

## **Topic 1: Facilitating, monitoring and enabling compliance through technology**

- (i) Briefly share your tax administrations experience on how you have used technology in areas such as audit case selection, debt management processes, filing and payment compliance, taxpayer services. Share any experience on mobile money transfers for tax payment, use of call centres, managing relationships with core clients etc.**

In line with its strategy to become an environment friendly organisation, the MRA has continually tried to build e-business capability across the whole organization since its inception by leveraging on new technology. Some great stride have been made in the different operational activities of the revenue administration and which include amongst others filing of tax returns and payment, delivery of quality services to taxpayers and the monitoring of tax compliance amongst others.

Mauritius operates a self-assessment system whereby a taxpayer voluntarily declares all his taxable income, submits his return and pays the tax thereon if any. To verify the authenticity of the information provided in the tax return, the returns received at the MRA are subject to further examinations through a risk based engine implemented inside our Integrated Tax Administration System (ITAS). This system allows the generation of errors and warning messages thus providing an important source of information to the MRA for selection of cases for tax audits.

Besides import and export figures from its Customs department, the MRA also collects information electronically from a multitude of external organisations. These third party information are stored in a Business Warehouse inside SAP Business Intelligence, a leading BI product. At the time of return filing, a number of checks are performed automatically on

figures being input by taxpayers and any discrepancies with information already available are immediately highlighted to them with a view to assisting in the accurate filing of tax returns. The availability of third party information in electronic format has allowed the MRA to provide pre-fill tax returns, as well as third party data matching, a non-intrusive technique for selecting cases for audit and improving audit effectiveness.

The MRA has further capitalised on the evolving technology by providing a vast array of payment channels to the taxpayer community ranging from the traditional modes such as cash and cheques to the more modern ones such as mobile phone payment, Internet Banking payment, payment at Automatic Teller Machine and payment through credit cards.

To take its taxpayer services a notch higher, MRA has provided a more taxpayer centric portal for taxpayers to interact with the MRA. The Taxpayer Portal is a one-stop shop for taxpayers to view and update their registration details, check their filing obligations, file their returns, pay their taxes, check their account balance as well as follow the status of their claims for a refund. All these are accessible to taxpayers 24/7 from the comforts of their houses or offices and the e-filing of tax returns has become a universal acceptance by our individual taxpayers.

**(ii) What are some of the success factors and the inherent challenges?**

Mauritius has a high penetration of the Internet, reliable connections and an IT literate population. This has enabled the MRA to achieve an e-filing rate of 99% amongst the individual taxpayers. Some other successes are:

- (a) Reduced time to effect a refund: With the digitisation of the whole tax filing and processing cycle, refund processing has become easier and faster.
- (b) Targeted Audits: With the availability of complete, accurate and timely tax related electronic third party information, MRA is now

able to perform more targeted audits which yield better and faster results.

- (c) Decrease in Operational Costs-With the electronic filing of tax returns, MRA no longer has to submit printed tax returns to taxpayers. The postage and printing costs associated with paper tax returns has been eliminated.

The inherent challenge is to be able to introduce the right technological innovation at the right time. This is a never ending process as innovations keep cropping up at a fast pace. Moreover, user buy-in is essential so that users whole-heartedly adopt the new technology after appropriate training to make the innovation project a success.

**(iii) How has IT been used to enhance inter-agencies exchange of information within your country?**

The Government of Mauritius has setup the Info Highway for sharing of information in a bilateral manner among public sector agencies. The MRA, being a public sector agency, has leveraged on the Info Highway to exchange data in a more efficient manner with other agencies thereby reducing the administrative burden on citizens and businesses. The Info highway is a much more convenient way of interacting with other agencies than traditional exchange of information on CDs and by e-mail.

For instance, a business entity does not have to apply for a Tax Account Number for tax purposes as once registered with the Registrar of Companies, this information is received electronically through the Info Highway at the MRA and thus automatically triggers the taxpayer registration process.

