Measuring the Efficiency of the State Administration Through the Key Performance Indicators

Mario Hak, PhD
Tax Office Požega, Croatia
Anton Devčić, PhD
RDA of Pozega Slavonia County, Croatia

Abstract
Efficiency has long played a central role in the contested terrain of public administration values. The theoretical part of this paper explains the role and importance of organizational theory at the micro and macro level. The new public management movement was only the latest demand that public organizations promote efficiency by adopting business methods. This paper analyzes the existing business processes and explores how to determine the optimal model of business processes in the Tax Administration. The goal of this model of business is to increase business efficiency and reflecting on all users of the Tax Administration.

Keywords: Public administration, efficiency, business process, key performance indicators

Introduction
In any attempt to make improvements to processes, it must be possible to measure performance, otherwise there is no way of knowing whether, or proving that, there has been an improvement. During the research, a number of possible key performance indicators were identified. Key performance indicators are measures by which the performances of organizations, business units, and their divisions, departments and employees can be periodically assessed, compared and benchmarked.

At the organization level, key performance indicators can be used for reviewing and will be useful for tracking, in the future, the effectiveness of any proposed changes to the business processes in the Croatian Tax Administration. Key performance indicators are defined as part of a hierarchical functioning and decision-making process.

The main part of the paper deals with explaining the benefits of the proposed changes which can help the Croatian Tax Administration to improve its effectiveness and efficiency and achieve its goals and strategy.
The changes have been divided into two groups, firstly those which have been the result of the reengineering process, and secondly those which have been suggested based on international best practice and the tax experts experience. Not all the changes involve changes to the processes themselves. The changes proposed from the reengineering process have been divided into four different domains: Croatian Tax Administration organizational changes, legislative changes, workflow changes and general changes.

**Definition and characteristics of efficiency and public administration**

The basic question of every organization including the public administration is a matter of efficiency. In the public service efficiency means that the taxes paid by citizens and other entities, as efficiently as possible, converted to high-quality public services. (Public services, 2003)

Public administration is not profit-oriented organizations. This restriction implies that employees have no incentive to provide the maximum in performance of their duties. The management of the public administration has a number of limitations related to the ability to motivate employees. Thus comes to a grinding achieving productivity of public administration. The absence of a standard system of indicators and methods of problem analysis in assessing the efficiency and effectiveness of the public sector.

The state administration must adapt in order to provide answers to the major challenges that stand in front of it: (Flynn, N., 1995).

- pressures on public spending caused by cyclical trends in national economies,
- seeking a higher quality of public services,
- competitive pressures that strengthens influenced ideas about the efficiency and management of the services that come from the private sector.

Understand the basic difference between management solutions and organization are one of the main contributions to the theory of organization (Daft, R. L., Steers, R. M., 1986).
Several common tax administration activities emerge in a function-based model:

- **taxpayer services and education**—strategies, materials and channels for delivery of education and services targeted at specific taxpayer segments;
- **returns processing and payment**—timely processing of all tax payments and returns, electronic commerce, and all related accounting systems;
- **audit and investigations**—national audit strategy, procedures for all types of audit, including single issues audits, audit standards, coverage rates, etc.;
- **collections enforcement**—collection procedures and legal issues; and
- **tax operations policy**—appeals, rulings and operational policy for all tax types, legislative review, international activities and double taxation agreements; and other residual issues.

There are also a number of **support functions** useful to have present in the headquarters organization that provides service to the entire tax administration. These include:

- human resources—to manage the human resources function for the entire administration, including staffing and recruitment, compensation, employee relations (all set within the broader government context managing the employment relationship)
- finance and budgeting—managing and overseeing the budget allocated to the tax administration and its further allocation to headquarters and field units
• corporate planning—preparing a regularly updated strategic plan and overseeing the development of operational and work plans by individual units
• information technology—managing the tax administration’s IT platform (including both its hardware and software)
• internal audit and internal investigations—reporting directly to the head of the administration, undertaking internal audits and internal investigations of staff as needed.

In case of Croatian Tax Administration, the HQ support functions could be grouped together into one cluster that reports to the head of the tax administration. HQ support functions provide functional direction to field units in the same manner as described for tax administration functions.

