

How To Select Your New Computer System

You are considering a new IT system but are unsure how to select an off-the-shelf package. These techniques enhance your normal procurement process and deliver a markedly better result. Drawing on years of experience, Martin Tate shows the way to find a product suitable for your organisation's needs.

In many business areas, organisations rarely develop their own 'tailor-made' systems. Packages dominate. By spreading development costs over many customers, they can offer quick and affordable installations of capable systems.

There are thousands of packages, with different feature sets and costs. Some are so sophisticated it would take years for an organisation to grow into them. This sophistication and breadth of choice can be a problem in itself. Organisations may assume selecting and implementing packages is quick, easy, cheap and low-risk. It is none of these things. Sadly, the benefits of a package often prove hypothetical. The ugly reality is that some organisations make a business-critical, but ill informed, decision and later face significant after-contract costs to 'upgrade' an unsuitable system.

A proven method to select your package

This method – proven on many projects totalling millions of pounds invested over the last 20 years – reduces risk, saves time, saves money and protects you from unscrupulous IT suppliers. It delivers a *rational, defensible* decision in a *predictable* timescale.

The golden rule is to avoid comparing packages to each other. Compare them all to the same yardstick – your business need or requirements. Define these before appraising packages.

The approach is top-down. The progressive short-listing means the team examines fewer packages in more detail. (A bit like staff recruitment, with candidate profile, sift of CVs, then first and second interviews.)

Project management & sponsorship

It is important business managers, not the IT department, control the project. Select a project sponsor and a project board (PB).

The best project sponsor is someone whose career benefits from a successful installation, and who has executive authority over other members on the PB. If necessary for seniority, enlist the Chief Executive. Note this method keeps in check the sponsor's time commitment.

Capturing business requirements

Major points to consider when capturing and documenting requirements are as follows.

- Inspect existing documents, such as strategy papers, previous statements of need (maybe memos or minutes), plus paper forms, computer screens and printouts.
- Taking a 'diagonal slice' through the company's stakeholders, hold meetings using one-to-one interviews, small groups or workshops. The PB should control the list of interviewees. Consider interviewing some of your suppliers and customers – often their systems must connect to yours.
- Organise notes under functional headings, such as Management Information, Sales & Marketing or Stock Control. This clarifies, reduces political interests and aids downstream selection processes.

"It is important that business managers, not the IT department, control the project"