- (iv) How do you see the benefit of automation in facilitating exchange of information in the international context such as under Tax Treaties and initiatives such as Country by Country Reporting by MNEs and other disclosure requirements under the revised OECD Transfer Pricing guidelines? Are there specific IT solutions you are currently deploying in managing such information?

With 43 tax treaties in force in Mauritius, the MRA received a number of requests of information from treaty partners. However, due to the ad-hoc nature of information being requested complete automation has not been possible. But generic correspondences and reports have been prepared to facilitate the tasks of tax officers. A system has been deployed at the MRA for recording, monitoring and reporting of the status of those requests for exchange of information so as to identify and resolve any undue delays before they become critical. Currently, the MRA has in place the FATCA Portal, a portal developed for the benefits of Mauritius based Financial Institutions for fulfilling their due diligence with the Inland Revenue Service and thanks to automation, a system similar to FATCA, is being put in place for the Common Reporting Standard (CRS). With effect from September 2018, the MRA will also be exchanging financial account information automatically under the CRS. In this connection, the OECD has developed the Common Transmission System (CTS) which is the platform through which the exchange will effectively take place. The cornerstone of the CTS is data security, with leading industry standards of encryption applied to each transmission. Mauritius has agreed to make use of the CTS as it will allow tax authorities around the world to deliver their exchange of information commitments and will significantly reduce development and operational costs to the secure transmission of tax information.

It is important to highlight that for exchange of information on request (EOIR), the MRA also submits encrypted information and documents

electronically to treaty partners which wish to avail of this facility. For security reasons, passwords are sent in a separate mail

- (v) **What do you consider as the major important sources of data for your administration and what systems have been put in place to harvest and manage this “big data”? Does your administration use data analytics for its compliance risk management and what are the relevant competencies required, what are the success factors?**

Some of our major sources include: information from tax returns filed by taxpayers, different taxes paid by taxpayers, third party information etc. At the MRA, we use an Enterprise Resource Planning especially built for Tax Revenue Management (SAP ERP TRM) to harvest and centralize all of our data and manage our core tax business processes. This facilitates information flow between all business procedures and fast processing of tax obligations by driving every process from paper to electronic media while at the same time allowing management of information from external stakeholders.

To manage data, the MRA calls out to Business Intelligence. A core component of our Business Intelligence is our Enterprise Data Warehouse (SAP Business Warehouse) which is our central repository of integrated data extracted from our transactional data system. In our data warehouse, data is cleansed, transformed and catalogued for use by our spectrum of operational, tactical and strategic users.

Reports and Dashboards are then developed by Business Intelligence reporting tools (SAP Business Objects) to derive our data and metadata dictionary to our business professionals and managers through different channels (Web, Desktop and Mobile) for data mining, analytical processing and decision support.

## **DATA ANALYTICS FOR COMPLIANCE RISK MANAGEMENT**

Tax Risk Management at MRA widely use Business Intelligence reports which match taxpayer VAT and Income Tax Returns data, Data received from Third Party Institutions, Bad Debts, Tax Collection, Assessments to derive risk criteria and scoring formulae for risk likelihood. Scoring formulae vary for different risk properties and lead to different routes for Auditing: Tax Return Filing, Registration, Payment, Accuracy of Declaration.

The success of the data analytics relies on the following competencies: Risk Management, Tax Administration Laws, Tax Business Processes in use through our ERP, Big Data Analysis, Regression Analysis with respect to Taxation and Economic Growth and a good communication with the Compliance Unit so as to constantly improve Risk Scoring and Integrity of Data.

**(vi) How has social media platform been used in improving relationships particularly with the informal sector players?**

The MRA through its Taxpayer Education and Communication Department launched its Twitter Account in March 2011 and its YouTube channel in 2014. All publications, communiqués and press articles of the Authority are shared on Twitter while all videos relating to the MRA are also shared on the two social media network. Twitter allows a one-way communication and to effectively communicate with stakeholders about new services provided by the organisation, on tax updates and other information about its activities. In general, stakeholders who follow the MRA on Twitter are better informed about their rights and obligations. With technology, the MRA also posts explanatory videos on tax issues on its YouTube Channel after the promulgation of Finance Act. These videos help to sensitise the public at large on the new fiscal measures and covers both operators in the formal and informal sector.

