

 **itSMF Annual Conference** 

**Linking ICT Procurement
To IT Service Management**



Weds 12-Nov-2003

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"Ensuring clients use IT that fits."
Delivering process, impartiality, knowledge,
reliability & savings on:
- ICT management best practice;
- ICT system & value reviews;
- ICT procurement, supplier evaluation
& system selection.

Adranz | Barkland | Blackpool Hotel & Guest House Association
Bombardier | Broadways Stampings | Castrol | Corporate Credit
DaimlerChrysler | Devil's Guide | East Lancs Careers Service
ELTEC | Galloway's Society For The Blind | Gateshead MBC
Halo Retail | Kelland | Lancashire Fire & Rescue Service
Lancaster University Mgt School | LAWTEC/Business Link
LEGO | M6 Papers | Nottingham City Council
Pinacl Communication Systems | Red Box Design Group
RNIB | Royal & SunAlliance
Svenska Cellulosa Aktiebolaget | Synchronatic | Turtle Wax

 **ITSM Into Procurement** 

- Objectives
 - Typical procurement failures
 - Show robust ICT procurement process
 - Illustrate major deliverables
 - Relate to ITSM (ITIL objects)
- Sources for method & presentation
 - Heritage – Prince, LBMS, Kepner-Tregoe
 - System & supplier selection projects

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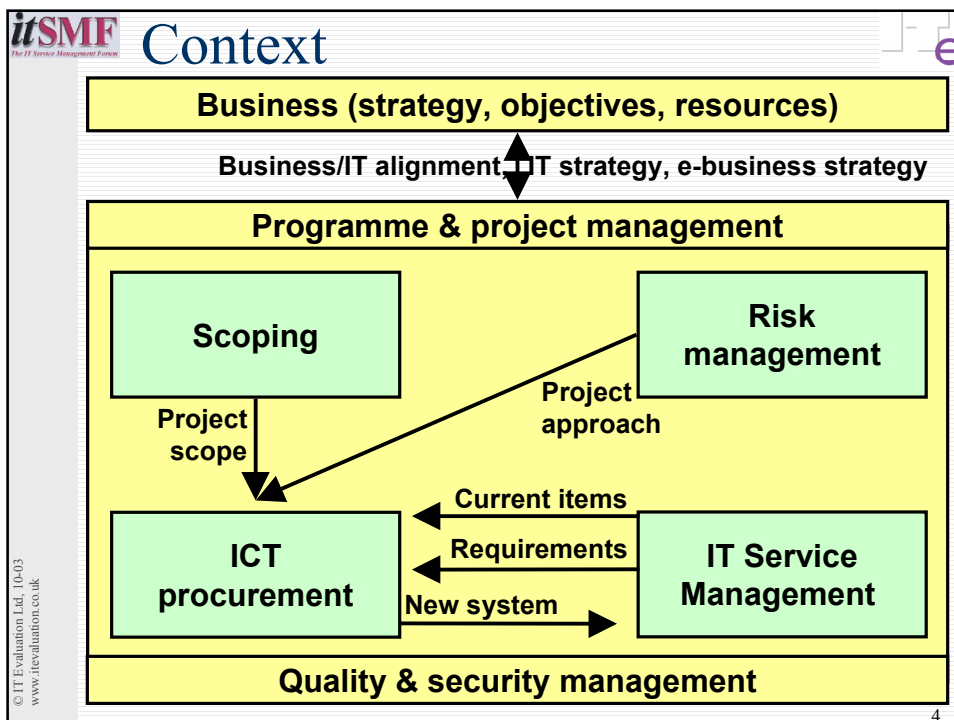
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Process strengths

- Understanding of risks
 - Avoid poor fit & ‘package’ modifications
 - Informality often loses control
 - Must compare systems to requirements
- Rigour deters unscrupulous vendors
- Strong contract as free by-product
- Two-way links exploit ITSM elements

