

Project monitoring and evaluation module: This module helps the management to monitor and measure progress of each project on a real-time basis. Besides AHAN this module has been successfully implemented in PPRA as well as RSPN. It allows all projects/programs of these organizations to be captured in the system with full details of activities/tasks and budgets. Each project/program becomes part of an online central project register which is also accessible to the finance and internal audit departments. Progress on work plans of each project can be tracked against performance indicators under specific outputs and outcomes. Indicators are updated automatically upon progress of linked activities and sub-activities.

B. MAINSTREAMING IT:

Through its strategic interventions ASP-RSPN has embedded IT reforms in the overall institutional strengthening framework. This mainstreaming of IT has been carried out in two dimensions:

I. DEVELOPMENT OF IT POLICIES AND MANUALS

ASP-RSPN has endeavored to improve governance of public sector organizations through development of overarching IT policies and manuals. Development of Policy Guide and General Procedures on Network, Email, IT Usage and Security for PDMA-PARRSA is one such example. The Policy deals with all aspects of IT's use in an organization and provides guidelines on appropriate use of computer and network resources. Similar guidelines and manuals have also been developed for NRSP and RSPN.

II. PRE-AWARD ASSESSMENTS STAGE

ASP-RSPN carries out pre-award assessments of public and private sector organizations to gauge the capacities of an organization in terms of governance, policies and procedures. The exercise focuses on policies, practices and structures relating to control environment, financial management and accounting, procurement management systems, HR policies and payroll systems, M&E and absorptive capacity. Review of IT's adoption, usage and coverage in these areas is central pillar of all pre-award assessments

C. TRAINING MANAGEMENT SYSTEM:

One of the most important applications developed by ASP-RSPN is the Training Management System (TMS). One variant of TMS has been successfully piloted in PPRA – known as the Learning Management System (LMS). It has enabled the Authority to conduct online training courses for procurement officials of the federal government. LMS is a web-based system that facilitates online training through lecture videos; e-handouts, power point presentations, online quizzes, assignments and evaluation/tests etc. LMS supplements the traditional classroom trainings and will build an organization's capacity to expand the coverage of training. For example class-room trainings that PPRA currently provides are inadequate to meet the ever-increasing demand from various ministries and departments to train their procurement staff. LMS is a time and cost-effective way to meet this demand in an efficient manner. LMS has separate modules that deal with:

- Management of database of trainees with the option of search, edit, delete etc.
- Add/edit/update training categories for the LMS training.
- Management of training and lecture content.
- Management of examination including assignments, tests and evaluation
- Trainee feedback.

LMS not only helps manage and conduct trainings more efficiently, it is also a great resource for public and private sector entities for improving the skill sets of their employees who can avail online training opportunities.

Another version of TMS is an integrated and comprehensive module which has automated the entire training cycle that trainees go through while attending various training programs at STI. STI's website now maintains a complete list and a calendar of training courses offered by the STI along with the list of instructors and speakers. Candidates can register online for a course. After registration each participant is enrolled in the biometric system which is integrated with the MIS to maintain the daily attendance of the participants. Result of each course as well as feedback of participants is saved in the system. These training management systems have wider benefits beyond PPRA and STI. Federal government departments and ministries now have wider and easier access to training opportunities with less transaction costs. Database which saves the profile and performance of trainees can be used for better career planning and human resource management of civil servants. TMS can be adopted by other public sector training institutes for improving management and quality of training.

ASP-RSPN has provided support to the Health Services Academy to use Peachtree which is a software for following audit and accounting standards and financial reporting

D. STREAMLINING INFORMATION FLOWS :

As part of IT reforms, ASP-RSPN has provided technical support for automating and streamlining procedures and processes that deal with flow and sharing of information both within and outside the partner organizations. Upgrading of an organization's website by making it more informative and user-friendly is an essential component of this approach. For example ASP-RSPN provided assistance in upgrading STI's website. It involved re-designing of the existing features and addition of new ones. These include:

1. home page uplifting and making it user-friendly
2. addition of yearly calendar of training courses
3. online registration of trainees
4. news, events and advertisements
5. feedback tab
6. a dynamic multimedia gallery
7. social media interfacing through facebook, youtube and twitter
8. online posting of course material

Similar interventions have also been carried out in FPPRA whose existing website has been made more interactive and user-friendly. By linking different modules such as monitoring, training with HR and finance sections, a seamless and efficient intra-departmental flow of information has been created. Such IT solutions have a cross-cutting impact on all the government departments. These innovations can be used as a benchmark by other public sector organizations for developing end to end automated systems.

