

2. Theme Information Technology Procurement

Lead Paper Information Technology Procurement by OAG Canada

Analysing and reporting information on IT procurement

- government-wide analyses and reports on IT investments
 - how much does the government invest year-over-year on IT goods and services
 - who in government is investing and is the trend consistent
 - what are government departments and agencies buying
 - but is data was not available
- IT contracting data (direct)
- general expenditure data (indirect)
 - aggregated IT expenditures over four years,
 - estimated portion of salary costs relating to IT
 - reconciled to audited financial statements
- a rising trend of IT expenditures in dollar as well in relation to total budgetary expenditures for government operations (no including integrated scientific or military systems)
- large spending users, medium, small. Top 20 IT users accounted for about 90 percent of IT expenditures.

Acquiring goods and services for large IT projects

- The Benefits Driven Procurement (BDP) for the acquisition phase of large IT projects (highlight the benefits that the solution will provide, clear accountability by all parties to the contract, front-end planning (focus on business need, project phases, manager commitment, governance structure, procurement strategy), sound project management, management of risk, breaking down a project into phases with checkpoints, governance and senior-level sponsorship,)
- Audit: to review the strength and weakness of the new BDP approach based on experience and its application
 - result: many essential elements of the BDP approach can work and produce results
 - result: need for shorten the length of time taken for the acquisition phase of large IT projects

Method of Supply for Hardware

- standing offers allow buyers to order directly from suppliers goods and services at pre-negotiated prices that remain in effect for a specified period of time
- audit results:
 - the standing offers are heavily used, thus leading to help users get more out of their IT budgets
 - procurement averaged four weeks – a significant advantage over the traditional competitive process using requests for proposals

- categories and products were not always sufficiently up to date leading to a risk that users might acquire a lower level product with very marginal savings or purchase products that the open market no longer supported.
- but savings from volume discounts averaged about 17 percents (microcomputers and LAN-related products)

Purchasing software products and related services

- national master standing offers to purchase commercial off-the-shelf software products directly from suppliers, subject to the authorised limits. The standing offer method of supply was widely used.
- audit result:
 - standing offers were awarded to vendors without competition
 - software acquisitions have been treated like those of any other commodity.
 - but software products are more than typical goods. The products are not interchangeable and they are upgraded continually. They often have far-reaching implications for an organisation.
 - the government lacked a strategy for acquiring software as an IT investment
 - acquiring additional licenses of upgrading software for use across department continued to be a challenge for the government

Contracting for IT professional services

(not included)

How to improve government procurement for IT goods and service

- The Canadian government developed a framework, called Enhanced Management Framework or EMF, to improve project and risk management
- acquisition activities that requires shorter time spans will add significant value to the projects
- Central procurement agencies provide guidance and support to user departments and agencies for acquiring personal computers. Benchmark testing. Volume discount.

Audit methodology and approach in analysing IT procurement data

- IDEA package

SAI Thailand

(The Country paper is related to Lead Papers from NAO/UK, OAG Canada and SAI Poland. Mainly it is related to NAO/UK Why IT Projects Fail)

In the following part which is a copy of the text within Theme Why IT Projects Fail following aspects are of special interest concerning IT Procurement:

- large sum of investment
- **Availability** of computer hardware and accessories
- **support** from supervising agency and top management
- communication to gain co-operation,

- **feedback mechanism** to improve project performance and ensure better value for money from IT development
- involving agencies in controlling and maximising IT projects, **specifying procurement methods**
- should government IT investments be **centralised or decentralised**
- how to conduct fruitful Performance **auditing** of IT Investments?

Despite the large sum of investments, it seems that the government has not yet satisfactorily achieve the objective of using IT to increase operational efficiency and effectiveness and the ultimate goal of using IT to serve citizens better. Auditing the Thai government accounting system that applies to all government departments. Key success factors for using the OCG software:

- Explicit policy of computerizing government accounting tasks
- Good support from the supervising agency and top management
- Availability of qualified personnel with computer literacy and good knowledge of government accounting.
- Good working environment
- Availability of computer hardware and accessories
- Sufficient operating budget
- Availability of personnel who has been trained by the OCG on software usage
- personnel with computer technical competency to solve hardware problems
- personnel with adequate knowledge of the software to solve operating problems
- Reliance on the OCG staff to solve problems resulting in operating delay
- ability to record certain types of accounts and reports using the software
- preference to perform work using Generalized Accounting Software Package.

A Standard Government Accounting software is a good ground for exchanging experiences among agencies.

