System House

The monthly review of the financial performance of the UK computing services industry Volume 2 Number 5 Available by subscription only March 1991

Managers bear brunt of job cuts

There seems little doubt that, as the recession affecting the computing services industry deepens, it is not only general staff but also managers, and often directors, that are feeling the pain. The latest CSA survey shows "a nett decrease of 1200 employees in Q4 1990".



A report from the **Meta Group** indicated that UK computer users and suppliers had shed 5000 jobs in 1990.

The list of redundancies is long. Even on published information, 1991 has seen 91 jobs go at Oracle, 60 at P-E International, 30 at Amstrad, 61 at Sherwoods, 80 at Logica, 60 at Hoskyns, 22 at Infomix, 27 at LBMS, 67 at BIS. To these can be added major job losses at DEC, IBM and almost every other manufacturer as well as the many staff that have lost their jobs when their companies have gone into receivership.

However in past recessions - none of which have been as deep as that currently being experienced - it was the technical staff which suffered most. Now it is the managers. For example, back in October 1990, **SD-Scicon** reported the loss of 120 *"managers and non-fee earners";* eventually saving the company £4m pa. In the last month we have heard of many (some talk of a further 10%) long serving SD-Scicon managers losing their jobs as the company *"adjusts to fit the size of business in a flat market by reducing central overheads".*

Indeed, after Philip Swinstead assumed the Chairman and CEO role, Ian Scroggins has taken "early retirement" and a flatter management structure has been introduced to give "visability and accountability".

Granada is another operation that has laid off at least 9 senior managers and cut out "two layers of management" in its attempt to return to profitability.

Human resource consultants, **MSL**, reported that "senior and managerial" computing posts advertised in 1990 (at 2,216) were down 34% on 1989 and down 50% on 1988. MSL's Andrew Russell agreed that managers seemed to be bearing the brunt of the job losses -"Companies stocked themselves up with senior people during the boom period of the 1980s. The peak has now passed. There are now some very good people available on the market and we are seeing more and more £50K+ pa managers approaching us because they have lost their jobs."

Even where managers have retained their jobs, their roles have been changed. One top industry director told us that, whether they liked it or not, his managers were being put back into direct sales roles. In other words, *"If you want to keep your job, get out there and sell something"*. Not surprising when, in the last year, managers' pay has risen by 13.8%; almost 40% higher than the average.

There also seems an increasing trend for even top directors to lose their jobs when the going gets tough. We have already commented on Geoff Holmes and Ian Scroggins, the previous joint MDs at SD-Scicon, losing their jobs as well as many other senior SD directors/ managers. To these can be added Bob Woodland and Michael Williams at Ferrari, Persona's MD James Calvert, Mike Brooke at Logitek, Barney Gibbens at Sema, Bob Jones at Dowty Information Technology, Bob Morton at Telecomputing, Conor Kehoe at Granada Computing Services. Even Kevin Lomax at Misys let one of his trusted directors, Bernie Lieberman, go when Misys Dataller ran into problems in early 1990.

Dr Doug Eyeions, the Director General of the CSA, agreed that senior managers were the most affected by the current recession. "There is no doubt that the recession is deeper this time around....companies are shedding the fat and the first to go are the non-fee earners, the general managers and those whose last real project management experience was a long time in the past".

We reckon on about three calls a day from "do you remember me" acquaintances asking us if we know of any companies looking for senior executives. Many of the stories are sad and the mood is often angry. Perhaps we have all got too fat but UK CSI companies have for years been complaining that they are short of the very people with the experience of those currently losing their jobs.

_Svstem House __

March 1991

The end of the Misery at Misys?

Seasoned **Misys** optimists like us have clearly seen better days. The latest results show a 70% decrease in PBT to £1.5m on revenues down 11.8% at £33.9m for the interims to Nov 90. EPS was also down 71%. The only good point is that the results were not as bad as the City had expected and the shares have risen 45% this month to 94p, but are still well down on their 450p high.

Misys had had an exemplary record - for an acquisitive company - up until now.



The recession is blamed with new business sales to new customers down by 25% as "the incidence of customers deferring capital expenditure decisions has become more pronounced". Bad debt provisions have increased particularly in those divisions with deal with other system houses. Losses were sustained in the the Networks Division (which comprises Modular Technology, CHA Comms, Zygal and ICC) and Enterprise. "Encouraging performances" were achieved at Misys Dataller, the insurance systems operation, Mentor and TIS Software. Maintenance /recurring revenue is up 25% on last year.

