



PROJECT **PERFECT**
Pty Ltd

Solution Options User Guide

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Version 1.0
1 Feb 09

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Document Origin

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Change History

Version	Date	Changes
1.0	1 Feb 09	Initial Version

Overview

Purpose of solution options

The purpose of looking at various solution options for a project is to identify a number of ways in which a business problem might be solved. Each of these options should have some advantages as well as disadvantages. It then becomes a matter of selecting the most suitable option, or even a combination of two or more options.

Scope of use

The solutions options process is designed to be flexible enough to cover all forms of solutions options ranging from applications, to infrastructure, to package selection, to any other form of technology consideration.

Input to cost calculations

The solutions options are input to the development of pricing by the supplier, at the various stages or the iteration process.. Solution options are developed as a response to the business requirements. If several options are under consideration, each option should be costed by the supplier.

Purpose of this document

The document covers what information to include in the
Solution Option Sheet
Solution Option Summary.

Solutions Option Sheet

Overview The Solutions Options Sheet is a document completed for each solution under investigation. It provides a summary of the fit of that particular solution to the requirements.

Option Name & Description A brief description of the solution. The intention is to enable it to be differentiated from other options rather than provide a definitive description. In the proposal, the solution should be fully documented.

Example:
Option Name & Description Name: Build New Account Transfer Function
Description: This option entails building the system and interfacing to system XYZ. As there are similarities between this system and ABC, there may be some reuse of components from system ABC.

Criteria Prior to completing this section, the team needs to agree the criteria that will be used for the selection process. This will include three category of criteria:

Category	Description
Mandatory	Mandatory refers to criteria that are essential for the solution to be considered. If the solution cannot meet mandatory criteria, it should not be considered. Failure to meet mandatory criteria can be a 'Show Stopper'.
Optional	Optional criteria are those that, while not absolutely essential, would have an impact on the ability of the solution to fully meet the business need.
Desirable	Desirable are criteria that fall into the 'nice to have' category. If they are not met, the solution will still adequately meet business needs.

Example:
Criteria The following is a sample of mandatory criteria. A similar table should be used for non mandatory criteria:

Criteria	Meets/Not Meets Criteria	Comments
Must have support in Australia	Yes	Support team of 6 in Sydney.
Can process multicurrency	Yes	Claim by supplier however this has not been validated

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Solutions Option Sheet, Continued

Example: Criteria (continued)

Criteria	Meets/Not Meets Criteria	Comments
Add change and delete customers	Yes	

**Criteria
Comments**

Add any comments that are needed to clarify how well the criteria were met. The intention is to only add comments if the other information regarding the criteria paints an incomplete or misleading picture. It is also an opportunity to make comment on any risks. For example particular technology may give significant advantages however it may be cutting edge and have significant risks associated.

Show Stoppers

If the solution has any failings that eliminate, or severely challenge the suitability they need to be mentioned here.

**Example: Show
Stopper**

This option was eliminated due to the lack of support for an Oracle database. As we are moving towards a rationalization of all databases to Oracle in this area, we would not consider a package that could not support Oracle.

**Other General
Comments**

Note any comments that are relevant but are not included elsewhere. If there are any other risks relating to the option worth mentioning, they should be included here.

**Example:
Other General
Comments**

Whilst the option to build rather than buy will enable us to better meet the business needs, there is an issue of gaining access to the appropriate business users. From past experience we know these people are extremely busy and it is difficult to gain their attention.

Solution Options Summary

Overview This document takes the information in each Solution Options Sheet and draws the information together so that a comparison can be made.

Solutions Considered Provide enough information to differentiate the solutions. It is not intended to be a full description of each option. Focus on the differences. This can be a cut and paste from the Solution Options Sheets.

Commonality What are the things that all the solutions had in common? The intention of this section is to create a record of where they all met a requirement and consequently that requirement did not become a consideration as to which was the most appropriate.