4. CONCLUSION:

The need to use information technology to transform the way public sector operates and delivers has become more pressing. Introduction of new technologies and automation of business processes have the potential to revolutionize the way public sector organizations work. Use of IT can promote more efficient and cost-effective governance, facilitate more convenient government services, allow greater public access to information and make government more transparent and accountable to citizens. Bringing reforms in public sector is a challenge. An even bigger challenge is to sustain reforms once they are introduced in an organization. The key ingredient for making reforms successful is the ownership and commitment of the organization and its capacity to implement them in a sustainable manner. Reforms can only be successful through the people who implement them and a behavioral change in adoption of new measures. It is worth bearing in mind that in addition to information technology other changes would be necessary to improve the existing system. For example, the quality of training cannot be improved by simply introducing e-learning or a biometric attendance system for trainees. A whole set of other factors may be necessary to make any impact on quality of training. IT reform is not only about bringing new products but also to bring in changes to the culture in the organization, the way decisions are made and more importantly how technology can be used to strengthen government's role as provider of social and economic welfare to the people. In several organizations new legislation may be necessary, rules and procedures need to be modified, and extensive training is needed to change attitudes. Successful implementation of reforms requires that there is a clear focus on the purpose for which the IT solutions are introduced. All partner organizations have demonstrated that this can be done and potential of information technology can be harnessed by adopting a holistic approach toward institutional strengthening – of which IT reforms are a part. ASP-RSPN took great care while developing specialized IT solutions for its partner organization which are in line with their business needs. Learning from their success stories, ASP-RSPN plans to replicate and scale up this model in other public sector organizations that it is partnering with to the full potential of information technologies as an enabler of citizens empowerment and development.

ASP-RSPN

House 70, Street 25, F-10/1, Islamabad, Pakistan.

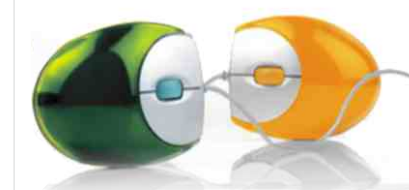
Phone +92 51 2114311, Fax +92 51 2114314

www.asp.org.pk



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IT Systems Enhancing Public Sector's Performance



1. ASP-RSPN - AN INTRODUCTION

Assessment and Strengthening Program – Rural Support Program Network (ASP-RSPN) is a five year program funded by the USAID. A substantial portion of USAID development portfolio is likely to be utilized through public sector partner organizations. In Pakistan one of the predicaments of aid delivery mechanism is that many local institutions face institutional capacity issues especially management of their own operations. This leads to a higher degree of risk, inadequacies in outcomes and consequently serious repercussions for development. ASP's mandate therefore is to partner with institutions to build capacity of Pakistani organizations for effective delivery of aid.

ASP's support to partner organizations is based on three pillars:

Pillar-I: The basic principle followed by ASP-RSPN approach towards capacity building is to devise an organization-specific, customized and relevant capacity building plan without using a "one-size-fits-all formula" approach. This enshrines the golden rule of building on the existing structures, systems and policies without re-inventing the wheel.

Pillar-II: ASP believes that the reforms should be demand driven and should have the full ownership of the recipient organization.

Pillar-III: The sequencing of interventions is critical and should be carefully timed in order to avoid the possible blow-back which usually happens when reforms are either too drastic or hasty.

ASP-RSPN sees itself as a catalyst whose job is to point the way towards reforms and consensually develop a roadmap of how to get there. It provides positive options to its partners to make relevant choices.

Under this guiding principle, ASP has partnered with the federal and provincial governments for several capacity building initiatives in the areas of financial management, human resource management, public procurements, budgeting and planning. Automation of business processes and introduction of management information systems in several public sector organizations is one of ASP-RSPN's significant achievements.

