

Guide to Business Software Solutions



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An informative guide by red erb pty ltd

*"It is through constant change,
that we can achieve perfection."*

Guide to Business Software Solutions

About this Guide

This guide is intended to inform and educate readers about business software solutions available.

It is not intended to recommend particular packaged products or solutions, but merely assist the reader in reviewing business solutions and highlight some considerations that may be important.

The guide also introduces the Red Erb Custom Software Development Solution, that provides an alternative software solution to traditional methods. More information on this technique can be found in the document "Red Erb Custom Software Development Overview" at <http://www.rederb.com/documentation.html>

It is important to note that this guide only focuses on the software component of business solutions. Although software plays an integral role, there are many other vital factors required for a successful implementation.

No software solution is ideal for every business. Each business has different requirements and processes and each must determine the software solution that is suitable for them.

This guide attempts to provide a neutral analysis of the business software solutions available and does not take any responsibility for decisions that your business may make.

If you have any comments or feedback on this guide, then please feel free to contact us via our web site.

We hope you find this guide useful, and that it helps you determine the best software solution for your business.

Before You Start

The process of selecting the right software solution for your business is long and involved.

Generally, the process starts because you have identified a current business problem that needs to be resolved, or you are trying to improve the efficiency, or decrease the costs of a business process. This will be your underlying driver, or your primary reason, for considering a new software solution. However, it should not be the only one.

Before reacting too hastily, you should perform further analysis of your business and your requirements to identify additional drivers and reasons.

You may be very surprised how many other problems or inefficiencies you identify.

This may take several months and may involve speaking to various people in your business or department.

Each of these requirements should then be prioritised so that you can determine exactly the minimum you require from a software solution but also the preferred and even the ideal requirements.

In addition to prioritising, some thought and analysis should be allocated to determine how much savings or benefits each of the requirements will provide. This will enable you to measure the effectiveness of a chosen solution by calculating a return on investment.

Furthermore, there are some other technical considerations that may also highlight some of your software requirements. Some examples are provided towards the end of this guide.

Good luck!

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Types of Software Solutions

There are four general software solutions available to businesses today. Red Erb now offers a fifth alternative that will be discussed later.

The **first** is to purchase an "off the shelf" or a packaged solution, such as Microsoft Office, or MYOB.

This option is the cheapest of the four, but can also be the most inflexible. It is unlikely that it will solve all of your business needs or requirements.

Packaged software is designed to meet the general needs and requirements of businesses so that it can maximise potential sales.

As a result, it may include unnecessary features and even increase your costs because it does not behave in a manner suitable for your requirements. It can cause additional manual processing or work arounds to adopt the software into your business.

Although the price tag generally makes this solution very attractive, altering your business to suit a generalised software solution can be extremely limiting and crippling, preventing a business from achieving its true potential.

The **second** option, is to purchase a packaged solution, but also invest in further customisations to the product to improve the alignment of the software with your business processes.

Although this is the next cheapest alternative, it can be a significant price increase as it will require dedicated resources from the solution provider to perform additional design, development and testing of the alterations.

Careful consideration should be given to determine the true benefits achieved by the software customisation compared with other limitations and pitfalls that the solution may contain. There are two main issues with the customised packaged solution.

Firstly, as the only customer using the customised package, you may encounter problems or bugs that other customers will not. This can lead to differing priorities between your business and when the software provider will deliver a fix.

For example, if they have two thousand customers running the standard product, and only your business running a customised version, how quickly will they respond to problems only you encounter?

The second problem is the overhead and on-going costs that must be incurred after the solution is implemented. Generally this will result in higher support and maintenance fees due to the customisations.

When a software vendor releases a new version of the product (for example with additional functionality or bug fixes), they must integrate the changes with your customisations solely for your benefit.

This is quite a costly and complex task as the software must be altered, tested and maintained separately to other versions.

The **third** alternative is to develop a complete custom solution aimed to meet the specific needs and requirements of your business.

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This would generally be performed by a software development company or consultancy firm. Traditionally this has been the most expensive of the solutions as it requires the most time and is highly resource intensive.

The first step in delivering custom developed software is correctly identifying your business needs and requirements.

Following this, the solution will be designed to meet these requirements and subsequently developed and tested to ensure it is successful.

Each of these stages requires multiple trained and skilled resources, increasing the cost to your business.

Furthermore, as it is a time-intensive process, it can result in the solution requirements being old and out of date by the time of implementation.

The major advantage of this alternative, is that every aspect of the solution can be tailored to your specific need and desire.

The *fourth* alternative has been the introduction of extremely large and complicated solutions which are designed to offer enough flexibility for any business to customise as required.

These solutions will be referred to as enterprise packages, such as SAP and PeopleSoft.

They can be thought of as a grouping of several packaged solutions with many configurable and customisable features. They attempt to provide an all-in-one solution for every business. Despite this, they still face similar disadvantages.

They are so large and complex that they can be an overly excessive attempt to meet your requirements. Often, many of the features and functionality they offer will not be utilised by your business.

Additionally, as they are such specific solutions they require a lot of customisation and configuration to reflect your business requirements. This can take several consultants, several months.