Example: Commonality The following were areas where all packages met our needs adequately. The differences were marginal and not of a nature that would cause us to select one option over another:

Criteria	Commonality
Cost	All solutions were within 10% of one another
Functionality	All mandatory criteria met. Desirable criteria met to a level of 90%
Vendor Support	No issues with any of the packages
Contractual Issues	Contracts were examined and met requirements
Time to implement	All have similar implementation times

Differentiators What are the main things that differentiated the solutions? The purpose of this section is to draw attention to the criteria where there was a noticeable difference between options. It is not to focus on where they all passed. It might include information not covered in the Solution Options Sheets. For example, options will have been costed based on the details in the Sheets.

Example: Differentiators The following were the main differentiators:

- Implementation Issues
 - Skills available
 - Compliance with architecture
-

Options Eliminated Were there any options immediately eliminated for failing to meet a critical requirement? Explain why the option was eliminated. This may relate to the 'Show Stopper' section on the individual sheet. It is important, for reasons of traceability, that if an option was eliminated, it is clearly stated why.

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Solution Options Summary, Continued

**Example:
Options
Eliminated**

The option “Online survey – JSP” was eliminated as our enterprise architecture is moving us towards a consolidation of all scripts being VB Script rather than JSP.

**Solutions
Evaluated**

This section focuses on the remaining options. If an option has been eliminated do not include in the table. Importance is expressed as a number 1 to 10. In order to provide a finer level for comparison, we break the Mandatory, Optional, Desirable segments down to a lower level.

If the differentiator was a mandatory requirement it would rate a 10.
If it was optional, rate 5 to 9.
If it was desirable, rate 1 to 4.

**Components of
the evaluation**

- The Differentiators are those identified in the differentiator section above
- The Importance is how important the Differentiator is to the decision. Rate 1 to 10 where:
 - 1 is insignificant
 - 10 is critical
- Rate each of the Options in relation to the “Worst Option”. Rate as
 - Major Advantage
 - Significant Advantage
 - Minor Advantage

Take into account benefit versus risk when rating. For example, if rating cost, you might have a low cost hardware solution. If there is a risk that the hardware might not be as reliable as another option, it may be rated as a “Minor Advantage”, or an equal “Worst Option”

**Example:
Solutions
Evaluated**

The following is an example of a table where the remaining solutions are rated.

Differentiator	Importance	Option 1	Option 2	Option 3
Cost	7	Major Advantage	Significant Advantage	Worst Option
Hardware Required	5	Worst Option	Worst Option	Significant Advantage
Time to develop	10	Worst Option	Minor Advantage	Minor Advantage

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Solution Options Summary, Continued

Recommendation Normally there is one recommendation. If there are more than one options being recommended, repeat the two sections as Second Option Recommended and Reasons for the Second Recommendation. Also include any negatives, and why that did not tip the balance in favour of another option.

Example:
Option
Recommended

Option Recommended: The recommended option is to build the application rather than purchase.

Reason for the Recommendation: The following are the key reasons for our recommendation:

The cost is significantly lower than to purchase

Functionality is a better fit if we build ourselves

All other options require significant investment in infrastructure

The only drawback to this recommendation is the lead time to implement.

Given all the positives however, we believe this is the best option to pursue

Solution Options Checklist

Overview

The following are some of the possible differentiators that could be used when comparing solutions. The list was originally taken from a checklist of software package selection criteria so has a bias in that area. Most of the criteria however do apply to build or buy.

Whilst the list is extensive, it is unlikely there will be a significant number of criteria that will be required to differentiate the packages.

