Modernization of Social Protection Programs

Risk management in procurement of IT services

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Nature of Social Protection modernization programs

- Institutional integration or change in institutional responsibilities
- Introduction of new schemes and/or merger or relocation of existing schemes
- Upgrade or integration of select functions (contribution collection, etc.)
- Integration with external service providers (benefit payments, etc.)
- Automating manual processes, strengthening record-keeping, improving reporting and monitoring systems
- Expanding access to services (“single window” branches, online services, help-line)
- Improving quality of services (automating claims processing, etc.)
Survey: “Did your latest reform include…”

- Reform of institution...
- Change in business...
- Upgrade/change of the core...
- Cleaning/digitization of...
Data is a key strategic asset of any social protection agency

- Lack of good records means:
  - no clear and legitimate entitlement to benefits
  - poor services to clients
  - no effective enforcement
  - limited capacity to plan, budget, and monitor

... but quality of data comes at cost and implementation is associated with major risks
Procurement process usually extends to 6-12 months
Implementation of such complex IT project may stretch for up to 3-5 years

**Implementation of information systems is a difficult enterprise associated with risks**

US averages:
- 50% of large implementations fail
- 80% suffer contract amendments
- more than half include disputes

From presentation of Carlos Ferreira, WB, “Procurement of Information Systems and Technology”, 2000

To monitor and manage all risks requires proper supervision
Clear implementation management plan(s) and reporting obligations are needed to keep vendor accountable
Survey: “Did your agency experience any issues with contract implementation?”

- We experienced delays with... (80%)
- We had cost overruns / unresponsive... (20%)
- We had to cancel the contract... (10%)
- Delivery did not correspond to... (5%)
- We had to take over development... (5%)
- We had serious legal battle... (5%)
The process should bring together operational and MIS/ICT specialists. ICT is only part of solution. All components of the business process should get critically assessed.

Internal resources and external expertise must be carefully weighted to identify the available skill set and to define most optimal implementation strategy.

Define and carefully analyze all risks involved in development and maintenance. Expect unexpected. Be prepared for many contingencies.
Implementation options

- **Outsourcing operations**
  Contracting various system functions to outside provider(s) of services. No direct responsibility over the processes.

- **Adapting an “Off-the-shelf” product**
  Customization of already developed commercial product to the specific business needs.

- **Outsourcing development**
  Hiring a professional IT consulting company to design and/or develop the software or selected components.

- **In-house development**
  Mobilizing a team of internal (and external) specialists to develop a system under the internal management.
Survey: “Dominant mode of the latest MIS development effort”

- By in-house team / Команда внутренних...
- By external contractor that developed...
- By external contractor that customized...
- By a combination of methods / Сочетание...
- We outsource the operation of our MIS system / О...
Survey: “The main contractor was”

- An international vendor (or consortium) / Международный...
- A local vendor (or consortium) / Местный производитель/поставщик (или консорциум)
- A consortium of local and international vendors / Консорциум...

The bar chart shows the distribution of responses to the survey question. The most common response is for a local vendor (or consortium), representing a significant majority of the respondents.
### Implementation options analyzed

