Experience Sharing on IT project implementation

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Sharing on IT Project Implementation

- User perception
- Organisational factors
- Project Life Cycle
- System Development Life Cycle
- Success Factors
- Problems & Solving Techniques
- Potential Risks
- Summary
What are users thinking of IT Projects?

- afraid of the IT projects
- not my core business
- too many failure cases in software industry
- no systems available in the markets
- lack of IT supports and expertise
- high investment but low returns
- computerisation is a hardware business
- software is just only MS word, excel...

Believe it or not!
- can accelerate the mission and vision of an agency
- a new era and a new mindset
- time to act or you will be left behind
Organisational factors

- no one shoulder this role
- no feedback vs too many user requests
- word processing vs system application
- multiple database vs central repository
- ad hoc requests vs functional requirements
- user expectations vs practical application
- departmental requirements vs agency-wide plan
- no IT budget vs limited IT budget
- fly-fighting IT projects vs a long-term IT plan

*Cultural change takes time*  
*and*  
*needs collaborations*
CFSC - IT Development’s Evolution Path

1. part-time by social worker / volunteer’s supports
2. committee to co-ordinate IT related activities
3. dedicated staff to promote IT applications
4. IT dept to plan and oversee IT projects
5. agency infrastructure setup
6. hardware upgrade and standardisation
7. enhance communication thru web, e-mail and intranet
8. identify the core application areas
9. core application development
10. system implementation and customisation

- Enhancement phase
- Integration with other sub-systems
- Reporting, Data analysis and Knowledge aggregation
Success factors - I

- a well-trained IT project champion
  - dedicated project staff with clear responsibility
  - find the right person to do the right things
- involve all levels of staff (management & user groups)
  - senior management’s commitment
  - setup task force and user focus group
  - department level, unit-in-charge, user representatives
- clear communication and reporting channels
  - promote discussion forum within the agency
  - well-defined project team structure
- develop IT strategies and objectives
  - inventory list for computer skill, peripherals and technologies
  - Identify the core application areas
- committee to filter and prioritize user requests
  - align and follow agency’s business goals
  - cost and benefit analysis
Traditional Project Life Cycle

- Scoping
- Planning
- Executing
- Monitoring and Control
- Reviewing
SDLC - System Development Life Cycle

- Requirement definition *
- System analysis - IT
- System design - IT
- System development - IT
- System test - IT
- User acceptance test *
- User training *
- Implementation *
- Maintenance *

Who do what & who is who?
IT-in-charge(*), Management *, Users *
Waterfall model vs Iterative model

- Rapid Prototype Model
  - requirement definition still needed
  - paint screens before it built
  - trial and error
- Shorter delivery life cycle
- Better user acceptance
- Change management
- Iterative processes take time
Success factors - II

- start from small
- implemented by phases
- well-defined IT objectives
- well-defined user requirements
- well-defined deliverables
- well-prepared project plan
- project kick-off briefing
- regular project status update/news
- follow project’s timeline
- allocate necessary resources
- in-depth training for all levels of users
- on-going review of business goals
Problem Solving - I

- Type of problems
  - internal (conflict of resources, change of user requirements, staff turnover..)
  - external (vendor management, special events, different interpretation, costing, project slack...)

- Preventive measures
  - quality of specification (requirements)
  - quality of design
  - provision for change requests
Problem Solving - II

- Managing by exceptions
  - reporting channels
  - effective communication
  - milestone/check point
- Alert and seek resolution before it becomes a big problem
  - functional approach
  - collaboration approach
    - interaction
    - collective efforts of working group & PSC
- understand the interactions between business processes and technical constraints
- justification of development cost and time
- seek professional advice whenever is appropriate
Balance of IT Project’s Matrix

- Time
  - timing e.g. seasonal factors
  - additional workloads to frontline staff
  - impact on business development & current operation

- Cost
  - additional resources (hardware/tools/project staff)
  - Increase in development cost
  - overall budget concern

- Quality
  - usability, reliability, operability, security, flexibility...
  - impacts on the user acceptance test, performance
  - which can kill the project, which can be improved

- Scope
  - core module first and implemented by phases
  - enhancement phase
  - follow strategic business objectives
Potential Risks

- prepare for the worst scenarios
  - DRP - Disaster Recovery Plan
  - failover - fall back plan
  - contingency plan
- baseline for the overall budget and schedule
- on-going monitoring process
- post project review
  - build up knowledge
  - understand the organisational change
  - prepare for next phase / project
Summary of experience on IT projects - (I)

- Dedicated IT Project Leader - full-time personnel
- Prepare a long-term IT strategy and IT plan
- Project team/charter with clear responsibility
- Well established communication channels
  - e-mail, reporting, discussion forum
- Check the readiness of Infrastructure and peripherals
  - network, PC, printer, software 98, XP
- Collect agency’s true business requirements
  - system analysis, volumetric analysis, performance...
- Prioritization
  - cost and benefit analysis
  - project benefits to most of users and mission critical
Summary of experience on IT projects - (II)

- System architecture preference
  - distributed vs centralised
  - interaction with other system components
  - system interface and system integration
- Package vs tailor-made system
- Outsource vs in-house development
- Contract management
  - payment schedule, penalty cost…
  - maintenance cost, warranty period
- Staging & Deliverables
- Specification
- User acceptance criteria / test
- User training and documentation
- Enhancement phase
* End *

Thank you