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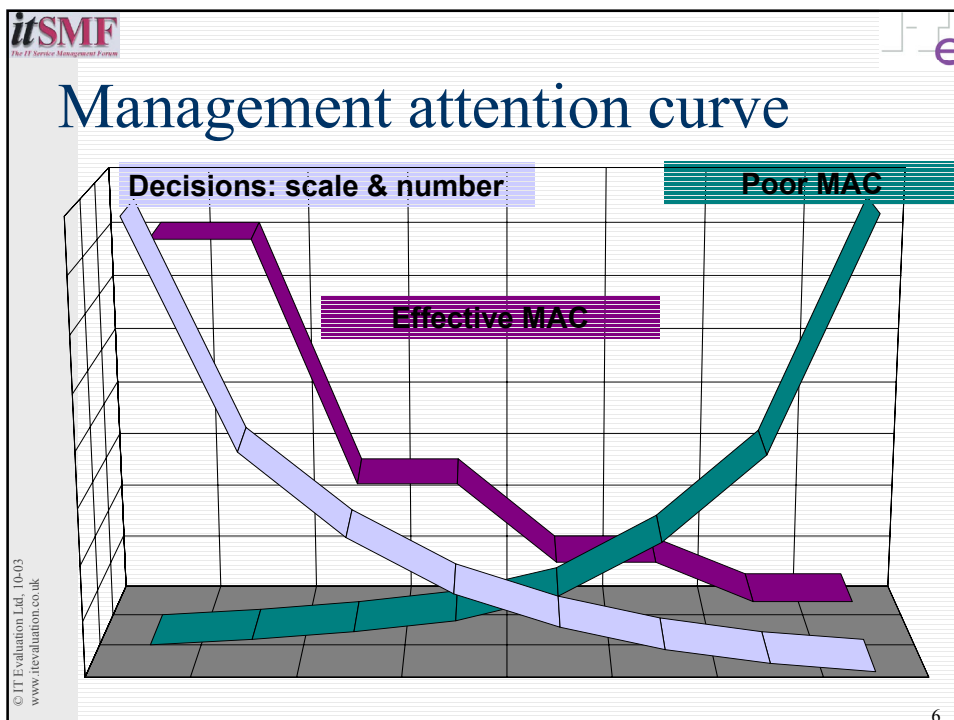
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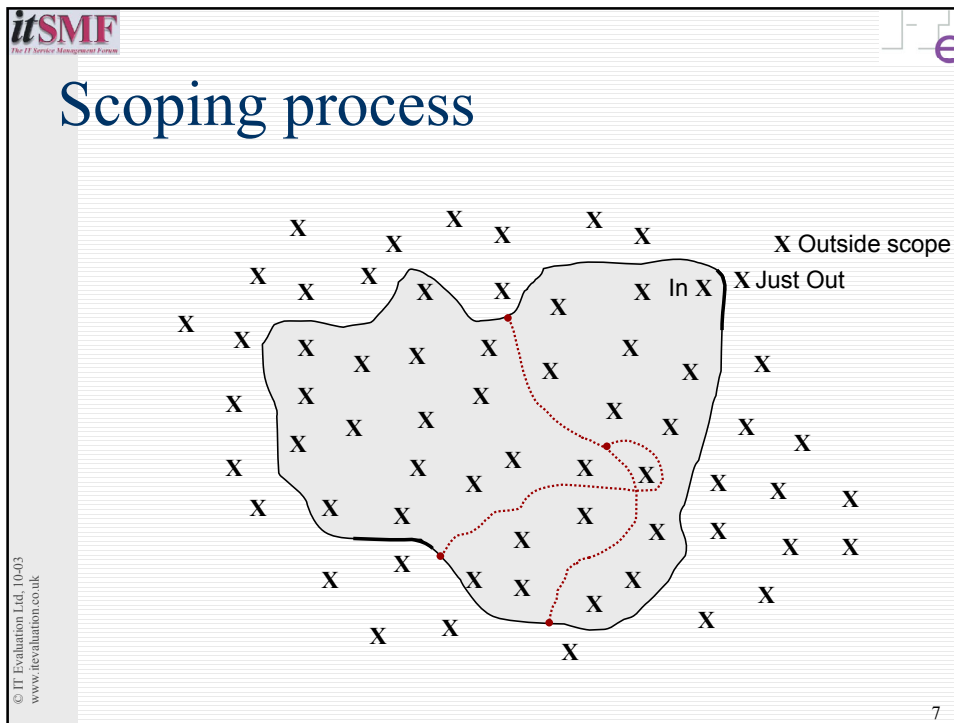
Principles

