

A Guide to software selection and development for organisations participating in the NDIS

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Introduction

As a condition of receiving a grant from the NSW Organisation Transition Fund to assist Sunnyfield in building a Communication Hub for our clients and carers we agreed to prepare and make available to the Disability sector the following:

a) Outline the wider impact and anticipated outcomes of your project in the service system.

We understand that one of the biggest risks to organisations embarking upon change is dealing with the many unknowns. Often factors such as time, money and resources are wasted in the process. In order to help improve the chances of a successful outcome Sunnyfield are prepared to provide a range of assistance free of charge to any organisation in the sector embarking on a similar journey. Specifically we would like to provide organisations with a range of tools that are essential to carrying out this process, these include:

- *A detailed project plan*
- *A step by step guide to software selection and development*
- *Help sheets incorporating lessons learned to assist with the end to end process*
- *Upon request additional support will be considered for small to medium providers*

To ensure this information is freely accessible it will be made available on our website, NDS Sector support consults and ADHC.

All businesses under the NDIS will need to adapt their service offering to suit the changing environment. Sunnyfield would like to play a leading role in this change and also plan to actively engage the sector in discussions about how this can be achieved through presenting at industry events and forums.

For assistance with any of the matters raised in this paper please contact:

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Executive Summary

1. The biggest obstacles to successfully implementing any software system are three fold:
 - a. Lack of understanding specifications and requirements
 - b. Lack of resources
 - c. Lack of structure in project planning and change management
2. In spite of 'commercial off-the-shelf' systems advertising that they can meet all ones needs you should always resist the temptation to take what is offered and make the organisation fit the system. You should always complete your own detailed requirements (know your business before briefing others) as the devil is always in the detail.
3. Whether you resource the project internally or appoint external project managers you need to be very realistic about all the resources required and the time they need to be engaged.
4. Always complete a project plan where more detail is better than less and prepare change management and training workshops for all impacted staff, and be prepared to repeat this training and even work on a one on one basis.
5. One of the conundrums of any project is obtaining budget approval before all the details are agreed with the Vendor as you normally cannot agree the final price until after approval has been given to negotiate with the preferred vendor. A 20% to 30% contingency is one way of covering this situation and even more if it is a build from scratch project.
6. Gain a clear understanding of the hardware and infrastructure changes that will be required and ensure any costs are included in the project budget.

Software Selection

1. Kick off a project with the appointing of:

- a. Project Sponsor
- b. Steering Committee
- c. Project Manager
- d. Project Team(s) or Working Party(s)

The Sponsor chairs the Steering Committee which is made up of the senior managers of the divisions/departments that will be affected by the new system and can make decisions on matters of strategy and the budget. The Steering Committee meetings should be held at regular intervals during the life of the project and include a representative(s) of the vendor(s).

The Project Manager is responsible for delivering the project on time and on budget while the Project Team co-ordinates the various groups, agrees specifications and organises the user acceptance testing (UAT). The person given this role must have either formal Project Management training or experience, if not they should be trained accordingly.

The project teams or working parties are set up to cover specific parts (modules) of the system and require a business champion to lead the team and members who are fully cognisance of the particular organisation's operations the team is responsible for as well as having an overall understanding of the project.

2. Clearly state the agreed scope and objectives of the project and detail any specific limitations
3. Agree the strategies for the framework of the project:
 - If the software is to be Cloud based, externally hosted, or internally hosted
 - Off the shelf no modifications, off the shelf with modifications or bespoke
 - Use of consultants
 - Requirements for parallel running if replacing existing system
 - Train the trainer system or vendor does all training
 - Big bang or staged implementation
 - Payback metrics or 'do or die' requirement
 - Interface requirements
 - Mobility requirements
 - Database Type
 - Data migration
 - Historic data

Or maintain an open mind until the submissions have been received.

4. Set out to write the detailed specifications of the functionality that you require (this is especially important if you are contemplating having a system commissioned or written from scratch), the outcomes, security set up, reports, interfaces etc. The specifications should contain all fields required, their size, whether mandatory or optional, and include workflows. Have these reviewed by the Project Team and signed off by the Project Steering Committee. This process will take some time as you need to capture all data, forms and reports and understand their relationships.

