Social Security Essentials www.issa.int

issa | INTERNATIONAL SOCIAL SECURITY ASSOCIATION

Technical Report 22

Presentation of the manual: *ICT project management in social security*

International Social Security Association
Geneva

Presentation of the manual: *ICT project management in social security*

International Social Security Association
Geneva

Technical Commission on Information and Communication Technology
28th ISSA General Assembly, Beijing, 12-18 September 2004

First published 2004.

Introduction

The manual on *ICT project management in social security* is the result of work undertaken within the framework of the Technical Commission of the International Social Security Association (ISSA) on Information and Communications Technology (ICT) with the assistance of IBM. We are grateful to all those who contributed their experience to this manual.

Clearly, it is in the interest of both social security organizations and supplier companies that ICT projects meet expectations and succeed. Social security managers charged with implementing new technological tools are aware of and understand the need to manage projects in the best way possible. But the reality is that social security ICT projects are too often partial – and sometimes complete – failures. The reasons for this are many: complexity arising from importing legacy data; implementation of the latest technologies; integration of ICT systems and so on.

1. Context of the study

1.1. Social security environment

Many social security schemes in operation today in industrialized countries were designed fifty or even a hundred years ago. In these countries social security schemes are continuously evolving, and the changes in the years ahead will pose new problems for ICT projects. ICT management approaches must be adapted to cope with the emerging needs.

In transition countries in Central and Eastern European and elsewhere, the introduction of market economies has led to the reorganization of all aspects of their social security systems. Social security organizations had to be created or reengineered to deal with all aspects of social security administration.

In developing countries, economic circumstances have required major organizational modifications involving the administration of their social security schemes. These changes have been made in response to demands of the public authorities which themselves are often subject to conditions imposed by structural adjustment programmes. During the first major stages of computerization, computers made it possible to automate tasks and, especially, to reduce the time taken in processing claims for benefits. Social security administrations in developing countries have generally gone through this first stage of computerization.

1.2. Service delivery

A modern social security institution cannot function without computers. During earlier computerization phases, decisions and choices essentially concerned technical matters and management models. For example, discussions typically centred on such issues as centralized and distributed models, and data capture approaches. In recent years however, many social security institutions have been forced to review their decisions in the light of new information and communication technologies. Data transmission networks, including the Internet, offer more affordable on-line data processing, in real time, and are one of the key elements of the possible organizational choices. New approaches also offer more choices in balancing the centralized and distributed issues allowing better solutions to be planned that address the needs of the client in his/her terms without compromising the roles of local, regional or central authorities.

1.3. Risk management

It is not surprising that ICT projects in social security are still regarded as carrying many unquantifiable risks. And there is ample evidence to support this pessimistic view!

Social security ICT projects, managed in traditional ways, are now more likely to be partial failures than was the case thirty or forty years ago. The new risks are due to the complexity arising from the need to import legacy data, frequent needs for prolonged co-existence with inflexible large legacy applications and the growing complexity of leading technology needed to support more complex, distributed and collaborative service delivery models. The modern needs often require ICT and project management skills beyond the traditional levels accommodated by public sector grading and pay conditions.

1.4. Defining failure

Few large ICT modernization projects, aiming to replace long established but increasingly obsolete systems, are delivering all the promised business improvements at the budgeted cost and within the predicted timescale. While few of these projects resulted in total and expensive failure, it is equally true that few performed better than initially expected. Most have been only partially successful if judged against initial estimates of time, cost and promised benefits.

1.5. Aim of the manual on ICT project management in social security

What are the factors that inhibit a more reliable environment for ICT projects in social security? How might social security institutions increase the probability of success of ICT projects? And perhaps most important, how can the experiences of the "early starters" inform the designs and approaches of organizations attempting large scale ICT projects for the first time so that the projects are more likely to succeed?

If we understand better the pitfalls that now constrain many institutions grappling with acute problems in migrating the best of 1970s or 1980s designs into stable systems, we can aim for new ICT application principles that will support rapid ongoing and more frequent changes in the years ahead.
Managing ICT projects better will become a key determinant of how organizations survive – some will grow, some will be merged and others may lose important segments of their business to private sector operators.

ICT projects undertaken by or for social security organizations are exposed to the normal project risks found in the public and private sectors. In addition, certain specific additional risks occur in social security ICT projects with a frequency suggesting that those risks may not be receiving sufficient attention.