- Cost of change curve (\Rightarrow redundancy)
- Management attention curve
- Management by exception
 - Progressive shortlisting / police by exception
- Stakeholders
- Model-building to test requirements
- Rational decision-making – ‘evidence’
- Project & management effectiveness


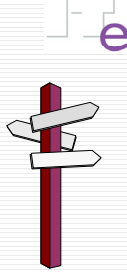
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- The slide is titled 'Procurement process – summary' and lists the following steps:
- Project start-up
 - Scope, finance, phasing
 - Interviews for requirements definition
 - Agree RDD
 - Revise Requirements Definition Document
 - Market-place trawl
 - Usually *after* requirements
 - Shortlisting
 - By Request For Information (RFI)
- The slide includes the 'itSMF' logo and 'The IT Service Management Forum' text in the top left. On the left side, there is vertical text: '© IT Evaluation Ltd, 10-03 www.itevaluation.co.uk'. In the bottom right corner, there is a signpost icon with three arrows pointing in different directions and a small number '8'.

Process – summary (B)

- Evaluation
 - Including visits by evaluation team
- Scoring of candidates
 - Possibly internal systems
- Demonstrations & reference sites
- Selection, negotiations & contract
- Installation
 - Post-implementation & benefits reviews

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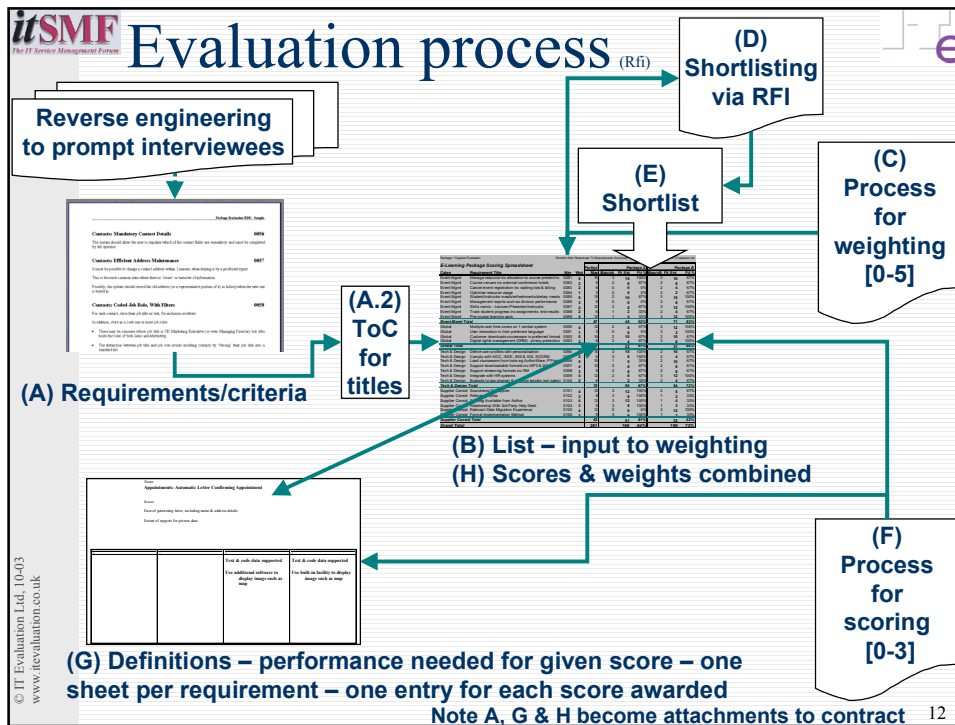
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Scoring to pick a winner (SDa)