- (vii) Do you have specific IT systems for indirect taxes- for example e-invoicing, fiscal devices, e-stamping, electronic cargo or stock monitoring systems?

The MRA had initially started with a pilot testing of Electronic Fiscal Devices (EFDs) in the horse racing sector in 2015 as it was feared that operators in this sector were not transmitting a complete and accurate set of bets received to the Central Electronic Monitoring System of the MRA. However, information collected as part of the pilot testing of EFD in the Horse Racing sector failed to provide concrete evidence of such frauds. Consequently, the implementation of EFD in this gambling sector was stalled.

However, audits carried out in some restaurants have enabled MRA to unearth electronic sales suppression techniques being utilized by restaurant owners in Mauritius. Thus, the MRA has decided to introduce EFDs in the restaurant sector in a phased approach. The first phase of the roll-out of EFD in restaurants is expected as from 2018.

The Customs Department forming part of the MRA has not been remote to the information technology revolution. At the level of the Customs Department, the Customs Management System (CMS) is the main information system for the processing of Customs declarations with integrated Risk Management capabilities, ensuring fast clearance of consignment at Customs. The processing of Customs declaration is fully electronic and paperless. The system comprises various modules which assist in ensuring that indirect taxes (Customs, Excise duties and VAT at Import) are collected efficiently. Other important information system includes the Cargo Community System for the receipt of Advance Cargo information electronically at the MRA Customs and a Warehouse Management System to have real time information of movement of goods at the warehouse as well as the actual stock at any given time. The MRA has also introduced the Tax Excise Stamp to enhance control on alcoholic and tobacco products.

- (viii) Has your administration considered deploying “blockchain technology” to manage tax information and data?

No.

- (ix) What organizational reforms were undertaken in transitioning from legacy to new IT systems? Did these entail staff redeployment, changing roles and acquisition of specific skill sets? Any experience with the use of social media to interact with the staff during this process? Feedback mechanisms in place?

(Covered under topic 2)

- (x) What’s your experience in the management of workflow under an automated environment? Any challenges and mitigations?

Following the implementation of the Integrated Tax Administration System, the automated workflow has been extensively used by the MRA. This has ensured that all tasks which require a vetting from one or several higher grade officers are only finalised in the system once all higher grade officers have vetted. This has given Management the confidence that critical transactions such as reversal of payments, write-off of debts, transfer of credits from one taxpayer’s account to another and refund of taxes are only effected after having been approved by authorised personnel through a workflow task in the system.

The workflow of the refund and repayment process is also managed electronically. The level of approval depends on the amount of refund/repayment being made. Once the final approval is obtained, the case is referred automatically to the Finance and administration department which is responsible for effecting the payment. The system allows full trailing of the refund once it is submitted up to the time it is settled.

The main challenge was to agree on acceptable deadlines for execution of automated workflow tasks before escalation to supervisors. An agreement

with concerned officers had to be reached on those deadlines to be incorporated in the system. With the monitoring of dwell time on automated workflow tasks, critical tasks are now being carried out systematically and within schedule.

**(xi) How have you used technology solutions for knowledge management and capacity building for the staff?**

(Covered under topic 2)

**(xii) Is (are) there any specific technology solution(s) that your administration is currently deploying in a bid to enhance tax compliance for which you would wish to showcase at the Conference?**

MRA has presently embarked on the upgrade of its Tax system to the modern SAP HANA platform. This will bring in the power of in-memory technology to analyse instantly large quantities of data and results of complex transactions and queries in order to execute business decisions based on real time data. The real-time processing and analysis of big data will definitely enhance the identification of any tax non-compliance and result in faster decision and action by the authority.