Objectives of tax administration in Croatia

Improving revenue performance is one of the most important objectives. To be able to achieve this objective possible options and priorities for tax administration improvement need to be clear. The necessary processes to prepare changes in tax legislation need to be pre-determined. Business process management allows you to start small changes in one or several business processes, as well as the expansion of optimization in a way that suits the organization (Lusk, S., Paley, S., Spanyi, A., 2003).

The developed tax administration strategy needs to have clear indication of priorities and limits. Six essential elements required for executable tax administration improvement are:
• An explicit and sustained political commitment;
• A team of capable, officials dedicated full-time to tax administration improvement;
• A well-defined and appropriate strategy;
• Relevant training for all involved staff;
• Appropriate (if necessary additional) resources for the tax administration;
• Changes in “incentives” for both taxpayers and tax administrators.
Figure 2: Tax system in Republic of Croatia

Improving tax administration requires an understanding of its problems. Strategic (political) level and execution (tax factory) level must be clearly separated. The most critical deficiencies in the functioning of a tax
administration and the most important priorities in the “reengineering” process to create modern and effective revenue authority must be clearly defined. The changes should be aimed at developing the capacity through which individuals, institutions and companies empower decision-making and self-formation of the direction of development. (Lopes, C., Theisohn, T., 2003)

Tax administration processes are interdependent. Selective reform efforts in one area will show limited results in a tax administration with generally weak performance. Tax administration processes are interdependent. Selective reform efforts in one area will show limited results in a tax administration with generally weak performance. Process orientation helps businesses in considering how their activities and jobs are added or subtracted value for consumers and adds a new dimension to the organizational structures of complexity. (McCormack, K.P., Johnson, W.C., 2001)

An improvement in the audit selection process, e.g., will have limited impact on tax revenues, if the collection function of the tax administration is not performing; and the establishment of a Large Taxpayer Unit will not be effective, if due to a lack of training qualified tax inspectors are not available to staff the unit. A comprehensive reform approach therefore is compelling to improve the efficiency and effectiveness of highly ineffective tax administrations.

**Research role of key performance indicators in Croatian tax administration**

Key performance indicators (KPIs) are measures by which the performances of organizations, business units, and their divisions, departments and employees can be periodically assessed, compared and benchmarked.

At the organization level, key performance indicators can be used for reviewing and will be useful for tracking, in the future, the effectiveness of any proposed changes to the business processes in the Croatian tax administration (CTA). Key performance indicators are defined as part of a hierarchical functioning and decision-making process. The hierarchy of business process components is described in the chart below. The performance indication is possible at each level of the process hierarchy. The higher level key performance indicators could be calculated based on lower level ones.

The possible procedure of implementation and utilization of KPIs is briefly outlined below.

- The strategy of the organization is first formulated including the definition of business, managerial and operational tasks.
- Objectives are defined for each strategy aspect.
- KPIs are determined for each objective.
  1. KPIs should be acceptable, understood, meaningful and measurable.
  2. If necessary, actual values of KPIs that are required for comparison with target values during periodic performance review must be available.
  3. KPIs should be meaningful so that the fulfilment of their targets actively contributes to organizational improvement. The change in the value of the KPIs should clearly show the result of the reengineering.
- The necessary inter-dependencies between strategies. For example, the strategies of the taxpayer perspective are aligned with the strategies of the Ministry of Finance (MoF) and the CTA staff.
- The KPIs must have a hierarchy. Measures (KPIs) selected for each objective must have a well-defined relationship with the measures of the “higher” objectives, and this fact must be kept firmly in mind while defining them.
- Usually numerical targets are set for each KPI. These may be in terms of: single value, upper limit, lower limit, range of values, percentage of a specific quantity/value, etc.

Another view of KPIs can be the view from different stakeholders. The next three tables show the possible KPIs from the perspectives of taxpayers, “management” and “tax clerks” in Croatian tax administration.