"Staff numbers have been reduced by over 200, c16%, since the peak". Indeed severance costs created an exceptional item of £380K. "Overheads are now running at a rate of c£5m pa less than at the end of the last financial year". Misys "had cash balances of over £1.1m at the half year with no charges outstanding to the banking community". This is a reduction from cash of £3.5m reported in May 1990.

However, Chairman Kevin Lomax believes that "the normally stronger trading position in the second half, together with the significant reduction in overheads, should enable the directors to report a performance for the second half which will be satisfactory in the current recession".

The problems at Misys have been made worse by previous high expectations. Profit expectations for 1991 were over £18m only 18 months ago - now brokers AES suggest between £5 - £6m for the year. Tempus, in the Times (1/2/91), said "Some of the problems are self-imposed...the rapid pace of its acquisitions growth will not help Misys weather the storm... with cash in the bank, Misys is at least likely to be around for the upturn...but the recovery may be a long time coming".

Note - Richard Holway, the editor of *System House*, has been a director of both BOS and TIS and is an adviser to Misys.

Tombstone for Touchstone

Last chapter - see Feb 91 System House.

The End..... On 28th Jan, Stratagem increased its hostile, all share offer for Touchstone to £7.73m, which included £1.61m for the loan stock; the equivalent of 6.1p per share. Getronics, which the Touchstone directors recommended, had bid £7.55m cash. Then on 20th Feb, Statagem increased its bid for the loan stock to £1.91m and announced that it *"either owned or had valid* acceptances for 56.8% of Touchstone ordinary shares and 40.8% of the loan stock". Touchstone's directors then *"decided to throw in the towel"* and the offer went unconditional on 21st Feb. We would now expect to see Touchstone broken up.

You may recall (Feb 91 System House) that this takeover had been acrimonious to say the least with Strategem accusing the Touchstone management of "complete and abject failure". It would be the surprise of the century if the current management survived under Stratagem. "MD, Owen Williams and Stafford Taylor (who now runs Cellnet) subscribed to a share rights issue in March 88 to the tune of £2.5m between them. The shares were held intrust by Banque Paribas; in other words Banque Paribas loaned the money with the shares as security". Source - PC Business Week 5th Feb 91. Since then Touchstone's shares have dived from 90p to 5p. That's an awful lot of money to find or service.

Telecomputing to "merge" with Gresham

On 18th Feb, **Telecomputing**'s shares were suspended at 11p pending an announcement. On 22nd Feb, just as we were about to go to press, it was announced that Telecomputing was to merge with the **Gresham Group** and the enlarged group will be renamed **Gresham Telecomputing**.

The merger will be all share. "Because of the substantial size of this acquisition in relation to the existing business of Telecomputing (Gresham rev = £9m and profitable - Telecomputing rev = £2m and loss making) it is conditional on the approval of shareholders. A circular setting out the terms will be posted to shareholders as soon a practicable".

Telecomputing's main product (since the abortive venture into expert systems) is transaction processing systems on ICL kit. A UNIX version is now available. Gresham, founded in 1969, also has its origins in ICL mainframe system software. They now employ 80+ staff and specialise in CASE, financial and bespoke systems.

At the same time, Telecomputing announced its results for the year to Sept 90. These showed revenues down 17% at £2.1m but losses reduced to £103K (1989 loss = £777K). However, a further £213K of extraordinary items were disclosed; including £69K for legal costs and settlement of the dispute with former Telecomputing chairman, Bernard Panton and £79K reorganisation costs

We, like **Ferrarl** which bought Mr Panton's 29.8% stake in Telecomputing at 87p, await the terms of the deal with interest. Gresham is clearly the stronger party in everyway; so reverse takeover would be a more appropriate term than merger. Telecomputing said "The enlarged group will have a much enhanced scale of operations and a considerably stronger financial base. We view the future with great confidence".

System House 🗕

P&P defies critics

David Southworth's contempt for Hoare Govett seems well founded. **P&P**'s latest results are rather good and the shares rose 26% in the first hours after the latest results for the year to Nov 90. These show revenues up 33% at £223.8m (by the way, a whisker ahead of Hoskyns and now P&P are #2 to Sema in terms of revenue ranking for quoted UK CSI companies). PBT is also up 19% at £13.1m but EPS declined 7.5%. Cash, as a result of the controversial £26.7m rights issue of 1990, is £8.6m but that did not stop interest charges increasing from £0.5m to £2.4m. Operating profits were therefore up 34%.