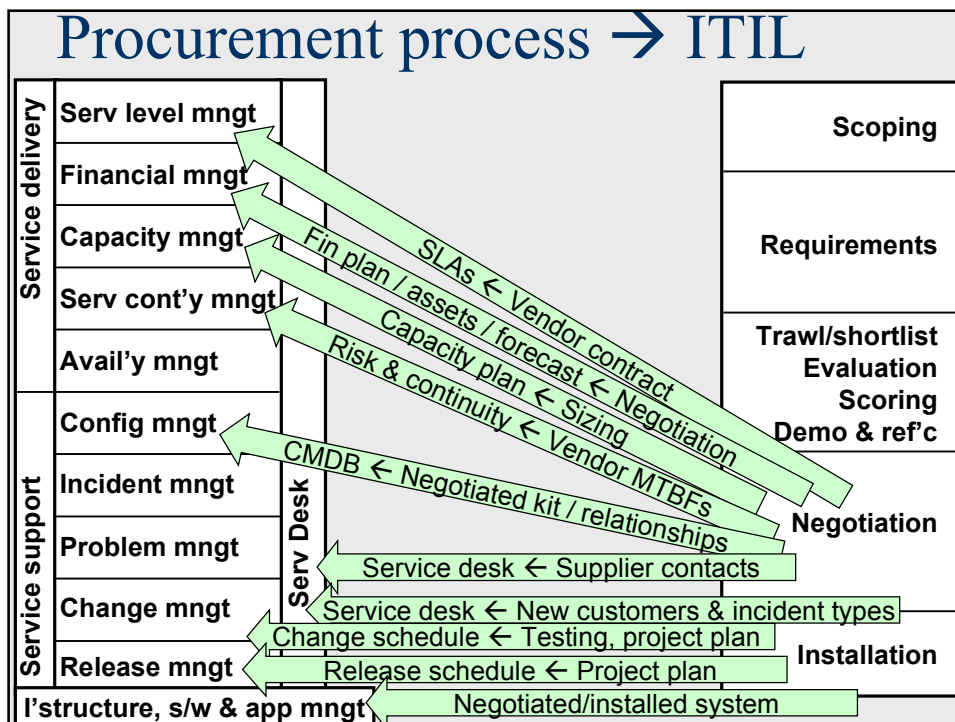
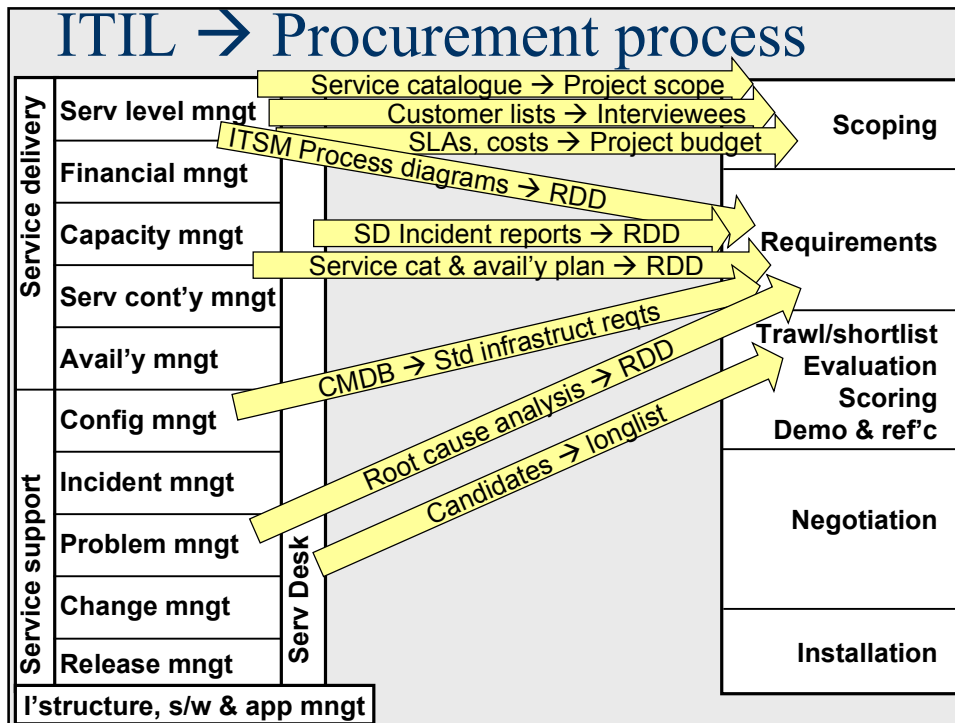
Package - Supplier Evaluation Shortlist After Responses To Requirements Document IT Evaluation Ltd