### Taxpayers’ view

<table>
<thead>
<tr>
<th>Indicator classes</th>
<th>Indicators</th>
<th>Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quality delivered to Customer</td>
<td>Complaints</td>
<td>Number of complaints in a year</td>
</tr>
<tr>
<td></td>
<td>Information on case status</td>
<td>provided/not provided</td>
</tr>
<tr>
<td></td>
<td>Contentious cases</td>
<td>Number of contentious cases</td>
</tr>
<tr>
<td></td>
<td>Bureaucratic language simplification</td>
<td>Clearness in the presentation to a generic user</td>
</tr>
<tr>
<td></td>
<td>Information availability</td>
<td>Time required to get updated about the case status</td>
</tr>
<tr>
<td></td>
<td>Easiness of finding information</td>
<td>Qualitative scale (e.g. number of clicks)</td>
</tr>
<tr>
<td></td>
<td>Easiness of filling cases</td>
<td>Qualitative scale (e.g. number of fields)</td>
</tr>
<tr>
<td></td>
<td>Easiness of finding regulations corresponding to a case</td>
<td>Qualitative scale (e.g. number of clicks)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Time and Service to Customer</th>
<th>Response time</th>
<th>Time from submission to issue (days)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Punctuality</td>
<td>cases late / total cases</td>
<td></td>
</tr>
<tr>
<td>Rate of worked request</td>
<td>Worked request / total request</td>
<td></td>
</tr>
<tr>
<td>Customer cost</td>
<td>Product/service cost/fee (Kuna)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Cost of Customer</th>
<th>Customer time</th>
<th>(Time for information on case) + (time for following the case status) + (time for receiving the service)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information Access Cost</td>
<td>Time spent in asking for information about case and service (in days) Cost of information on service</td>
<td></td>
</tr>
<tr>
<td>Cost for the customer service use</td>
<td>Time spent in asking for information</td>
<td></td>
</tr>
</tbody>
</table>
“Management” view

<table>
<thead>
<tr>
<th>Indicator classes</th>
<th>Indicators</th>
<th>Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Process cost and revenues</td>
<td>Unit cost</td>
<td>Headcount / case-services (Year)</td>
</tr>
<tr>
<td>Time usage</td>
<td>Duration (day)</td>
<td></td>
</tr>
<tr>
<td>Collected tax</td>
<td>Kuna</td>
<td></td>
</tr>
<tr>
<td>Process Time and Service level</td>
<td>Process duration</td>
<td>Number of process activities supported by IT / Total Number of process activities</td>
</tr>
<tr>
<td>Process quality</td>
<td>Incorrect documentation</td>
<td>Incorrect-missing cases / total cases</td>
</tr>
<tr>
<td>Re-working rate</td>
<td>Cases reworked / complaints</td>
<td></td>
</tr>
<tr>
<td>Rate of special cases</td>
<td>Special cases / cases</td>
<td></td>
</tr>
</tbody>
</table>

“Tax clerks” view

<table>
<thead>
<tr>
<th>Indicator classes</th>
<th>Indicators</th>
<th>Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Services quality delivered</td>
<td>Capability to prevent task/service errors</td>
<td>Task/service error rate</td>
</tr>
<tr>
<td>Capability to prevent &quot;syntactic&quot; (law) errors</td>
<td>Syntactic (law) error late</td>
<td></td>
</tr>
<tr>
<td>Flexibility</td>
<td>Capability to manage anomalies (not technical) present/not present</td>
<td></td>
</tr>
<tr>
<td>Integration Capability</td>
<td>Capability to integrate different information, present/not present</td>
<td></td>
</tr>
<tr>
<td>IT Support</td>
<td>Rate of process activities supported by IT</td>
<td>Number of process activities supported by IT / Total Number of process activities</td>
</tr>
<tr>
<td>Rate of process activities replaced supported by IT</td>
<td>Number of process activities replaced by IT / Total Number of process activities</td>
<td></td>
</tr>
<tr>
<td>Cost and time of operation</td>
<td>Complexity of the services</td>
<td>Number of elementary activities to complete the services</td>
</tr>
<tr>
<td>Time for training on the procedures (of services)</td>
<td>Measured in hours</td>
<td></td>
</tr>
<tr>
<td>Information access time</td>
<td>Seconds</td>
<td></td>
</tr>
<tr>
<td>Time to accomplish an activity</td>
<td>Measured in minutes</td>
<td></td>
</tr>
<tr>
<td>Information sharing cost</td>
<td>Time for system data entry + time for system delivery output</td>
<td></td>
</tr>
</tbody>
</table>

Tax return processing is one of the major issues in Tax Administration. All (paper and internet based) channels of it must be managed as well defined processes. The central issue of a tax return management is the tax form “lifecycle” management. The quality of assessment depends on a holistic and well managed set of tax forms. The centralized and unified document management system for controlling all document flows (used in all kind of channels) is a highly prioritized requirement.