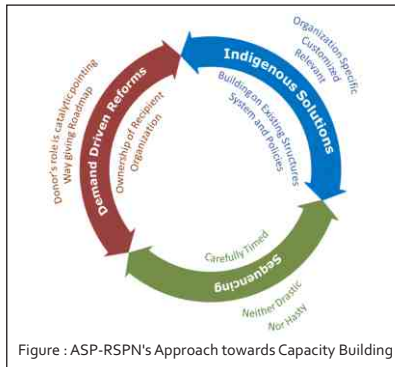


Figure : ASP-RSPN's Approach towards Capacity Building

2. IT - A HARBINGER OF EFFICIENCY AND EFFECTIVENESS

ASP-RSPN is partnering with a number of public sector organizations for institutional strengthening and capacity building. An important plank of this transformative reform agenda is the introduction of IT solutions and automation of business processes. These interventions form a significant part of the capacity building plans that ASP-RSPN has developed in collaboration with its partner organizations. The objective of these interventions is to enable public sector organizations to improve their service delivery and bring more transparency and accountability through adoption of modern IT-enabled business processes.

Demand for access to public services- and expectations of service quality - continue to increase. Public sector in Pakistan is becoming more responsive to such demands and several organizations are building IT infrastructure and adopting IT solutions across different areas of government for improving access to and quality of public services. This investment will make significant difference to government's productivity levels.

Moreover these reforms not only make it easier for government to carry out its day-to-day business more efficiently but also enable it to serve the citizenry with a much wider reach. Technology can be used to provide access to citizens who might otherwise be excluded from services delivered using traditional methods – for example, using websites to inform artisans of opportunities of skills development or providing online learning on public procurement. Internally, the use of information technology will enable different departments of government to take advantage of cross-public sector applications for better planning and coordination. It opens up new vistas for more efficient information sharing and reduces inefficiency, replication of systems and duplication of efforts.

IT applications have the potential to kick off institutional reforms by simplifying administrative procedures, lessening bureaucracy and increased knowledge sharing within the government – transforming the traditional government into a more integrated and efficient one.

Public sector organizations in Pakistan have been introducing information technology reforms with varying degrees of success. Wherever these reforms have not able to take root, it is mainly because of the piecemeal and flawed approach that the organizations have taken while designing and implementing such reforms. A key reason for lack of success has been either a lack of capacity or a lack of willingness on the part of government functionaries.

ASP-RSPN is helping public sector organizations in their embrace of information technology and has carried out IT interventions at different scales in several organizations. These reforms have been successful because of the fact that these were embedded in the overall framework of institutional capacity building – a framework developed indigenously by the organizations with ASP-RSPN acting as a facilitator and hand-holder. ASP-RSPN is providing support for bringing reforms in areas of governance, HR, procurement, financial management, IT and M&E systems.

3. THEMATIC OVERVIEW OF IT INTERVENTIONS

IT interventions that ASP-RSPN has undertaken have common as well as unique features. Common features include development of modules dealing with human resource management, financial management, procurement and inventory management. In public sector organizations such as the ones mentioned above, there are prescribed procedures for performing these functions in a standardized manner. Therefore IT solutions for these generic functions are similar in design and application except for a few variations depending upon peculiar business needs of a particular entity. A thematic overview of these cross-cutting IT solutions is given below:

A. BUSINESS PROCESS RE-ENGINEERING:

ASP-RSPN's IT interventions have led to a complete redesigning and automation of ways of working in its partner organizations. These have entailed business process re-engineering in areas such as human resource management, financial management, procurement management.

I. HRMIS

As part of IT reforms ASP-RSPN has developed an HRMIS which consists of several automated modules which deal with processes and procedures associated with whole of the life cycle of an employee in an organization.

Recruitment and selection module processes vacancy announcement, online application, shortlisting and final selection of an employee. After selection of a candidate his/her particulars are added in the system for payroll and other processing. This module maintains e-files of each employee containing details of qualifications, trainings, postings, promotions, leave and disciplinary record.

Leave and attendance module maintains attendance record of employees. Attendance data is captured through the biometric system and is linked with payroll processing. The module also allows all types of leave to be applied and approved online with the option to view the available balance. It also tracks leave/absence record of each employee.

Payroll processing module captures all payroll transactions and maintains the details of salaries of all employees keeping a track of increments, deductions, loans, allowances, entitlements (GP fund) etc and generates automated payslips.