Due to the specialised nature of this solution, consultants and support are very expensive, but the complexities of the product mean it is virtually impossible to survive without their expertise.

As a result, this alternative can be as expensive as a custom solution, but should – emphasis on should – be delivered in a quicker time frame.

A further consideration for customised packaged solutions, custom developed solutions, and enterprise packaged solutions, is that due to the nature of changing business requirements and the complications that inherently exist within technology, it is not uncommon for the delivery of these solutions to run over time and over budget.

There is *another* solution alternative that has recently been made available by the innovation of Red Erb Pty Ltd. This solution is discussed briefly in the next section. For a detailed overview, please refer to the document “Red Erb Custom Software Development Overview” at <http://www.rederb.com/documentation.html>

A comparisons of these four alternatives has been summarised into a table (see Table 1: Comparison of Business Software Solutions) at the end of this guide.

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Red Erb Custom Software Development

Over the last five years, Red Erb Pty Ltd has been engineering a new alternative for software solutions that addresses the disadvantages previously identified.

This approach is designed to provide businesses with rapid delivery of customised software solutions, whilst maintaining maximum flexibility and control for future requirements.

This alternative eliminates the three major disadvantages of traditional custom software development – resource intensiveness, time, and cost.

This is achieved through automating the process of software development and testing.

This enables a single computer to develop and test the solution in a few hours when traditionally it would have taken several people, several months.

It allows changes to your solution to be implemented quickly and effectively, enabling your business to respond to market conditions if the need arises.

For more information, refer to the “Red Erb Custom Software Development Overview” at <http://www.rederb.com/documentation.html>

Additional Software Considerations

In addition to the type of software solution selected, there are further considerations that are important in the decision making process.

These considerations are generally forgotten as they are not high priority business requirements.

The primary focus of selecting a business solution is ensuring that business requirements are met and that the solution is cost effective, or represents an acceptable return on investment.

Some of these considerations may not be applicable to your software solution needs, however are listed for your convenience in a table at the end of this guide (see Table 2: Summary of Additional Software Considerations).

As you analyse each potential solution, take time to ensure the relevance of these considerations as they may impact your decision.

The Red Erb Custom Software Development Solution has been designed with these considerations in mind, allowing businesses to focus on the most important thing – doing business.

By taking responsibility for these technical considerations, the Red Erb Custom Software Development helps ensure the overall success of a solution even when your requirements change over time.

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Table I: Comparison of Business Software Solutions

<i>Solution Alternative</i>	<i>Advantages</i>	<i>Disadvantages</i>
Packaged Solution	Cheapest of the solutions	Limited to what packaged solutions are available, if any, for the business requirements identified
	Quickest of the solutions	Restricted by packaged solution limitations and software requirements
		May have to alter business processes or operational procedures to overcome the limitations of the solution
Packaged Solution with Customisation	Second cheapest of the solutions	Can still take several months, depending on customisation requirements
	Second quickest of the solutions	Despite customisation, may not meet all business requirements
		Support overheads and ongoing costs
Custom Developed	Tailored specifically to your business needs and requirements	Due to the time taken, business requirements can change, and make the custom solution obsolete
	Flexibility and control over solution	Runs the risk of project delays / overruns
		Most time and resource intensive of the solutions
		Expensive
Enterprise Package	Quicker than custom development	Large and complex
		Consultants and support are expensive and unavoidable
		Installation and configuration required and can take several consultants, several months
		Despite flexibility and customisation, still not tailored exactly to business

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Table 2: Summary of Additional Software Considerations

<i>Consideration</i>	<i>Description / Examples</i>
System Requirements	What kind of operating system, hardware and other software is required by the solution
Security	What kind of security is available in the solution, or is required. How sensitive is data, how will it be accessed
Concurrency	How many users can use the solution at any one time? Does the solution access real-time and current data?
End Users	Who will use the solution and how? Will they need remote/offline capabilities? What kind of user interface are they skilled with?
Accessibility	How will the solution be used? Will it involve hand held devices, or voice technology, or the internet?
Location	Where will users of the solution be based? In one office, in different capital cities or different countries?
Existing Technology	How does the solution suit the existing investment you have in information technology? What support and licensing fees are you already paying?
Performance	How will the solution perform after several months or years of data? How will it perform with more users?
Automation	What level of automation does the solution provide? Does it leverage the power of computing and minimise manual intervention where possible?
Scalability	How can the solution grow once it has a significant increase in data or the number of concurrent users?
Flexibility	How can the solution adapt if business requirements and processes change?
Return on Investment	What benefits and savings does the solutions really deliver? And how long will it take to break even?
Future	How will each of these considerations change in a year or five years time? What will the life span of the solution be?
International Languages	Will the solution be used in different languages and different countries?
Interoperability	What other software is in use within the business? What software will users be switching between to do their job?
Integration	What other systems will the solution need to integrate with? Do you require certain import and export file types?
Documentation	What level of documentation and help is provided with the solution? What level is required for the business and by users? Will training be required?
Emerging Technology	What new standards and technology is emerging that may be useful for the solution now or in the future?
Operations	What kind of effort is required to ensure that the solution stays operational and available?
Support	What kind of support is available and how responsive and effective is it if problems are encountered?