The new platform will also help MRA to add a new dimension namely geo-location to its data in order to visualize information and to analyse using another perspective to enhance compliance.

Currently, the VAT Lucky Draw Scheme (VLDS) is an initiative of the MRA which aims at increasing tax compliance with regards to the VAT Act. To further encourage taxpayers to participate in the VLDS, the MRA designed a VAT app whereby entries can be sent easier.

**(xiii) Any thoughts on the future use of artificial intelligence in the area of tax administration?**

The MRA is currently in a full swing of automation phase for a complete elimination of manual interventions on the part of our officers. As a long term future project, it is being envisaged by the MRA for using Artificial Intelligence to identify taxpayers who may default in furnishing returns, understate their tax obligations or underpay their tax dues.

## **Topic 2: Equipping staff with skills to deliver in an increasingly digital environment.**

With the inception of the MRA in 2006, different government departments, i.e. Income Tax Department, VAT Department, Large Taxpayers Department and the Customs Department were merged into a single body corporate. Consequently, the MRA had inherited three different stand-alone legacy systems from the erstwhile Income Tax department, VAT Department and Large Taxpayer Department.

One of the major challenges of the MRA was to have one integrated IT system to administer all tax types and revenues which subsequently resulted in the implementation and operation of the SAP ERP system. This new IT system brought along numerous changes as follows:

- Business process re-engineering had to be undertaken to review, simplify and harmonize existing business processes in order to have generic processes in place irrespective of the tax type;
- Certain functional areas of the Operation and Finance Departments had to be centralized

The setting up of MRA e-services platform coupled with automation and rules engine of the new IT system enabled a substantial reduction in work force required for the correction and validation of returns. However, additional staff had to be recruited and trained to acquire new skills sets on SAP, a new technology, in terms of system administration, functional and technical capabilities.

The MRA Human Resources and Training Department (HRTD) was fully involved in the reform and modernisation process. In that context, HRTD acted as a catalyst by bringing about a change in capacity building of its human capital in various fields including IT. The MRA Training School was restructured into a

Training Academy with a view to ensuring a sustained role in terms of capacity building.

To interact with staff and get feedback during this process, social media, not being formal and official enough, MRA uses traditional methods such as e-mail and use of an electronic help desk to interact with the process owners and key users. Moreover, while technology was being used to reengineer our processes, knowledge management and capacity building of the staff through this means was not ignored. Consequently,

- An intranet site was created to provide employees access to a significant database of information, news and resources. Employees can look up court judgements, publications, legislations, training material, work procedures, IT policies, and so on.
- A record management system (RMS) has been set up to allow the scanning and electronic storage of work documents. Staffs can easily upload, share and retrieve information related to diverse areas. RMS provides employees with information about themes of particular interest for the tax administration, similar cases that need to be processed by other case officer, and information on handling of business processes. RMS is structured, fast and a reliable information system, thus minimizing the time for employees to get targeted information with satisfactory results. Hundreds of thousands of documents have been saved in the electronic system since its inception on 01st August 2013.
- A complaint management system has been developed to capture and manage complaints received through different channels. Staffs record the investigation carried out, root cause, resolution

and follow-up actions in the system. This information serves as a knowledge base for recurrent complaints. From its inception on 15th June 2016, 661 complaints have been resolved.

It needs to be mentioned that prior to the MRA system going live, staffs were given full training. They were provided with the necessary documentation, support and technical assistance. Staffs were provided access to a test system where they were able to simulate business functions related to tax and revenue administration.

To capitalise on the benefits of advance technology, the e-learning has been adopted as a new initiative in this developing area. Several courses are being mounted using a blended learning approach.

Learning is a never ending process. To provide its officers to keep updated on relevant tax issues the MRA has a Documentation Centre where books, magazines, tax journals etc. are available for reference purposes by officers. But an interesting feature to be noted is that interesting articles appearing in newspapers and journals are forwarded to officers via their official e-mail for their capacity building. An officer may even from his computer desk verify which books and magazines are available for hired.