It looks as though P&P's decision to concentrate on end user sales, following the board's recognisition "that PC distribution to third party resellers in the UK would not in itself provide the future earnings potential required", has really paid off as "business with large corporate clients has increased substantially". In addition, expansion overseas has "contributed higher than expected profits". Since the end of 1989, P&P has acquired Microcomputer Business Systems NV and Zaventem Electronic Development and Distribution NV in Belgium (consideration £4.75m) and Nordic Datadistribution AB in Sweden (consideration £6.4m). Clearly, P&P intends to continue its successful European acquisition strategy.

Although P&P accepts that 1991 will be a "tough year" and the business environment "is likely to remain challenging.....P&P is in a strong position both financially and in the market place". The first two months trading of the new year has "been marked by continuing strong performance in Corporate Systems, Principal (Apple sales via third parties) and Europe". That would infer the opposite in the third party distribution operations and new technologies. Certainly, P&P made play in their press release of their performance relative to the other "smaller PC companies, most of whom have been unable to, or chosen not to, diversify their core business during times of economic difficulty".

P&P *is* different in that they really do have very strong management who understand computing services. We would tend to agree with P&P's views that this will provide *"a clear and lasting differentiation from its competitors"*.

Reuters

Whether **Reuters** is or is not a CSI company would be of little interest if it did not cause such confusion to so many market researchers. Many information providers, like **Datastream**, and financial services system houses like **NMW** and **Quotient** are included as part of the industry and there is very little difference between their services and those provided by many parts of Reuters. If Reuters is included in the industry statistics, they would be by far the largest UK CSI company, would represent around 20% of total billings, would have the largest overseas earnings and have profits equal to all the other UK CSI companies added together.

Reuters latest results for the year to Dec 90 show revenues up 15% at £1.369 billion and PBT up 13% at £320m. However, Reuters reported "very heavy turn-ofyear cancellations as clients trimmed their costs ahead of 1991". Commentators are pessimistic for 1991 with the FT saying "a double-digit fall in earnings would not be a surprise". In addition, further delays in the launch of their two important new products, Dealing 2000-2 (automated foreign exchange trading) and Globex (automated financial futures), were indicated. If Reuters is catching a cold, many other information and systems providers in the financial services marketplace could suffer pneumonia.

Sanderson takes Advantage of GA

Sanderson owns 49% of US General Automation. GA reported profits of \$104K (loss \$424K last time) for the quarter to Dec 90 on revenues up 40%. Interest in the recently introduced Advantage Series business computers was reported as strong.

Robin Hood wanted for Sherwoods?

Several of our readers 'phoned this month to tell us of problems at Sherwoods and that they were actively searching for a "white knight". Sherwood's MD, Richard Guy, strenuously denied these rumours to us but admitted that there have been a number of redundancies recently. However, they then put out a statement announcing a restructuring "designed to increase the focus of its operations and ensure its resilience in the current economic climate".

In Microscope (20th Feb), Sherwoods marketing director was reported as saying they would be interested in a merger "if the right opportunity came along" and confirmed that they had had abortive negotiations to sell their disaster recovery operations - Guardian.

Indeed, this month 61 jobs have gone - 19 staff at Sherwood's Swansea office and the old Wootton Jeffreys office in Manchester has been closed with the loss of at least a dozen jobs. Retail financial services development work has been put on hold. Staff numbers are now around 400.

Sherwoods had recovered well from the £2m loss in 1988. Schroders had forecast £2.68m PBT for 1990 and only 6 months ago the Chairman had underlined his confidence for continued progress.

Regardless of statements to the contrary, we are increasingly convinced that Sherwoods is in merger talks with at least one major CSI company. We await both the forthcoming results and further developments with interest.

System House -

March 1991

CSA publishes Buy IT in survey results

The CSA has just published the results of the largest survey ever undertaken of market attitudes towards the buying in of IT services. Over 300 CEOs and IT directors from most of the leading UK corporations took part in the survey.

87% of CEOs viewed IT as being of strategic importance to their business, but only 52% said they were satisfied with the contribution IT was making - 29% registered dissatisfaction. 56% indicated a perception of IT having an appreciable cost impact. Indeed, the majority of organisations spend up to 5% of turnover on IT but "a surprising 15% (one sixth) spend at least 10% ".