By reviewing and analyzing projects, lessons can be learned about how to identify and reduce project risks by taking the right steps at the right time to avoid potential problems. Understanding the risks and incorporating risk containment measures in the daily management of ICT projects will lead to better outcomes. The aim of the manual is to help manage projects and understand the risks that are inherent in ICT projects.

1.6. Partnership

IBM's Global Social Security Practice, a sponsor of the ISSA Information Technology Conference in Valencia in 2002, agreed to cooperate with the ISSA Working Group to develop the manual. IBM has a broad network of consultants throughout the world, and one of its objectives is "building knowledge" based on the experiences – the lessons learnt – in social security projects. As IBM has pointed out, all reputable ICT supplier companies benefit when social security ICT projects go well and they suffer in terms of adverse publicity and usually also financially when ICT projects do not meet expectations.

1.7. Ten aspects of project management

The manual deals with the following ten aspects of project management:

1. Project definition.
2. Project manager.
3. Stakeholders involvement.
4. Communication.
5. Training.
6. Planning and managing human resources.
7. ICT project management and risk management.
8. Technology.
9. Project control and monitoring.
10. Assessing project progress – Independent project review.

Senior executives will glean ideas on questions that should be answered before projects even begin. They will also learn how they can contribute to the success of projects by taking a proactive and supportive role from the very beginning.

1.8. Situations where there are special considerations

The advice set out under the ten aspects is relevant in all countries, irrespective of the current status of their ICT systems or the type of social security system in place. In some cases the way the advice is interpreted will depend on the local situation. For example, if an organization is embarking on an ICT project for the first time in many years or if a new organization is being established, then there may be special considerations.
There is a temptation to adopt the very latest technology when starting a "green-fields" project. Local ICT experts who may be straight from university often advocate the latest thinking – e.g. build everything in Java, all access should be over the Internet, etc. Ten years ago there were cases where client-server architectures with Windows NT hosts were advocated for ICT projects in developing countries despite the fact that even in Europe and in the United States there was an acute shortage of persons with skills and experience. In fact there are institutions in Europe still grappling with the final stages of their equivalent architectural visions.

The technology selected has to be appropriate to the available skills and national infrastructure, otherwise training will be very expensive and there will be high rates of skilled staff turnover. Organizations should match their technology ambitions to local conditions. With this in mind, additional comments are offered to organizations that are being formed or expanded to offer new services.

2. The ten aspects of project management

2.1. Project definition

Experiences in development of ICT in social security organizations consistently demonstrate that the introduction of ICT should be an integral part of a strategic business plan. Different partners and different types of experts, including internal users and end users (clients), must work together, and receive appropriate and well defined training to undertake and implement ICT projects. The organization's senior management must show strong leadership so that staff at all levels and from different backgrounds will adhere to ("buy-in") and support ICT development projects. Without this environment there is little assurance that success will be achieved.

2.2. Project manager

The steering committee is formally responsible and leader for the project. However, the project manager is the person "in charge" who is responsible for the project on a daily basis. A project manager:

- allocates tasks to the individual members of the project;
- monitors the progress of individual team members with regard to their tasks;
- prepares progress reports for the steering committee;
- implements risk-reduction measures;
- assesses known risks and attempts to predict and circumvent unexpected risks;
- acts as the liaison person to other projects, departments and other parties of interest.

The project manager attends meetings of the steering committee, where he presents progress reports and the risk assessments, answers questions, participates in the discussion and gives advice on decisions to be taken by the steering committee.

2.3. Stakeholder involvement

The importance of user involvement and the number and scope of many users' applications developed in typical social security schemes together impose special requirements to address stakeholder issues comprehensively from the earliest stages.

In the 1970s and 1980s ICT departments mainly designed and developed back-office systems. Accordingly, the number of users/stakeholders involved was relatively small, or at least the variety of users and user needs was relatively restricted and somewhat easier to predict. This situation changed in the 1990s, and more recently, the introduction of Internet technology created a new and far larger group of stakeholders: the clients of the organization. They are the persons who primarily use the new system(s), and they are not only a much larger body than the former concept of users, but they also have a much wider range of needs and abilities when it comes to interacting with modern systems.

2.4. Communication strategy

Managing effective communication between different types of experts can present problems because each expert group (legal, technical, business, etc.) tends to have its own jargon. These problems are most evident when complex technical aspects are involved

Informal communications are a vital part of the overall communication process and help to establish relationships as much if not more than communications about the technical aspects of projects.