Package Scoring Spreadsheet – Example

Package + Supplier Evaluation				Shortlist After Responses To Requirements Document				IT Evaluation Ltd			
Categ	Requirement Title	Nbr	Wgt	Perfect	Package A			Package B			
				Max	MatchA	Fit	Xtd	Fit %	MatchB	Fit	Xtd
Customer/Supp	Customer & Supplier Details	0081	5	15	3	15	100%	2	10	67%	
Customer/Supp	Grouping Contacts	0082	3	9	2	6	67%	2	6	67%	
Customer/Supp	Hold Company Registration & VAT Numbers	0083	2	6	0	0	0%	2	4	67%	
Customer/Supp	Contract Quotations Status, Version & Re-Use	0084	1	3	0	0	0%	2	2	67%	
Customer/Supp	Secure Order Form	0085	5	15	2	10	67%	3	15	100%	
Customer/Supp	Levels of Bill of Material	0086	3	9	0	0	0%	2	6	67%	
Customer/Supp	Notice Of New & Changed Tenders	0087	4	12	2	8	67%	3	12	100%	
Customer/Supp	Customer Contribution & Profitability	0088	2	6	1	2	33%	2	4	67%	
Customer/Supp	Customer Changes Own Account Information	0089	4	12	1	4	33%	3	12	100%	
Customer/Supp Total				87		45	52%		71	82%	
Sales/Marketing	Customer Price List	0090	4	12	2	8	67%	3	12	100%	
Sales/Marketing	Telephone Scripts	0091	1	3	0	0	0%	3	3	100%	
Sales/Marketing	Reports On Main Sales Measures	0092	5	15	2	10	67%	2	10	67%	
Sales/Marketing	Cost of Campaign	0093	2	6	2	4	67%	3	6	100%	
Sales/Marketing Total				36		22	61%		31	86%	
Tech & Design	Staff-To-Service Expertise Matrix, With Controls	0094	5	15	3	15	100%	2	10	67%	
Tech & Design	Drill Down & Drill Across	0095	2	6	3	6	100%	2	4	67%	
Tech & Design	Screen Prints	0096	5	15	1	5	33%	2	10	67%	
Tech & Design	Archiving & Retrieval	0097	4	12	2	8	67%	2	8	67%	
Tech & Design	Fax From Desktop	0098	3	9	2	6	67%	2	6	67%	
Tech & Design	Contribute To ISO 9002	0099	4	12	2	8	67%	3	12	100%	
Tech & Design	Report Generator	0100	2	6	1	2	33%	2	4	67%	
Tech & Design Total				75		50	67%		54	72%	
Supplier Consid	Soundness Of Supplier	0101	4	12	3	12	100%	2	8	67%	
Supplier Consid	Reference Sites	0102	3	9	3	9	100%	1	3	33%	
Supplier Consid	Training Available from Author	0103	4	12	3	12	100%	1	4	33%	
Supplier Consid	Relationship With 3rd-Party Help Desk	0104	3	9	3	9	100%	1	3	33%	
Supplier Consid	Relevant Data Migration Experience	0105	4	12	0	0	0%	3	12	100%	
Supplier Consid	Formal Implementation Method	0106	3	9	3	9	100%	1	3	33%	
Supplier Consid Total				63		51	81%		33	52%	
Grand Total				261		168	64%		189	72%	

Figure A – Example scoring spreadsheet from a customer management system selection

- Document requirements as statements of need in *measurable* terms. “The IT supplier must be reputable” is too vague. Agree the acceptable thresholds – possibly “the IT supplier must turnover at least £1m, with at least 30 staff, 10 of them in R&D”.
- Distribute the Requirements Definition Document (RDD) for comment and approval. You must be willing to revise it to reflect responses.

The PB meets to approve the RDD by applying weights – agreed numbers to classify each requirement on a scale 0 – 5:

- ‘nice to have’ requirements have low weights;
- a ‘must have’ (or *mandatory*) one gets a high weight.

Trawl the marketplace for packages

It is important to trawl widely for package candidates – the winner can only be as good as the best on the longlist.

Use directories, databases, magazines, exhibitions, search engines, referral services and experience. Tap personal knowledge from the team, customers, suppliers and allied organisations.

From longlist to shortlist

The Request For Information (RFI) takes you from the longlist of ‘possibles’ to a shortlist of four to six packages for detailed evaluation.

The RFI is a list of testing, closed questions, extracted from requirements with the highest weights. Typically, you create a questionnaire form – listing questions, with space for the responses.

E-mail the RFI to the longlist of package suppliers and invite response. Stress answers have ‘contractual significance’. Insist on a written reply.

Marking the RFI responses determines the shortlist for detailed evaluation. Failure to meet mandatory requirements means the package is rejected. This reduces the candidate list quickly.

Supplier & package evaluation visits

Send the RDD a week in advance to those shortlisted.

Usually, your evaluation team should visit the package supplier. They have more resources at their offices, they can draw on their experts on demand and you can assess ‘supplier substance’ such as premises.

Remember the evaluation team is not there to select the winner on the spot, but to gather facts. Team members must make copious notes.

Largely, you rely on the supplier’s knowledge of their package. It is not feasible for evaluators to ‘take apart’ 3-5 major packages and reach sensible conclusions on fitness for purpose.

The defence against misrepresentation is that supplier responses will shape the evaluation team’s scores of each candidate. These scores will be an attachment to contract.

Scoring the packages

After *all* the evaluation visits, the team assess the candidate packages and express their capability as a score. This is not a *general* survey of the market, like those found in IT magazines. The objective is to pick a winner, in the context of the company’s requirements.