Service Desk System Scoring Spreadsheet		Nbr	Wgt	Perfect	Package A			Package B		
				Max	MatchA	Fit	Xtd	Fit %	MatchB	Fit
CfM	Record both hardware & software assets	0081	5	15	3	15	100%	2	10	67%
CfM	Manage assets for their full lifecycle	0082	3	9	2	6	67%	3	9	100%
CfM	Automatic IT asset capture/audit	0083	4	12	0	0	0%	2	8	67%
CfM	Report software license compliance	0084	3	9	1	3	33%	2	6	67%
CfM	Track normal assets per user	0085	5	15	2	10	67%	3	15	100%
CfM	Record installations	0086	3	9	0	0	0%	2	6	67%
CfM	Manage costs including depreciation & roll-up	0087	3	9	2	6	67%	3	9	100%
CfM	Alerts for maintenance, leases & contracts	0088	2	6	1	2	33%	2	4	67%
CfM	Track loan items with overdue & history	0089	1	3	0	0	0%	3	3	100%
CfM Total				87		42	48%		70	80%
InM	Track valid users by HR integration	0094	4	12	2	8	67%	3	12	100%
InM	Allow user to book incident directly	0095	3	9	1	3	33%	3	9	100%
InM	Capture all support incidents by customer & asset	0096	5	15	2	10	67%	3	15	100%
InM	Allocate standard incidents types & descriptions	0097	4	12	2	8	67%	3	12	100%
InM	Make incident active immediately or in future	0098	1	3	1	1	33%	2	2	67%
InM	Assign call to analyst/team based on skills	0099	2	6	3	6	100%	2	4	67%
InM	Reassign incident (by drag & drop)	0100	3	9	1	3	33%	2	6	67%
InM	Escalate outstanding incidents	0101	4	12	2	8	67%	2	8	67%
InM	Provide incident statistics	0102	4	12	2	8	67%	2	8	67%
InM	View support history including by user, item & cost	0103	2	6	2	4	67%	3	6	100%
InM	Search incidents with personal searches	0104	3	9	1	3	33%	2	6	67%
InM Total				105		62	59%		88	84%
Supplier	Soundness of supplier	0158	4	12	3	12	100%	3	12	100%
Supplier	Reference sites	0159	3	9	3	9	100%	2	6	67%
Supplier	Training available from author	0160	4	12	3	12	100%	1	4	33%
Supplier	ITIL-certified consultants	0161	4	12	3	12	100%	1	4	33%
Supplier	Relevant data migration experience	0162	1	3	1	1	33%	3	3	100%
Supplier	Formal implementation method	0163	3	9	3	9	100%	2	6	67%
Supplier Total				57		55	96%		35	61%
Grand Total				249		159	64%		193	78%

Note slide numbers in lower corner, for questions and reference.

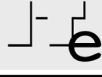



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The IT Service Management Forum
- ## The human dimension
- Empowering – ops people consulted
 - Active listening - aspirations at all levels
 - Collects ‘invisible’ knowledge
 - Intolerant of mis-matched systems
 - Decision makers get peace-of-mind
 - IT gets buy-in
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Further information.






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 www.bcs.org.uk/consult/creg/tatem
British Computer Society status, specialisms & ethics

 www.lums.lancs.ac.uk/staffProfiles/People/MDD/00000188
Lecturing topics in business schools

 www.govinfo.co.uk/archive.php
Method article 'How to Select Your New E-commerce System'

Client references

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Origins & Heritage Of The Method

This section shows the originators of the various aspects of this method.