Respondents indicated "an overall positive attitude" towards buying in IT services. The main advantages of buying in IT services were recorded as follows:

 Up-to-date technical knowledge and skills 45%

 Versatility/flexibility/supplement to in-house 43%

 Cost-effectiveness/speed/efficiency 43%

11% Independence/objective viewpoint 6%

Proven solutions

It was cost again which leads the list of disadvantages:

Cost	48%
Lack of business understanding	23%
 Lack of continuity/ongoing support 	19%
Loss of ownership and control	17%
Poor performance/guality	10%

54% of CEOs forecast an increase in IT expenditure over the next 3 years but surprisingly 13% forecast a decrease. The IT directors indicated that there would be net decreases in expenditure on the following services in the next 12 months.



The highest satisfaction levels were expressed for contract staff (76%) and consultancy (75%) but it seems that both will bear the brunt of the current cutbacks. Recruitment received the lowest level of satisfaction; indeed 18% ranked the service as poor and it looks as if recruitment agencies could be in for a bleak year.

Market researchers Romtec feel the draft too

Romtec plc, where Russ Nathan is Chairman, is a much guoted UK market researcher - particularly in the micro arena. Latest results filed at Companies House show that, although revenues increased by 27% to £2m in the year to Jan 90, PBT fell by 43% to £106K.

However, our theory is that, as the recession deepens, companies will require more, not less, market information.

On the brighter side, IT directors forecast net expenditure increases in the following services:



Interestingly, only 8% of IT directors said they expected to buy in FM services over the next 12 months whereas 23% of CEOs said they expected to move to such services. Indeed, the latest survey from IDC - "Analysis of UK Software and Services Marketplace 1991" - forecasts an average growth rate of 22% for FM for the next five years; much higher than the anticipated growth for the total computing services marketplace. FM will account for 6% of the total UK services marketplace in 1995 compared to just 4% at present.



Clearly, CEOs have plans for FM which are either not known by or not agreed by IT directors!

Overall, the CSA report is of great interest and value to anyone planning their marketing approach and their business plans. The industry still has a long way to go to overcome the view that external services are expensive and not very good value for money. But there is clear evidence that companies want to use computing services to increase the effectiveness of their IT operations rather than increase the size of their internal IT operations.

The report costs £150 (CSA members £75) from Computing Services Association, Hanover House, 73/ 74 High Holborn, London WC1V 6LE Tel: 071 405 2171.

CSC profits decline but Bluebird advance

According to reports filed recently at Companies House, Computer Sciences Company Ltd, the UK arm of US CSC, increased revenues by 7.3% to £19.8m in the year to March 90 but profits declined by 24% to £586K. IBM mid-range agent, Bluebird Software plc, posted revenues up 50% at £13.9m and PBT up 30% at £1.1m for the year to March 90.