Key factors which influence project:

Policy settings, support from top management, availability of complement resources, quality of project management team, communication to gain co-operation, feedback mechanism to improve project performance and ensure better value for money from IT development:

The roles of involving agencies in controlling and maximizing IT projects, specifying procurement methods, etc. (Relates to Inception and design of projects, Managing projects, Learning lessons)

My comment: New problem area The needed Resources

SAI Cameroon “IT Procurement”

Government departments frequently use contracting to procure the goods and services they need for IT projects. The routine is

- tendering procedures: to advertise intentions to contract and invite tenders, to request the submission of bids. There are ordinary tendering procedures and exceptional tendering procedures (direct contracting or negotiated procedure, void of advertising and sometimes, any competition)

- award procedures: to select the cheapest bid in ordinary form award (clearly defined and delimited IT projects). The prevailing principles are publicity and free competition. In general this form is used because it is simpler and faster.
- award procedure: to consider the technical specifications, the technical, commercial and financial capacity of the bidder in the discretionary procedure. This award form is used in large specific IT projects needing new technical variants or special requirements. The contract consists of designing and development of the system and the supply of relevant hardware and system application software needed to run the system.
- to make the award.

The decision on the award is made by an independent contracting committee in order to preserve transparency, objectiveness and effectiveness. Most specific IT projects are awarded by the National contract committee..

SAI:

- study how the analysis of contracts are regulated by the current general rules and regulation,
- determines whether the selection and award procedures have been followed appropriately
- whether the relevant operating guidelines have been correctly observed in implementing them

Audit findings:

- over utilisation of the discretionary award procedures. More consideration is given to the technical aspects of bids than to the financial aspects, leading to IT projects costing too much. There is a lack of objective criteria that can serve as a basis for such award.
- the use of automatic procedure has in some case caused awards to go to bids that are too low to guarantee a proper execution of projects, leading to abandoned projects or technically failed projects (too low quality materials).

SAI Germany “New IT Procurement strategies in Germany”

Three basic principles:

- all contracts for IT assets and services are to be awarded competitively
- in the majority of the cases, the responsibilities for IT procurement have decentralised structure. There are some central procurement offices.
- regulations and rules serve as a yardstick for steering non-competitively award situations.

Findings:

- In the case of central procurement offices the long time lags associated with the public tendering procedure give rise to dissatisfaction among future users of IT assets and services. Users tend to evade centralised procurements procedures to the extent possible and try to procure the IT assets and services needed in a decentralised fashion, often disregarding the obligation to award contracts competitively.
- This is leading to inefficient management of the knowledge, experiences and skills in the area of IT procurement.
- The error rate is increasing and the risk of litigation is increasing
- In some branches of the public sector the problems with the central procurement offices lead to an adjustment of procurement strategies. The bodies have begun to plan requirements proactively, using blanket contracts for both hardware and software procurement covering 1 to 3 years (IT assets and services can be ordered from one

supplier within the period fixed). Several advantages are connected to this strategy. The disadvantage is dependence on a single source (if the agency do not have several blanket contracts with different suppliers)

Findings concerning large IT projects:

- Poor specifications as a result of imprecise requirement definition can lead to project failure as well as to the submission of inadequate tenders/bids because the workload may be underestimated by the contractor
- public managers may develop unrealistic estimates of costs or of workloads involved.
- frequently costs are deliberately underestimated to have the project survive budget negotiations and to success at least in launching the project
- interfaces/data exchange formats are not defined on the basis of standardised formats generally accepted in the marketplace.

SAI Bangladesh “IT Procurement”

Bangladesh is getting involved in increasing investment in IT sector. Government of Bangladesh has set a policy for large scale procurement irrespective of whether those are IT related goods and services or not. There exist some peculiarities in case of purchasing IT goods and services:

- in most cases needs analysis and feasibility studies are done by hired consultants. In this case the controlling authority of the project and the representative of the donor agency play the main role.
- publication of tender notices for necessary hardware, software and services. A detailed tender document is prepared.
- then a bidder is accepted on technical ground, only then his financial offer will be considered
- a high level tender committee recommend one bidder as winner (often the one with the lowest amount)
- Government/donor agency finally accept the recommendation
- a contract is signed

Bangladesh Computer Council (BCC) is playing a major role to guide organisations in IT procurement. Government agencies invite representation from the BCC in every large scale purchases of IT goods and services. BCC is regarded as the body that has the technical capability of judging merit of IT goods and services.

Some comments to lead paper issues:

- Bangladesh no co-ordinated effort to keep central information regarded IT procurement
- Performance Auditing should identify problems or weaknesses related to procurement stages in failed IT projects
- audit has to look for clues whether purchases were made economically and whether sufficient technical backup has been ensured in the contract
- audit should be satisfied that purchasing department ensures that the software fully conforms to the business needs of the organisation.
- making a contract is very crucial. The contract must include appropriate and sufficient clauses that help the organisation to get things done and also protect legal rights in case something goes wrong.