OCG – standards in UK government IT

Prince project management method, including ‘PCB’ and project sponsor.

Kepner/Tregoe – formal decision-making techniques

Mandatory requirements.

Scoring techniques (part of).

LBMS – methods & Case tools

Analysis and (some) project management methods.

Tasklist and original forms (paper-based selection method) c1988.

Scoring techniques (part of).

IT Evaluation – further development/application of method

Scoring *definitions*.

Use of project documents as attachments to contract.

Use of PC packages, CASE tools and product databases to aid productivity, including client management system for calls, fax shots, e-mail shots and project history log.

All formats shown, including advanced use of word processor and spreadsheet for document automation, plus fax package or mass e-mail for RFI.

Selected Example Formats From The System Selection Method

Sample RDD page (prime list of requirements)

This illustrates the main Requirements Definition Document format, and typical wording of requirements.

- Note the wording states the objective, not the method of achieving it – this is a statement of business need rather than a program specification.
- Also note that targets are quantified where possible. This makes it easier to measure the performance of candidate systems, and to verify the implementation has met its objectives.

See example extract overleaf.

Configuration Management (CfM)

Record both hardware & software assets

0081

The system must record both hardware & software configuration items.

- Different data will be needed for the two types.
- There should be at least three user-defined fields available.
- Report which assets are in use and how often.
- Mark assets critical to the business continuity plan.
- Report assets with outstanding faults.

Manage assets for their full lifecycle

0082

Track IT assets from request (with option for requisition/approval), to purchase and delivery. Record installation date and who by (may be supplier or staff member).

Record maintenance attention including parts.

Mark for retirement. Capture decommissioning date, choosing disposal method (such as *Sale*) from a user-defined picklist.

Automatic IT asset capture/audit

0083

The system should discover configuration items on workstations, either directly through a network or from diskette/CD (which will probably involve a separate 'capture agent').

- The system should support Windows versions 98, NT, 2000, XP & 2003. The network is Cat-5 with TCP/IP as the sole protocol.
- Capture system configuration information including CPU type/speed, OS, RAM & BIOS data, disk/diskette profile, video, mouse, all system devices, CD/CDW/DVD and printer(s).
- Distinguish between laptops and desktops (preferably by another means than model number). Record if a laptop can be docked (such as presence of docking station).
- Capture legacy startup files such as Autoexec.bat, Win.ini - recording the date/time of the file.
- Keep a history of changes.
- It is also *desirable* to audit over the Internet, subject to security controls.

Sample RFI page

Example of the sort of form faxed or e-mailed to system suppliers, for them to 'turn round' – complete and send back.

- Note use of closed questions.
- There will normally be predetermined thresholds or acceptable answers in the right hand column. Faxed supplier copies will have these suppressed by using hidden text. E-mail needs a separate document version with the answer column blanked.

See example extract overleaf.

5.	Configuration Management	
5.1	Does the system record both hardware and software assets that are treated by the organisation as configuration items?	
5.2	Are user-defined fields available on the asset register? How many?	
5.3	Will the system ‘discover’ configuration items on workstations, either directly through a network or from diskette/CD? Does it support at least Windows NT, 2000 and XP over Cat-5 network with TCP/IP?	
5.4	Does the system keep a history of changes to assets?	
5.5	Does the system manage costs including cost roll-up from depreciation and expenses?	
5.6	Are costs attributed to cost centres?	
5.7	Does the system raise alerts for maintenance, leases and contracts, including when assets are retired or contracts have expired?	
5.8	Does the system support relationships between items to create a Configuration Management Database (CMDB)?	
6.	Package History & Market Penetration	
6.1	What year and month was the first version of the package released?	
6.2	For the user base within the UK give the: (a) estimated number of user <i>organisations</i> ; (b) estimated number of user <i>individuals</i> ?	
6.3	Give examples of other customers using the system. <ul style="list-style-type: none"> • Is there a typical customer profile, including company turnover, number of employees and industry? 	