**Suggested changes in the Croatian Tax Administration**

As a result of the work done during the business process analysis, the authors has identified a number of possible areas where the CTA could
effectively improve their way of working. These suggested changes can be observe like **General changes in CTA**

Below we give an overview of each of the proposed changes:

1. **Establish a new set of the IT-based solutions to connect the data bases of the CTA and other bodies** of the state and public administration which would enable controlled and secure data access to the ISTA (Information System of Tax Administration) system of the CTA, without the intervention of CTA employees.

2. **Implement IT connectivity with other state and public administration bodies** which would enable CTA employees controlled and secure data access to the other bodies’ databases, without the need for involvement of the other bodies’ staff. Standardize CTA clerks’ workplaces (according to their roles) and plan to equip them with an appropriate IT tools. **Obtain adequate IT equipment** at all levels of CTA (Local, Regional, Central) including desktop computers, laptop computers, servers, network equipment, printers, scanners, mobile Internet connection devices etc. that are prerequisites for executing the task of CTA at the expected level of quality.

3. **Establish the adequate processes regarding the maintenance and setting up of obtained IT equipment** (e.g. internet access rules, repairing printers, speed of internet connection, etc.) to support CTA staff business tasks.

4. **Ensure adequate facilities (e.g. rooms, warehouses, halls etc)** for executing all CTA business procedures at the desired quality level.

5. **Establish processes necessary for the planned and permanent (ongoing) professional development (i.e. education)** for all CTA staff (e.g. inspectors, lawyers, clerks etc.), at all CTA levels (Local, Regional, Central), including the execution of activities related to the elaboration of standardized training curricula for the various functions within the Tax Administration. (Beneficiary should check if the existing RAMP project component (i.e. Component II. Knowledge and Professional Upgrading of Tax Officials and Stakeholders) has already addressed this issue.)

6. **By establishing internal and external communications strategy / policy** and by establishing appropriate systems improve horizontal communication (e.g. sharing knowledge, experience and good practice between the CTA staff) and vertical communication (e.g., enabling control of subordinate organization units, enabling sending of feedback information to the superior organization units etc.) within the tax administration, for example by modernizing the existing Intranet site of the Tax Administration through new designs and higher volumes of information Plan, obtain and implement adequate **Document Management System** to increase the level of working with unstructured data within the CTA.
7. It is recommended that during first visits to the taxpayers adequate customer service related information and support be given: information on rights and obligations and support for the taxpayer in finding pertaining information/instructions/documents/forms.

8. Improving and adding new services to available e-Tax solution (according to the existing Croatian e-government strategy\(^{46}\)) will increase the number of taxpayers that currently use e-Tax services. Also, it will further relieve CTA resources that are used for manual data entry and processing of tax returns that have not yet been implemented by e-Tax services. Furthermore, to increase the number of e-Tax users it is recommended to:
   o all mandatory tax forms must be available via e-Tax services
   o tax registration via e-Tax services must be mandatory for legal persons
   o additional methods for authentication of users must be considered, such as “user name/password” type of authentication used by most European tax administrations
   o Marketing campaigns should be considered to promote usage of the e-Tax services

9. Publish, in a timely manner, an Excel version of the Income Tax Return form on the CTA web page, so that filling the tax return will be simpler for taxpayers, until there is an available e-Tax form for income tax. Furthermore, that solution requires development of the Tax return “metadata” system to collect, validate and process data from the submitted Excel forms.

10. Analyze possibility of establishing a **Tax Return Data Warehouse** to enable easy Tax return processing in the CTA and to increase the quality and transparency of tax assessment and management of taxpayers’ accounts.

11. In the future, **electronic payment** features could be enhanced. Although the e-payment function in Croatia has already been developed to a certain extent and taxpayers have some electronic options for paying their tax obligations, the e-payment function of the CTA still needs further analysis to enable taxpayers easier, safer and more secure paying of tax obligations to the CTA.

**Conclusion:**

The effects of public administration have expressed negativity and limitations. In the first place to the height of expenditure, lack of funds for financing, spending of funds and recruitment, efficient human resource management policies and inefficiencies in public administration. The

\(^{46}\) Electronic government strategy of the Republic of Croatia for the period from 2009 to 2012”, The Government of the Republic of Croatia
effective and efficient functioning of the Tax Administration requires good key performance indicators. Good Key performance indicators are measures by which the performances of organizations, business units, and their divisions, departments and employees can be periodically assessed, compared and benchmarked. It is possible to conclude that Key performance indicators allow management best control of the organization and increased efficient of organizations.

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