5. Build a list of potential providers from web searches, talking to like organisations, attending industry forums etc.
6. Then carry out desktop reviews of all systems available and rank them in accordance with your requirements and then invite the top group to demonstrate their systems to the Project Team (The actual number to be dependent on the perceived fit, costs and implementation time.) These demonstrations can either be of a general nature or scripted to your requirements and all attendees should be issued with an objective marking sheet.
7. Understand if there are any network or hardware requirements over and above your existing infrastructure and if you wish the preferred supplier to provide a turnkey package or if you will engage separate vendors.
8. If you are constrained by a budget be upfront with any vendor you engage with and there are a number of funding options available, especially with the growing Software as a Service offerings and use of the cloud.
9. When a short list of vendors has been agreed issue a Request for Proposal (RFP) to the short list detailing:

- Specifications
- Workflows
- Existing hardware & network set up
- Existing software and interfaces required
- Draft Implementation schedule
- Data migration requirements
- The resources you will be committing to the project
- Training requirements

Refer Appendix 1 for an example of the contents of a RFP

10. On receipt of the submissions utilise a scoring system to choose a preferred supplier and if required arrange for further demonstrations and reference site visits bringing in end users to assist in the evaluation. It is important that these evaluations be objective as possible and a mix of purchase or commission solutions can be included.

The summary evaluations should cover:

- Vendor track record, financial viability, size, geographical spread, and client references
- Functionality meeting specifications
- Level of customisation required
- Overall ease of use, screen layouts etc. and degree of change management required
- System technology
- System security
- Implementation methodology and timetable

With the different groups given weighting to allow for their importance in the overall decision making process. Note that you need to differentiate between 'must have' and 'nice to have' functionality and weight them accordingly.

11. When reviewing submissions it pays to use the 5 years Total Cost of Ownership (TCO) model to compare costs splitting the figures between Capex and Opex values and include estimates of internal and external resources required.
12. Calculate the payback period by realistically calculating the savings, monetary and non-monetary, and allowing for time for the system to be bedded in.
13. Open negotiations with the preferred supplier and obtain copies of their contractual documents including:
 - Software Licence
 - Professional Services (Consulting services) Agreement
 - Maintenance & Support Services Agreement
 - Pricing Schedule
 - Payment Schedule
14. Commission a legal review of the vendor documents to ensure that they are fair, follow general commercial practices and that any potential liability is understood and minimised. Write your own additional agreement if you feel the standard ones provided by the vendor do not include all the clauses you require.
Be very clear on milestones and pay points and hold back 10-20% of the agreed price until 3 months after Go Live.
15. Prepare a Project Initiation Document (PID) (Refer Appendix 2) which outlines the Objectives, Goals, Governance, timelines and control mechanisms for the project which is signed by all parties.
16. For all projects prepare a Communication Plan outlining how you are going to advise your relevant communities of the progress of the project and ensure any reports are released on a scheduled regular basis.
17. All systems require support and maintenance once implemented as change requests and upgrades are received and therefore realistic budgets should be provided going forward.

System Implementation

1. Set up an Issues Register and a Risks Register which should be presented and reviewed at each Steering Committee meeting.

The Risks Register should include:

- Register No
- Date raised
- Details
- Area of the Project/Business
- Likelihood of occurrence (Almost Certain, likely, possible, rare, unlikely)
- Impact of occurrence (low, major, minor, moderate)
- Risk Rating (Extreme, high low, medium)
- Control Actions to mitigate the risk
- Residual Risk after control actions
- Person Responsible
- Date Closed
- Closing comments

This Register is generally static with the risks declining as the project progresses.