Expanding the issues raised by SAI Canada

- Efficient and effective **regulations and rules** in the area of IT procurement (Germany)
 - regulations and rules serving as a yardstick for steering both competitively and non-competitively award situations (Germany)
 - the need for a national level IT procurement policy to give guidance and direction regarding what to buy, how to buy and when to buy (Bangladesh)
 - The need to have data on advantages and disadvantages with regulations, rules, methods and routines concerning IT procurement (Germany)

- Analysing and reporting **information on IT procurement** (Canada, Thailand, Cameroon)
 - The need for the government to have relevant and reliable data (IT investment trends, size, large and small spending users and other characteristics) on IT procurements over the years. (Canada, Cameroon, Germany)
 - The need to have data on how government agencies follow the regulations and rules concerning IT procurement and how procurement strategies are evolving and the reasons why (Germany)
 - The error rate and the risk of litigation in award situations (Germany)

- **contracting** for IT professionals services (Canada, Cameroon, Germany, Bangladesh)
 - tendering routines (Cameroon)
 - award routines (Cameroon)
 - Decision making on what to buy and the decisions makers (Cameroon)
 - the use of an independent contracting committee (Cameroon, Bangladesh) or central procurement offices (Germany)
 - The need for the government to have technical, commercial and financial capacity information about bidders (mostly foreign based multinational companies). (Cameroon, Bangladesh)
 - Information for pricing analysis. (Cameroon)
 - the contracting procedure specific to IT projects (Cameroon)
 - the knowledge to make a contract including appropriate and sufficient clauses (Bangladesh)
 - new contracting strategies such as the use of blanket contracts (Germany)

- Acquiring goods and services for **large IT projects** (Canada, Thailand, Cameroon)
 - The need for the government to have good approaches, strategies and methods to acquire goods and services. (Canada, Thailand, Germany)
 - The need to use these tools in a good manner.
 - the contracting phase is of pivotal importance (Germany)
 - Avoiding the dependence to one supplier through competitive tendering/bidding (Germany, Bangladesh)
 - Centralised or decentralised acquiring (Thailand, Germany, Bangladesh)
 - **support** from supervising agency and top management (Thailand)
 - the need for fast and appropriate decision procedure (Bangladesh)

- **supplying hardware** (Canada, Thailand)
 - The need to have strategies, methods, standards and routines to buy goods that are frequently bought or being bought in large quantities. The issues to take due care to assurance of quality, economy and efficiency in supplying hardware. (Canada, Cameroon, Germany)
 - The need to be aware of strengths and weaknesses in the system with standing offers. The possibility to use volume discounts. (Canada, Cameroon)
 - Availability to hardware (Thailand)
 - Centralised or decentralised supplying (Thailand, Cameroon, Germany, Bangladesh)
 - the need for fast and appropriate decision procedure (Bangladesh)

- **purchasing software** products and related services (Canada, Thailand)
 - buying on a piecemeal or enterprise-wide basis (Canada)
 - The use of government national master standing offers. The need for the government to have good strategies to acquire software as an IT investment. (Canada)
 - centralised or decentralised purchasing (Thailand, Cameroon, Germany, Bangladesh)

- Outsourcing IT assets (especially IT Hardware) (Germany)

- **Supporting and monitoring** of IT Procurement (Cameroon, Bangladesh)
 - involving agencies in supervising, controlling and maximising IT projects (Thailand, Cameroon, Bangladesh)
 - The need for the government to have good approaches, strategies, methods, feed-back mechanisms and use of skills achieved concerning IT Procurement (Canada, Thailand, Germany)
 - the need to have adequate numbers of skilled people on IT (to prepare proper bidding documents, scrutinising technical and financial bids, to draft contracts). (Bangladesh)
 - Advantages or disadvantages with centralised or decentralised IT Procurement (Thailand, Cameroon, Germany, Bangladesh)
 - The use of government national master standing offers (Canada)

- Auditing IT Procurement (Thailand, Cameroon, Bangladesh)
 - the role of SAI in IT Procurement
 - the existence of a strong and efficient audit will cause project authorities to be more careful in procurement of hardware, software and other IT services. (Bangladesh)
 - identify problems or weaknesses related to procurement stages in failed IT projects (Bangladesh)
 - look for clues whether purchases were made economically and whether sufficient technical backup has been ensured in the contract (Bangladesh)
 - audit should be satisfied that purchasing department ensures that the software fully conforms to the business needs of the organisation. (Bangladesh)

- Best practices (Germany, Bangladesh)
 - negotiations about the essential points of a contract should be completed before awarding the contract
 - “rated break points”/clearly defined project components that may be run/operated/integrated independently are useful tools
 - no purchase commitments should be made

- bedding periods should be as short as possible
- specifications should require state of the art products and services
- time lags between tendering and contracts awarding should be kept as short as possible.
- no scope for raising prices should be allowed
- short duration of contracts such as 2 years plus an optional extension of 1 year.
- contracts concluded should not provide for definite purchase commitments
- in case a software fails to produce desired results, there should be remedy in the contract (Bangladesh)
- further market development should be observed while the contract is in force
- competition among suppliers should be ensured by concluding at least two blanket contracts
- purchasing IT assets and services from reputable suppliers ensures a certain minimum quality standard.