Performance management module has automated the performance appraisal system. It provides for setting up key performance indicators (KPIs) for employees, end-year performance evaluation by the reporting officer, review by the counter-signing officer, pen-picture and rating of the employee. The module saves and archives data on all performance evaluations which is used for awarding increments or promotions.

II. FMIS

This application is developed to address the financial management needs of organizations and provide easy-to-use solutions for recording and analyzing financial information. The application performs the following functions:

- maintenance of a dynamic chart of accounts
- budget preparation and allocation
- recording and posting different types of vouchers such as bank payment, cash payment, bank receipt, cash receipt and journal vouchers
- location wise recording of financial transactions
- recording and sorting audit entries

- tax calculations and statements
- standardized and customized financial reports and budget variance analysis
- recording and managing fixed assets information

III. PROCUREMENT AND INVENTORY MANAGEMENT SYSTEM

It has two modules. The procurement module deals with procurement of goods and services. Procurement process for each item/service is initiated through the system by generating purchase orders and recording specifications. Tenders are uploaded on the website and the module provides the option for uploading bid evaluation reports and procurement contracts. The module also saves and archives data on pre-qualified bidders and blacklisted suppliers. This is an integrated monitoring application with a user interface available designed to replace the existing processes which were being managed through a mix of traditional file system and stand-alone database.

Procurement management system has a whole-of-government significance. By enabling the procuring agencies to upload their procurement plans, tenders and bid evaluation reports on official website it can serve as a management tool for them to monitor their own processes and work plans. It will increase efficiency through the use of shared services across government organizations.

Inventory and supply chain management module maintains information on inventory stock according to warehouse location, region, and production department and sales outlets. Each fixed asset is given a unique identification number. Purchase orders are generated through the system for new items. This has significantly reduced the time-lag between order and supply of new items. This module has also automated the sale, purchase and stock registers for capturing transactions including receipts and issue. This module is especially significant for an organization such as AHAN whose suppliers include village artisans and entrepreneurs. Real time issuance of orders for new items and timely reimbursement to suppliers mitigates the liquidity risks that small and medium enterprises and individual entrepreneurs typically face when supplying to public sector organizations.

IV. OFFICE MANAGEMENT SYSTEM

This system aims to replace the traditional 'noting and drafting system' with an automated system. This has been successfully piloted in Secretariat Training Institute. Once it is fully operational, STI will become the first public sector organization to have an integrated office management system. OMS maintains a complete list of files of all sections along with their contents in terms of noting and correspondence in scanned form. Receipt and issue of documents has also been automated and movement of documents/files across different sections can be tracked electronically. Each user has been given access to the system through unique log-in for secure emailing, scheduling of meetings, amending and saving documents and uploading public information. OMS can be successfully replicated in different governments departments, as core business processes are currently being run in almost similar fashion.

V. ENTERPRISE RESOURCE PROGRAM

ASP-RSPN has also developed and implemented an ERP system in one of its partner organizations i.e., AHAN.

Previously AHAN was using isolated software packages for management of its data collection and reporting requirements. For example finance section was using Quick Book accounting package for handling the financial management requirements. The marketing department was using Candela software package for management of its marketing and retail related activities. Other sections and regional offices were using MS-Office software package. All of these are stand-alone software packages completely disintegrated from each other and unable to facilitate a seamless flow of information across the organization.

The ERP system developed by ASP-RSPN's team is a single, holistic system for the whole of the organization which integrates all business processes. ERP replaces the existing approach where each department/section installs and maintains its programs – an approach which leads to fragmentation. In addition to reducing operating costs and complexity, the ERP opens up new opportunities for information sharing and coordinated decision making.

The following modules of ERP cater to the specific requirements of organizations:

General ledger module: This module provides for consolidation of financial information including number and volume of sales, instead of fragmented accounting for various sub-offices. Through the development of a GL module each office, branch, retail outlet and warehouse is identified as a distinct cost center and all cost centers are made integral parts of the module. Organizations can keep a track of all accounting transactions through a common chart of accounts and consolidate expenditure incurred by all regional offices on a real-time basis.

Fixed assets module- This module is designed to maintain fixed assets registers. It is integrated with accounts system and generates depreciation vouchers automatically as per pre-defined templates.