Vendor Criteria

- Financial Viability
 - Installations
 - 24hr Help Facility
 - Support Staff in this State
 - Product Range
 - Staff available to assist with implementation
-

Product Criteria

- Modules Available
 - Fully Australianised
 - Time since first release (stability)
 - Integration with other packages
 - Frequency of planned releases/versions:
 - Number of Australian customers using the software package:
 - Number of Australian installations using software package (i.e., differentiate multiple copies at a Customer):
 - Number of new Australian customers using the software package in the last two years:
 - Number of worldwide installations (copies)
 - Specific runtime hardware supported (list minimum and maximum hardware requirements as well as optional devices supported)
 - Specific runtime Operating System software supported (including versions and restrictions on versions):
 - List all other software required to run the software package:
 - Current Operating System release/version supported:
 - Number of separate programs in the software package:
 - Language software package developed in:
 - Is a mixture of languages used to develop the software package?
 - What data management software is used and/or supported by the software package?
 - What transaction processing monitor software is used and/or supported by the software package?
 -
-

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Solution Options Checklist, Continued

**Produce
Criteria
(continued)**

- Is there a User's Group:
 - Local?
 - Worldwide?
 - Source code distributed with the software package?
 - Willingness to place source code of software package in escrow?
 - Willingness to perform performance and functionality benchmarks?
 - Changes in our current work practices are required to implement the software package:
 - Does the software package require a Computer Operator (eg, backups, start up, shut down, disaster recovery, hardware preventative maintenance, etc), what skill level and for how long?
-

**Technology
Criteria**

- PC/Mid-Range/Mainframe
 - Client/Server
 - Open systems
 - GUI front end
 - System interfaces
 - Databases
 - Development Language
 - Operating Environment
-

**Facilities
Management
Criteria**

- Outsourcing
 - Infrastructure
 - Supply software
 - Supply hardware
 - Supply system software
 - Supply Database software
 - Supply data communications hardware and system software
 - Customisation
 - Installation consulting
 - Implementation
 - Software maintenance
 - Hardware maintenance
-

**Functionality
Criteria**

- Able to provide Function 1
 - Able to provide Function 2
-

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Solution Options Checklist, Continued

- Documentation Criteria**
- On line contact sensitive help
 - Facility to modify on line
 - Program documentation
 - Installation documentation
-

- Training Criteria**
- Provide classroom training
 - Hold monthly training programs
 - Provide training materials
 - Run “train the trainer” courses
-

- Pricing**
- Initial Licence Fee for base plus each individual feature:
 - Annual Licence Fee for base plus each individual feature (if any):
 - Fee scales for varying number's of users:
 - Fee scales for varying runtime hardware models and sizes:
 - Expiry date of fee quotation:
 - Software Maintenance Fee for base plus each individual feature
 - Software Maintenance Fee as a percentage of the Initial Licence Fee:
 - Source Code Licence Fee:
 - Development Tools Licence Fee:
 - Description and quantity of what is included in the Initial Licence Fee:
 - Software Maintenance Fee:
 - Telephone Hot Line Technical Support
 - Onsite Technical Support
 - New releases/versions
 - Training in new releases/versions
 - Documentation for new releases/versions
 - Problem repairs/bug fixes
 - New features - general
 - New features - site specific
 - Other
 - Upgrade to the next release:
 - Initial Installation Fee:
 - Initial Training Fee:
 - Technical Support and Development staff ad hoc fee rates:
 - Escalation period and rate for Technical Support and Development staff ad hoc fee rates:
 - Cost per person per day of course training:
 - Other elective/optional/desirable costs associated with acquiring the software package:
-

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Solution Options Checklist, Continued

Pricing (continued)

- Other duties, taxes, installation and commissioning, freight and handling costs:
 - Minimum Software Maintenance period:
 - Multi-site and/or multi-CPU licensing fee rules:
 - Multi-site and/or multi-CPU Software Maintenance Fee rules:
 - Multiple companies on a single CPU licensing rules:
 - Licence Agreement and/or fee required to migrate to another hardware configuration (either from the same or different hardware vendor)?
 - Rental or lease available for the software package:
 - Cost of developing and/or running special training courses:
 - Willingness to trade-in, buy back or offer a discount on existing hardware, system software and Application Software and at what price and under what conditions:
 - Prices are subject to foreign exchange rate fluctuations:
 - Estimated annual usage and price of each consumable and media:
Price for an additional copy of each reference manual:
-