Communication not only keeps everyone up-to-date on project progress, but also facilitates buy-in and ownership of major project decisions and milestones. To ensure the success of a project a lot of diverse information, including expectations, goals, needs, resources, status reports, budgets and purchase requests, needs to be communicated on a regular basis to all the major stakeholders.

2.5. Training

ICT projects generally expose staff at all levels to new challenges in terms of concepts as well as in the approach to project activities. Training can help staff conceptualize, assimilate and accept the project and the associated changes. Integrated management training improves operational capacities.

The training should focus on operational capacities rather than technical training. Its aim should be to contribute to a critical analysis of the organization, its procedures and the role of each unit. A workflow management project should provide the information technology basis for processes and procedures. Consequently, the training should be process-oriented and focus on techniques for the management of change.

2.6. Planning and managing human resources

Traditionally, social security organizations have delivered the benefits and services specified in the legislation that defined their role. Despite increasingly complex social security schemes and growing numbers of claimants, organizations are under increasing pressure to achieve more tasks with fewer resources, hence they must deploy their staff and facilities in smarter and more efficient ways.

They must balance different variables (available staff, workload volume and complexity, the working environment including tools, architecture and geographical extent) while coping with new challenges. These challenges include new forms of competition, directly from commercial financial and other service agencies, and indirectly when people opt out (legally or illegally) and manage their own affairs.
Many organizations also must plan for fundamental changes in the types of benefits and services offered in the light of anticipated social and demographic changes. It seems likely that there will be greater emphasis on household and family factors, and greater interaction with tax and private pension funds when entitlements are calculated in the years ahead.

2.7. ICT project management and risk management

Social security organizations generally have or develop relationships with all persons in a country. As a result they process large amounts of data regarding the registration of members, collection of contributions, accrual of benefit rights, the processing of claims, etc.

In many countries, social security organizations are larger than the biggest bank, deal with more people than the largest retailer, and have more employees than any commercial organization in the country. Even in those countries with a social security system operated by several organizations, each one is often a large organization in its own right and has the added task of communication with other organizations.

Because of the size of their operations, social security organizations rely heavily on the use of ICT. It is virtually impossible to imagine how they could fulfill their tasks using only manual systems no matter how large the number of clerks they employ.

2.8. Technology

Apart from ICT companies, technology is not a business objective in its own right. Most organizations use ICT as means to an end and social security organizations are no different in this respect. When innovative ICT is being considered, senior executives should ask whether the business objectives in question can be obtained with more traditional or proven technology. They should ensure that any project proposals involving a total modernization of systems and infrastructure are carefully assessed to verify that the proposals are business driven and not overly influenced by a desire to have show-case technology. Incremental modernization and extension may be feasible. Recent developments in technology can provide new approaches such as adding new channels to systems rather than rebuilding them (e.g. by adding a web based interface to an existing system).

Projects do not succeed accidentally. Success will only come if good planning is in place. For example, to ensure that the system will work correctly, a complete testing strategy is necessary from the beginning. A poor testing strategy leads to poor quality results and unhappy project sponsors.

2.9. Project control and monitoring

Projects do not simply propagate in a vacuum. A business need must be identified and this should be formally described along with statements of what is expected, how and when it will be achieved, who will achieve the results and at what cost. Following the development of such a project charter and a preliminary scope statement, the project manager must define how the project will be executed, monitored and controlled. The project plan is the tool used by the project manger to do this.

Whatever the project, a comprehensive plan should set out the ways in which scope, schedule, cost, quality, staffing, processes, communications, risk and procurement will be managed. The plan should include the project objectives, assumptions, organization, procedures, review/approval checkpoints or "gates" potential risks, the work breakdown structure, network diagram, schedule, the budget and human and physical resources. The level of detail

will vary according to the characteristics of each project but each area should be explicitly considered.

2.10. Assessing project progress – Independent project review

Depending on the nature of the project – its priority, size, cost, duration, risks and use of technology – at least one independent project review (IPR) should take place at a key point in the project's lifecycle, preferably earlier than later.

The purpose of the IPR is to assess objectively the degree to which the project is being managed according to the organization's project management framework (standard processes and procedures) and how the project is performing in relation to agreed scope, cost, time and quality objectives (i.e. to the project baseline). From the results of the (IPR), senior stakeholders will determine whether or not to allow the project to continue and under what conditions.