within tax agencies:

### 1. The tax gap

First, there is the perpetual tax gap: the gap between taxes owed the government and those actually collected. While the tax gap may vary in size and source from country to country, it is an ever present factor driving all tax administrations. Closing the tax gap would both increase revenue and positively impact the trust in the tax system on the part of those who voluntarily pay what they owe.



### 2. **The need to reduce costs**

While tax administrations collect most of the monies coming into the government, they must compete with other departments for funds to operate. Finding ways to increase collections while reducing operational expenses is a never-ending challenge.

### 3. **Demand and revenue curve: The aging population**

Recent years have been particularly tough in terms of governments needing additional revenues—and this is unlikely to change in the foreseeable future. The financial crisis created a need for more government expenditures while revenues dropped as a result of the economic downturn. Now, as economies begin to recover with resulting revenue increases, governments are having to come to grips with the aging of their populations. Citizens are living longer and requiring services for longer periods of time, while the number of young people entering the workforce to pay for those services is not keeping pace.

### 4. **Citizen expectations for services equivalent to financial services companies**

As the Internet and mobile services have matured, citizen expectations for services have been transformed. Any product and service—anywhere, anytime, on any device—is an expected norm, and anything less leads to a negative perception. Tax agencies are grappling with how to meet these expectations in a way that drives business value with legacy systems not designed to support such services.

There is also strong internal competition for available discretionary funding for new IT capabilities.

### 5. **Globalization of tax**

Tax agencies are just beginning to scratch the surface on the impact of globalization on their operations. This reality is not only driven by multinational corporations finding ways to reduce taxes through relocating revenue, but also by global citizens who have financial considerations in multiple countries and who may be working consciously to hide income and are willing to switch their citizenship to reduce individual taxes. Finally, this globalization has made it easier to avoid higher VAT taxes and in a most recent development, some tax administrations are finding identification theft to defraud the tax system originating outside their borders.

There is certainly no panacea for addressing the above problems. They are persistent and defy easy solutions. However, modern technology provides tools which can be of substantial assistance to tax administrators seeking to make the progress expected of them. This progression begins with a broader approach to analytics.

### **Application of the newest technologies in fraud detection to identify better cases**

While tax administrations have for years used forms of data modeling and business rules-driven formulas for selecting cases for audits, the technology has advanced significantly and can help administrators make better selections to reduce no change audits and increase revenue. This is particularly true if the agency has access to multiple sources of internal and external data.

### **Use of in stream analytics to detect fraud and error earlier and to automatically route cases to the right point of action**

The sophisticated technology used to select better audit cases can also be used for more refined up front screening of filings as they come into the system, stopping questionable refunds from going out the door and helping taxpayers to correct errors without the need for an audit. This is a key element in the drive toward what a former US IRS commissioner called “real time tax administration.”

### **Apply analytics to collections to identify the next best action leading to increased collection of tax owed**

While technology in various ways for detecting fraud has existed for some time, there really have been no dramatic changes to the collection function since the introduction of collection call centers almost 40 years ago. However, analytics have been developed and applied successfully for identifying the next best action for collection inventories and that collection channel, getting the right case, to the right technique, at the right time.

### **Provide analytical tools to the auditor for working the case**

Another new wave of analytical technology is beginning to provide tools for the tax compliance officer actually working the audits or other type cases. These tools provide visualization and data modeling for the auditor to analyze taxpayer behavior, audit results or criminal fraud detection.

### Apply analytics to drive services improvements

Finally, there is much room for use of analytics to drive the entire tax administration including services components. This transformation could include better analysis of the results from various educational or services initiatives to determine which deliver the most value for which set of taxpayers, or even for each individual taxpayer. Even more interesting for tax administrators would be to use analytics across the entire agency to determine the most effective mix of services and compliance initiatives to maximize improvements in all of their key performance indicators.

### Use of social media

Taxpayers are talking about tax administrations using social media. Most tax administrators are aware of this reality. But what are these taxpayers saying, and how can these communications be used by tax administrators to improve service?

Tax agencies need to learn how to utilize social media to better understand taxpayers as well as put forward their own messages. A good number of tax administrations are already using websites like LinkedIn and Monster for recruiting, and are posting recruiting or educational messages on YouTube. But this is just a small part of the potential. There will be a steep learning curve in how to get business value from these channels. One of the first steps begins with the acquisition of analytical tools that can be used to gather and analyze content from social media so that impact can be assessed.

Additionally, it is almost certain social media is being used by some percentage of employees inside the tax administration. They are on Facebook, Viber, WhatsApp or any of the other myriad of websites. The younger employees are certainly using social media. Tax administrations need to understand this reality in order to gain business value inside the organization—for education, broader knowledge management, team activities and community building. Some agencies are already starting this journey and there are enterprise services available to help facilitate this journey.

### More effective use of mobile tools

Many tax administrations have at least begun the journey toward providing mobile services to taxpayers with smartphones and tablet PCs. However, much more remains to be done in order to match the services taxpayers get from their banks and other service providers. Tax agencies everywhere are talking of addressing this gap. But there is also a danger of not providing a coherent business and technical strategy that produces the optimal experience for taxpayers in the most efficient way for the tax agency.

The absence of a consistent, user-tested look and feel across all applications and a common technical way of providing the applications can surely cause problems down the road. Acquiring the right platform for this service's effective deployment is key. One best practice is for the deployment to include API standards which help external stakeholders such as accountants or payroll service providers build interfaces with their own value-added apps for their clients. It would in fact be best for each government to have a common look and feel and technical approach across departments. Some governments already recognize this reality and are looking for the tax administration to be the leader.

Tax administrations could also be doing more to use mobile technology with their own employees—especially those who spend much time in the field. Easy, real-time access to office systems could reduce trips back to the office while promoting faster case resolution, increased caseloads and faster collections through mobile payment systems.

### Where does cloud fit in?

Cloud is a buzzword in technology, but it is also a real tool for change—particularly for those agencies seeking to create efficiencies to get more value from their IT expenditures. Many tax CIOs are discussing cloud, want to move to cloud or have even been directed by the leaders of government to move to cloud. However, developing the cloud and preparing the applications to run there is not free. It often takes money in the short term to create savings in the long term and that is where the problems lie in many tax agencies at the moment.



There are always more good initiatives than IT budgets can accommodate. Tax agencies must be watching for the point that the savings need is great enough to support the cost of the move, or even better, watch for the opportunity where a move to the cloud also helps solve one or more other top tier initiatives of the agency.

For the foreseeable future, government clouds are likely to be private clouds. There are different financial models for getting into the cloud and there is also the potential, being seriously explored by several countries, to have the tax agencies develop a broad cloud base that can help them to become a service provider to other departments. IT as a service based upon cloud computing is clearly a direction for the future of IT, and tax administrations have the potential to lead in this environment.

## Why IBM?

IBM® has a long, established record in working to improve tax revenue management for agencies around the world. IBM experts provide practical, effective insight based on real-world experience that goes far beyond local and regional constituencies. With extensive experience in the implementation of tax and revenue systems, agencies can depend on IBM to provide sound guidance based on a true global awareness and a keen understanding of today's economic realities.

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