Installation and Implementation

- Typical time required to initially install the software package:
 - Typical time required to perform static file takeup:
 - Typical time required to perform dynamic file (eg, balances) takeup:
 - Recommended time for parallel running:
 - Recommended time between date of order, date of initial installation and date of going live:
 - Typical time and manpower required to install and migrate to a new release/version:
 - Are there automated installation and migration tools:
 - What limits are there on the quantity, type and location of initial installation Technical Support:
 - What modules of the software package must be implemented:
 - What modules of the software package can be optionally implemented:
 - Can modules of the software package be implemented progressively?
 - Recommended staff resources we need to make available to implement the software package:
 - Role
 - Quantity
 - Duration
 - Tools available to convert or migrate existing data files:
 - Standard acceptance test suite and/or demonstration delivered with the software package?
 - Delivery lead times for all products:
-

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Solution Options Checklist, Continued

Technical Support

- Locations where Technical Support is available:
- Number of full time, permanent Technical Support staff in Australia in each location:
- Number of part time and non-permanent Technical Support staff in Australia in each location:
- Support hot line or telephone service available?
- Does the vendor have the infrastructure required (i.e., lines, people, modems, software, security guarantees, etc) to dial into our computer to provide Software Product support?
- Separate telephone number available for those customers who have entered into a Software Maintenance Agreement?
- Is on-site service available?
- Additional cost for on-site service:
- Restrictions on hot line service:
- Hours
- Who can call
- Number of calls per period
- Other
- Superseded versions supported:
- Under what circumstances are new releases/versions not provided free of charge if a Software Maintenance Agreement is entered into?
- Customer-modified versions supported?
- Emergency releases/versions distributed to repair urgent problems?
- Access to source code onsite?
- Problem escalation procedures within the vendor's organisation:
- Experience of Technical Support staff (full time, part time, permanent and non-permanent):
- Number of years working in IT:
- Number of years working with the vendor:
- Number of years working in our industry:
- Number of years working with the software package:
- Other relevant experience:
- Vendor prepared to modify the software package to suit our requirements?
- Who owns the modified source code?
- Is the modified source code available to other users (how?)?
- Supply copy of vendor's Modification Request and/or Bug Notification Form?
- Level and number of our staff (and time) required to maintain software package to:
- Support end users:
- Apply bug fixes:

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Solution Options Checklist, Continued

Technical Support (continued)

- Install new release/version:
 - Vendor guarantee to continue support of the software package in Australia:
Guaranteed response time to calls
-

Contracts and Agreements

- Willingness to negotiate changes to Contracts and Agreements in general
 - Payment terms for all fees:
 - Warranty period:
 - Proposed duration of each Agreement:
 - Performance guarantees the vendor offers and on what basis
 - Willingness to being prime contractor for hardware, software package and specialised development and at what additional cost (if any)?
 - Willingness to indemnify us from breach of copyright from third party
 - Willingness to allow a third party organisation to perform customisation work to our specifications
 - Willingness to allow a third party organisation to perform on-going maintenance and support
-

General Features Criteria

- Software package provides online, context sensitive help
 - Flexible report writer which operates for each Application System (eg, GL, DR, CR, Payroll, Personnel, etc)
 - Same Report Writer or a different one for each Application System
 - Flexible Query Language (and is it SQL compatible?)
 - Reports can be directed to either the user's screen OR to the user's local (or specifically nominated) printer OR to the main system printer at the user's option?
 - Software package Australianised?
 - Spelling
 - Date Formats
 - Business Terms
 - Payroll Tax
 - PAYE Tax
 - Sales Tax
 - Capital Gains Tax
 - Fringe Benefits Tax
 - Addresses (Postcode, States)
 - Statutory Reporting
 - Software package provide a single system image look and feel:
 - Screen layout
-