The Issues Log is a more dynamic register with all issues raised during the project logged and dealt with. The headings here are:

- Register No
- Date raised
- Description Summary
- Issue Type (Requirements change, Environment change, Problem or error, Query)
- Impact Level (High, Important, Low, Moderate, Medium, Very important)
- Date Assessed
- Current Status (Build, Completed, Design, Initiated, Planned Rollout)
- Owner
- Status (updated as actions occur)
- Action Date
- Date Resolved

2. The selection of Project Team members is crucial to the success of the project and they should have the following attributes;
 - a. Good understanding of the organisation's functions
 - b. Respected within the organisation
 - c. Specialist knowledge of the area of the organisation they represent
 - d. Good written and oral skills
 - e. Ability to devote the time required to the project
 - f. End user experience

and include a Quality Controller, refer Appendix 3 for a Project Structure Chart

3. Where the project is of a sufficient size it is preferable to split the work and have working groups set up for the various parts of the project, each lead by a member of the Project team.
4. Subject Matter Experts (SME) need to be identified and included in the project team or working groups.

A. Commercial off-the-shelf system implementation

1. Have the vendor set up a Test System within an environment that mirrors the planned live set up and arrange training for the various project team members.
2. Prepare master file data for importation and set up user security profiles.
3. Decide on what historical data is to be migrated and prepare and then execute a Data Migration Plan.
4. Prepare test scripts for all the functional areas and ensure all existing procedures are tested following 'a day in the life' of the organisation and then monthly and year end procedures, if any.
5. Carry out UAT based on the test scripts and recording all testing done and logging any issues arising. All testing to include the running of reports and printing of all required forms in all formats.
6. Produce Training Manuals and a Training Plan noting that training should be done as close to cut over date as possible and re-training may be required immediately after go live. Where possible produce training videos which can be freely distributed to assist staff to become proficient in the system. The manuals should be written progressively as the system is delivered, tested and accepted.

B Custom or Bespoke Systems

1. Under this scenario there is a greater emphasis on the vendor delivering the requirements in small increments which can be tested as the project proceeds (agile process) and leaving nothing to chance when writing specifications.
2. Be very very clear on the scope of the project and keep changes to a minimum or plan to have a number of phases to be completed after the core or initial phase has been implemented and is working as specified.
3. The specifications should include details of every data field:

- a) Field Name or Label
- b) Field size
- c) Field type (Alpha, numeric, Boolean, checkbox, date, time etc)
- d) Format (ddmmyy, hh:mm:ss etc)
- e) Optional or Mandatory
- f) Drop down entry options

4. Build a friendly but professional relationship with your vendors and always record in writing any issues and have a formal process to accept changes including delivery and cost.

5. Ensure testing is carried out as soon as possible after delivery recording the results of the tests and providing prompt feedback to the vendor.

Appendix 1 – Request for Proposal

Executive Overview

Part 1 – RFP Overview and Schedule

System Objective

Desired Outcomes

RFP Overview

Proposed Project Timeline

Evaluation Process

Rejection of Responses

Part 2 – Organisation Overview

Organisation Core Values

Mission

Corporate Strategy

Legal Entity

Divisional Structure & Operating Sites

Division 1

Division 2

Division 3

Support Services

Current Systems and Infrastructure

Network Infrastructure

Server Infrastructure

Internal Resources

Requirements

General System Requirements

Specific Requirements

Quality, Risk and Compliance

Interface 1

Interface 2

Data Migration

Examples of outputs required

Part 4 – Detailed Response Requirements

Vendor Response Format

Appendix 1 (cont)

Response Content

Vendor Specific Information

Solution Description(s)

System Requirements

Technical Interfaces

Security

Response Times

Pricing

Implementation Timetable

Resources

Conflicts of interest

Evaluation Process

Selection Criteria

Lodgement of Response and Delivery Method

Appendix 2 – Project Initiation Document (PID)

Project Initiation Document

Objective and Goals

Scope

Deliverables

Approach

Constraints/Assumptions

Related Initiatives

Project Team

Workgroups – Client Portal Client, Parent & Friends

Costs

Project Governance

Timelines

Monitoring and Control

Control Mechanisms

Issue Escalation Process

Risk Management Process

Budget Management Process

Vendor Management

Project Documentation Communications Plan

Change Control Process

Data Management Plan

Quality Plan

Appendix 1: Requirements for Phase 1 Prioritised

Appendix 2: Project Communication Plan

Appendix 3 - Project Structure