Sample scoring spreadsheet – format

Package + Supplier Evaluation		Shortlist After Responses To Requirements Document				IT Evaluation Ltd				
Service Desk System Scoring Spreadsheet										
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				Max	MatchA	Fit Xtd	Fit %	MatchB	Fit Xtd	Fit %
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Supplier Total				57		55	96%		35	61%
Grand Total				249		159	64%		193	78%

Sample scoring spreadsheet – notes

Example of scoring mechanism.

The list of requirements would be longer – from the Requirements Definition Document's table of contents.

This example shows two candidates, but there would be more columns for more systems.

- The weight (**Wgt**) reflects the importance of the requirement.
- The score (**Match**) reflects the degree of fit – for each package.
- Multiplying *weight* times *score* magnifies the gap between systems of different capabilities – ‘rewarding’ systems that are strong in important areas.

Note the column for **Perfect** score (weight x 3). This is used to calculate and show maximum points. It means the spreadsheet can show fit as a ‘percentage perfection’ at Requirement, Sub-Total and Grand Total levels. These index numbers become highly significant during decision-making.

Sample definitions page

These record the basis for allocating points. They record the capability needed for each score. There is one such form per scored requirement.

They only need to be completed by exception. Only define the scores you allocate, rather than all four. This is *not* a ranking and some packages will score the same. If two packages scored 3 and two packages scored 1 point, then define only 3 and 1.

However, when you create the document you may automatically generate a 'standard definition' for the 0 and 3 scores. These will be adjusted as necessary, left if adequate and be completed with 'infill' definitions for 1 or 2 as needed.

See example extract overleaf.

Name

Automatic IT asset capture/audit

Reference

0083

Issues

Ability to populate the CMDB automatically as well as by manual data entry.

Use of native/internal facilities (taken to be superior because more tightly integrated) rather than third-party utilities.

0	No explicit support in current version without modification to standard system.	1		2	Links with at least two third-party utilities for scanning the network or receiving data from agent software via diskette or CD. Required OS supported. Required data captured.	3	Facility meets or exceeds requirement as expressed in Requirements Definition Document (reference RDD-XXXX-31.doc) as released to shortlisted candidates.
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Ref	Project Metrics During ICT System Selections	Notes	Year	I/Views	Nbr Rqts	RDD Pages	Long List	RDD Pkgs	Project £000s
01	Fluids Manufacturing Package	(a)	1992	45	243	147	8	4	£664.7
02	Counselor Management		1993	20	131	83	6	2	£7.0
03	Newspaper Distribution		1993	2	80	41	20	2	£1.6
04	In-House Braille		1994	2	0	0	5	0	£5.0
05	Document Transmission		1994	2	14	15	8	0	£0.7
06	Customer Relationship Management (CRM)		1995	3	84	41	43	3	£7.1
07	Youth Training Administration (West Lancs)	(b)	1995	10	108	78	11	6	£60.0
08	Youth Training Administration (East Lancs)	(c,d)	1995	2	167	100	1	1	£41.8
09	New Standard Desktops		1995	2	20	2	2	1	£2.0
10	Pen Computing Laptop Selection		1995	2	20	2	2	1	£3.6
11	PC card HDD & modem selection		1995	1	3	1	1	1	£1.1
12	Client management system	(e)	1996	2	163	95	1	1	£50.0
13	Business advisory service support	(f)	1996	2	162	91	2	2	£180.0
14	Financials & order processing	(g)	1997	1	127	51	250	6	£200.0
15	Financials & MRP	(h)	1997	51	320	135	200	7	£600.0
16	Laptop specification/selection		1997	2	42	3	2	1	£2.8
17	Telephony & WAN	(i)	1998	2	80	20	3	3	£60.6
18	Mechanical/electrical CAD, visualisation & stress analysis		1998	80	182	77	10	2	£5,000.0
19	Remote desktop selection		1998	1	10	2	1	1	£1.3
20	NT desktops & server		1998	2	33	6	1	1	£12.4
21	Pan-European ERP & materials management		1999	30	198	90	1	1	£179.8
22	ID card, access control, time, attendance & work-booking	(j)	1999	43	260	95	61	5	£1,162.0
23	National e-business feasibility		2000	98	317	157	0	0	£57.8
24	Web storefront - spares from 17 legacy ERP systems	(k)	2000	4	228	108	8	0	£68.6
25	Mobile telephones/network selection		2000	2	50	6	1	1	£0.5
26	ERP & digital rights management	(l)	2001	3	235	89	19	3	£22.0
27	Learning management system (LMS)	(m)	2001	53	217	106	1	1	£30.9
28	Networked colour laser printer/mopier		2001	2	9	1	3	1	£7.4
29	Global engineering resource/skills management	(n)	2002	10	61	4	4	4	£29.4
30	Web-based CSCW	(o)	2002	2	360	27	3	2	£13.2
31	Accounting	(o)	2002	1	200	28	1	1	£0.8
32	Desktop & virtual office communications	(o)	2002	1	200	28	2	2	£6.0
33	XP desktop selection		2002	2	20	3	1	1	£1.4
34	Telephony, e-mail & ISP evaluation		2002	2	166	10	2	1	£8.7
35	Manufacturing strategy	(p)	2002	3	47	9	7	7	£1.5
36	XP Tablet PC feasibility/specification		2003	2	50	4	11	1	£2.0
37	Manufacturing location	(p)	2003	2	101	7	5	5	£33,002.0
38	Service desk (active)		2003	3	181	72	10		£0.0
Count/Total:			38	497	4,889	1,834	717	81	£41,495.8