<table>
<thead>
<tr>
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<th><strong>Benefits</strong></th>
<th><strong>Risks</strong></th>
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<tbody>
<tr>
<td><strong>Outsourcing operations</strong></td>
<td>▪ Advantage of external expertise and capacity</td>
<td>▪ Contractual issues. Failure to pay attention to small but critical details of the existing processes or requirements may threaten implementation or exploitation</td>
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<td></td>
<td>▪ May be a cost saver due to specialization</td>
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<tr>
<td><strong>Adapting an “off-the-shelf” product</strong></td>
<td>▪ May be quick and easy solution</td>
<td>▪ Customization may take more time than expected due to local specifics</td>
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<td></td>
<td>▪ Direct control over the business process</td>
<td>▪ License/maintenance may turn to be expensive</td>
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<td>▪ High dependency on external provider</td>
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<td>▪ Risk of hidden costs (e.g., requirements of periodic upgrades and modifications)</td>
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<tr>
<td><strong>Outsourcing development</strong></td>
<td>▪ Advantage of external technical expertise and capacity</td>
<td>▪ It is impossible to specify all contingencies in the original contract</td>
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<tr>
<td></td>
<td></td>
<td>▪ High risks of delays and cost extensions/modifications</td>
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<td>▪ Dependency on provider</td>
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<td></td>
<td></td>
<td>▪ Limited monitoring capacity</td>
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<tr>
<td><strong>In-house development</strong></td>
<td>▪ Full ownership of the process</td>
<td>▪ Shortage of skilled IT and management specialists in the public sector</td>
</tr>
<tr>
<td></td>
<td>▪ Full access to the source code</td>
<td>▪ Private/public sector wage differentials may result in drain of capacity during the maintenance and exploitation phase</td>
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<td></td>
<td>▪ Know how in context, needs, users</td>
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MIS procurement: Mapping the risks

Institutional/Management risks
- Limited understanding of the system and business process requirements
- Poor management plan and weak enforcement tools
- Lack of quality control skills and/or effort on the clients side
- Hands-off approach may only delay the crisis while micro management by the client raises the additional liabilities

Contractual risks
- Lack of specifications in initial technical requirements
- Lack of mechanisms of adjustment to changes
- Ambiguity in acceptance procedures
- Drifting focus and resources of the IT provider to new projects and new clients
- Risk of cost and time overruns

External and Post-implementation risks
- Policy, legal, and regulatory changes
- Management change
- Fast technological changes
Survey: “Institutional challenges”

- Lack of project management experience...
- Lack of clear understanding by our...
- Poor coordination between different...
- Slow decision making on contract...
- Other (please explain) / Прочее...
Project Management

- Establish clear governance provisions over the process
- Use third party expertise to help ensure quality of deliverables
- Involve operational staff in the process of the system design and acceptance testing (through special working groups)
- Require periodic reporting from the project and regular consultations with the in-house IT & management teams
- Require and periodically review implementation management plan
- Require in-house presence of the development team for the whole duration of the project
MIS procurement: Risk mitigation (cont’d)

Contract Management

- Require/encourage partnership of local and international companies in development effort to facilitate access and continuity. Think about joint liability.
- Recommend uses of software/hardware tools that the institution would be able to maintain (in the system specifications)
- Ensure flexibility in the contract terms in respect to specifications, payments, and timeline modifications.
- Ensure that payment schedule is connected to main milestones/deliverables
- Require training to be provided to both IT personnel and operational staff as part of contracted delivery
- Ensure clear provisions on the ownership of the source code and any (even partial) delivery
- Negotiate gradual transfer of ownership of the system components as they get developed (needs to be a contract clause)
Development Process Management

- Think about separate implementation phases: (i) design & (ii) development
- Usually a considerable amount of external expertise required; hence, typically the task gets outsourced
- One big contract could be awarded to do system analysis, design, implementation, and training. But significant risks of such large procurement
- Alternatively (and more often) system analysis (Phase I) is a separate task with following outputs: gap analysis, new system design, technical specifications, costing, package of tender materials, long-list of vendors
- All documents from Phase I needs to be reviewed and approved by the management and corresponding Technical Committee(s) before tender process under Phase II can be initiated
Concluding remarks

- Sound implementation strategy is as important as sufficient budget
- Information system reengineering, design, and implementation must be "owned" throughout the organization, not just driven by a group of outside consultants.
- System reengineering is about **organizational change**
- Do not produce complex solutions for simple problems. You need to understand what you are getting and why. No need to buy a “Rolls-Royce” where bike is the solution.
- Start coordinating early with reforms in other institutions and systems (civil register, payment systems, tax administration, etc.)
- Define 2-3 reform/project phases with clear outcomes: [1-2 years] / [2-4 years] / [4-7 years]