A tick box or yes/no approach is inadequate – with effective short-listing, many requirements will be supported in some way by most packages. Therefore, you need to compare *relative* package capabilities.

Figure A has an example scoring spreadsheet. This illustration shows two candidate systems, but there would be other columns for more packages. The list of requirements would be longer – from the RDD’s table of contents.

- You score for fit in a range 0–3. These correspond roughly with up to 25, 50, 75 and 100% fit. However, the scoring also produces specific *definitions* – a record of the capability necessary to reach each score awarded.
- Record the scores for each package on the scoring spreadsheet.

- Earlier, the PB chose weight for importance [*Wgt* on Figure A]. The evaluation team allocate the score [*Match*] for each requirement for each shortlisted package. Notice the effect of multiplying *weight* by *match*. This magnifies the gap between packages – ‘rewarding’ packages that are strong in important areas.

Live demonstrations

The PB reviews the scoring spreadsheet and normally picks two packages for demonstration. Unless there are special circumstances, it is the two highest-scoring systems.

The demonstration is an expensive meeting, and very important to the project’s reputation for a selection process with integrity. You should specify the outline of the demonstration, and send sample data (such as real product codes). This means the two demonstrations will be comparable, the audience will see realistic business situations and the demonstrations will further test package capabilities.

Collect attendee reactions on a feedback form.

“Do-it-yourself amateurism is a false economy”

Reference sites

Make it clear during early supplier contact you intend to ask for reference sites later. This is part of policing supplier answers for honesty – although it is unlikely a supplier will give out a bad reference site.

Telephone or visit to ask for views on:

- the usability of the system, especially if it seems complex to a novice;
- the quality of supplier support, especially the knowledge and responsiveness of the service desk;
- the ease of implementation, especially the effort and staff required.

Negotiation with preferred supplier

A major IT system will usually represent one of the most expensive purchases your company will make. Moreover, the impact on the company of successful negotiation goes far beyond the initial capital outlay. Prepare a Negotiation Plan, with points to agree. Analyse the scores for package weaknesses.

- Your main negotiation objective is to come to agreement. The PB has endorsed one system as the best fit.
- The second objective is to close gaps to requirements, in the next version of the standard system. These enhancements will be free and supported throughout the package lifetime.

It is *essential* to agree that attachments to contract will include the RDD, Scores, and Definitions from the selection.

Selecting outside help

IT projects involve deep, specific skills that might only be used once every five years. Do-it-yourself amateurism is a false economy. Consider outside consultants for the selection project.

Choose them carefully. Despite the sophistication of modern systems (probably because of it), the greatest single factor in success or failure is the calibre of the people involved. Do not appoint lightweights from your own organisation. Assess outsiders rigorously.

- Interview candidates. This is mini-recruitment, with candidate profile and selection. The person is more significant than their company. Beware ‘bait and switch’ – a senior winning the work, but handing over to a junior.
- Ask whether the consultancy is a reseller of systems. Or if they accept ‘referral fees’ (*aka* commission) from the eventual IT suppliers. Or if they have implementation consultancy divisions.

Summary

Package selection is increasingly important to organisations and to IT. It is more common for users and systems staff to select packages than create bespoke systems. However, a badly fitting package will damage the organisation.

- Be a sophisticated, informed purchaser, whose requirements drive the selection.
- Take advantage of suppliers’ knowledge of their product, but have checks for misunderstandings and misrepresentation.
- Use a systematic selection approach, and ‘scale’ the amount of evaluation and contracting effort to match the project risk or cost profile.

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IT Evaluation advise blue-chip boards including Bombardier, Castrol, DaimlerChrysler, LEGO, Pearson, Travelodge & Turtle Wax. They specialise in IT procurement, particularly requirements definition, package/supplier and service evaluation and contract negotiation. Martin Tate is one of the UK’s authorities on large system selections, with 20+ years’ personal experience of over 40 selection projects, 600+ user requirements interviews or workshops, 860+ systems appraised and combined budgets exceeding £10m. Contact him with queries on this article, for training course details or for an initial meeting about selecting IT consultants, suppliers, systems or services.