Notes On Table

- (a) Niche IT supplier, facing loss of sale to a mass-market rival, needed to ensure they won the clearly-rational evaluation & gave a 50% discount on the package from £400K to £200K.
- (b) Seven months of evaluation & acquisition was then followed by seven months of implementation support - including specification of 'scripting' for work automation features. Project cost quoted included heavy element for this scripting and for supplier's implementation support including data loading.
- (c) Same public administration programme, different client (delivery organisation). Consultation by-passed 'prime' interview stages. An equivalent document from another territory was released as a consultation document.
- (d) Low number of candidates because the client, after evaluating requirements, opted to specify extensions to an existing package already in use.
- (e) Unusually, requirement definition was by end-users interviewing each other. This was an experiment, and largely unsuccessful.
- (f) Low number of interviews & package candidates because of extremely tight, and immovable, project deadline. Client commissioned low amount of 'prime' research, and instead relied heavily on a 'standard' list of requirements from similar evaluations. Requirements Definition Document was then widely circulated for comments.
- (g) Requirements definition process. Requirements Definition Document, most of market-place trawl & sifting of RFI responses by client. Software cost was 'bundled' in overall fixed price to implement. A 60-point negotiation agenda yielded at least £40K cash discounts and about £50K of 'free modifications'.
- (h) Runner-up supplier was so determined to make the sale they offered to give the package free, charging only for modifications & implementation services. Their offer was declined because of provably inferior fit to requirements.
- (i) IT Evaluation main role was to create requirements. Client used recommended supplier but split contract and added 'second source' - supplier of own choice (unsuccessfully).
- (j) Project scope was expanded, partway through project, to include a new business. The existing RDD was sent ahead, and taken as read at interviews in the new business. This drastically reduced 'prime' interview time to assimilate the new requirements.
- (k) Client was acquired during project. Existing system from acquiring company was expanded to cover this role.
- (l) Evaluation & feasibility study revealed fatal flaw in technology. VC application and business plan aborted to avoid multi-million loss.
- (m) IT Evaluation changed project scope so client could extend use of existing system (free because already licensed for unlimited number of users).
- (n) Assignment was to audit evaluation to date of user team from client. IT Evaluation endorsed method and supported extended use of in-house system.
- (o) Project split into CSCW, accounts and desktop/communications. Statistics for CSCW only.
- (p) Capital & organisational design project (not IT). What is best strategy within region, and what is best new factory location? Process used at both levels.