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Solution Options Checklist, Continued

**General
Features
Criteria**
(continued)

- Keyboard usage
- Message formats
- Software package support the importation and export of documents via Electronic Data Interchange (EDI)? If so, which standards are supported
- What areas of the software package are extensible by the Installation
- What areas of the software package are parameterised:
- Automatic computer-to-computer interfaces to our existing Application Systems:
- Software package hardware and system software:
- Independent
- Portable
- Security features
- Backup features
- Recovery features
- Audit Trail features
- Internal integrity and consistency checking features
- Software package based on an active Data Dictionary:
- Graphical output features
- Industry standards does the software package conform to (eg, UNIX, PICK, MS-DOS, EDI):
- Vendor-specific standards does the software package conform to (eg, IBM SAA):
- Can the software package operate on multiple concurrent sets of data for:
- Acceptance Testing New Releases/Versions;
- General Testing Of New Ideas;
- Training;
- Live Production.
- Software package has portable security (by user from one terminal to another):
- Software package allows overnight posting of transactions
- Software package allows on-line posting of transactions
- Reports can be output to microfiche for archiving:
- Software package provides a full printed audit trail on all master file updates (both before and after image of record):
- Add/Change/Delete/Enquire/Print transaction security on all software package functions:
- Security by Add/Change/Delete/Enquire/Print transaction type access to Organisation Unit data:
- Software package easily useable by novice people (eg, Accountants) and not just by data entry Operators:

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Solution Options Checklist, Continued

General Features Criteria (continued)

- Software package record who entered all transactions and when:
 - All system-generated journal entries have system-generated journal numbers:
 - Master files have "user defined fields":
 - Transaction files have "user defined fields":
 - All accounting transactions have a sense of "natural sign":
 - Flexible data entry screen formats for all transactions (i.e., are they installation definable):
 - Software package have provision to print an alignment mask on all reports which use special stationery:
 - Flexible, user controlled menu processor:
 - Group users by classification
 - Group users by location
 - Menu selection screens tailorable
 - Ability to add own functions
 - Only display those functions the user is authorised to select
 - Reports DO NOT print if any file being accessed is in use (locked) by another user:
 - All rejected transactions go to a suspense account:
 - The software package performs automatic foreign currency conversions:
 - Dump the contents of all screens to a printer:
 - Software package allow for printing of a report to be restarted at a nominated page/item in the case of paper jams:
 - What needs to be acquired and installed and at what cost to allow Personal Computers to be used as computer terminals:
 - Software package provide an "Abort Report" command on all reports (eg, pressing <ESC> during the production of the report):
- Software package support enquiry scrolling both forward and backward?
-

Application System Specific Criteria

- Tools does the vendor have available to assist in performing testing
 - Able to continue to use these tools after the Development Project is complete (and on what basis):
 - How will Quality Assurance be performed on the Application System:
 - One person with final responsibility for the Development Project:
 - How will the vendor handle the situation where the vendor develops the Application System and then we modify it, and a bug is then found during the warranty period:
 - Responsibility determination:
 - Charging policy:
-

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Solution Options Checklist, Continued

**Application
Specific
Criteria**
(continued)

- Systems Software infrastructure the vendor requires us to supply (ie, text editor, source code manager, etc) over and above the standard Operating System and compiler
 - Vendor prepared to have our staff work in its Project Team so we can perform ongoing maintenance of the Application System
 - Vendor will meet our project schedule
 - Vendor prepared to develop the Application System on a Fixed Price basis
 - Vendor prepared to develop the Application System on a Time And Materials basis
 - Vendor prepared to develop the Application System on a rolling Fixed Price for the next stage of the development and Time And Materials for all subsequent stages basis
 - Quantify that time which vendor staff will not be available to work on our Development Project (eg, for internal vendor's meetings, other Customer's project work, full-time/part-time)
 - Subcontractors the vendor intends using
 - Skills available within the organisation
 - Skills available in the market
-