Richard Holway Limited - Results Service

Admiral pic	Results Revenue PBT EPS	Interim - June 89 £7,221,000 £1,104,000 6.1p	Final - Dec 89 £15,971,000 £2,653,000 16.2p	Interim - June 90 £9,785,000 £1,511,000 9.1p	Interim Comparison +35.5% +36.9% +49.2%
	Results	Interim - Sept 89	Final - Mar 90	Interim - Sept 90	Interim Comparisor
ACT plc	Revenue PBT EPS	£56,435,000 £2,023,000 1.86p	£140,712,000 £8,026,000 7.07p	£46,162,000 £5,364,000 4.01p	-18.2% +165.2% +115.6%
Butler Cox pic	Results Revenue PBT EPS	Interim - June 89 £4,194,600 £633,800 8.1p	Final - Dec 89 £9,370,000 £1,324,095 16.43p	Interim - June 90 £5,239,100 £400,100 4.7p	Interim Comparisor +24.9% -36.9% -42.0%
Capita pic	Results Revenue PBT EPS	Interim - June 89 £3,630,000 £560,000 4.4p	Final - Dec 89 £6,880,000 £1,300,000 10.39p	Interim - June 90 £9,167,000 £956,000 5.9p	Interim Comparisor +152.5% +70.7% +34.1%
Computer People pic	Results Revenue PBT EPS	Interim - June 89 £32,400,000 £1,810,000 9.5p	Final - Dec 89 £69,919,000 £4,219,000 21.8p	Interim - June 90 £38,988,000 £2,138,000 11.25p	Interim Comparisor +20.3% +18.1% +18.4%
Electronic Data Processing pic	Results Revenue PBT EPS	Final - Sept 89 £16,034,000 £1,040,000 8.45p		Final - Sept 90 £16,645,000 £2,100,000 17.38p	Final Comparison +3.8% +101.9% +105.7%
Ferrari Holdings plc	Results Revenue PBT EPS	Interim - June 89 (9 mor £14,496,000 £604,000 2.9p	ns) Final - Dec 89 (15 mons) £32,003,000 £1,419,000 6.6p	Interim - June 90 £27,503,000 (£390,000) (2.5p)	Not comparable due to different accounting periods
Hoskyns Group pic	Results Revenue PBT EPS	Final - Oct 89 £188,706,000 £15,229,000 12.0p (adjusted)		Final - Oct 90 £223,263,000 £17,253,000 13.0p	Final Comparison +18.3% +13.3% +8.3%
INSTEM plc	Results Revenue PBT EPS	Interim - June 89 £4,012,000 £382,000 5.32p	Final - Dec 89 £8,003,000 £885,000 12.9p	Interim - June 90 £5,349,000 £505,000 7.07p	Interim Comparison +33.3% +32.2% +32.9%
Kewili pic	Results Revenue PBT EPS	Interim - Sept 89 £8,064,000 £1,125,000 11.03p	Final - Mar 90 £17,107,000 £2,668,000 27.11p	Interim - Sept 90 £15,924,000 £1,513,000 12.02p	Interim Comparison +97.5% +34.5% +9.0%
LBMS pic	Results Revenue PBT EPS	Interim - Oct 89 £8,032,000 £513,000 2.7p	Final - Apr 90 £18,470,000 £450,000 2.3p	Interim - Oct 90 £9,643,000 (£618,000) (3.4p)	Interim Comparison +20.05% Profit to loss Profit to loss
Logica pic	Results Revenue PBT EPS	Final - Jun 89 £179,505,000 £18,835,000 20.0p		Final - June 90 £187,489,000 £9,011,000 9.0p	Final Comparison +4.5% -52.2% -55.0%
.ogitek pic	Results Revenue PBT EPS	Interim - Sept 89 £18,723,000 £1,310,000 6.69p	Final - Mar 90 £59,580,000 £3,830,000 16.27p	Interim - Sept 90 £33,103,000 £145,000 0.52p	Interim Comparison +76.8% -88.9% -92.0%
Macro 4 plc	Results Revenue PBT EPS	Final - Jun 89 (amended £13,131,000 £6,132,000 17.3p	ŋ	Final - June 90 £14,775,000 £7,353,000 20.6p	Final Comparison +12.5% +19.9% +19.1%

*

Richard Holway Limited - Results Service

Micro Focus plc	Results Revenue PBT EPS	Interim - July 89 £14,807,000 £2,459,000 12.4p	Final - Jan 90 £35,639,000 £8,223,000 37.4p	Interim - July 90 £23,298,000 £7,127,000 34.2p	Interim Comparison +57.3% +189.8% +175.8%
Microgen plc	Results Revenue PBT EPS	Final - Oct 89 £45,071,000 £7,179,000 11.1p		Final - Oct 90 £47,115,000 £8,504,000 13.5p	Final Comparison +4.5% +18.5% +21.6%
Misys plc	Results Revenue PBT EPS	Interim - Nov 89 £38,383,000 £5,058,000 10.8p	Final - May 90 £76,741,000 £11,070,000 23.5p	Interim - Nov 90 £33,857,000 £1,521,000 3.1p	interim Comparison -11.8% -69.9% -71.3%
ММТ ріс	Results Revenue PBT EPS	Final - Aug 89 £7,443,898 £2,151,953 12.8p		Final - Aug 90 £7,524,390 £1,865,165 10.4p	Final Comparison +1.1% -13.3% -18.8%
NMW Computers plc	Results Revenue PBT EPS	Interim - June 89 £4,663,000 £48,000 0.1p	Final - Dec 89 £9,119,000 £87,000 0.2p	Interim - June 90 £4,423,000 £210,000 0.6p	Interim Comparison -5.2% +337.5% +500%
P&P pic	Results Revenue PBT EPS	Final - Nov 89 £168,869,000 £11,066,000 20.0p		Final - Nov 90 £223,787,000 £13,117,000 18.5p	Final Comparison +32.5% +18.5% -7.5%
P-E International plc	Results Revenue PBT EPS	Interim - June 89 £27,444,000 £2,429,000 9.4p	Final - Dec 89 £58,017,000 £5,622,000 21.1p	Interim - June 90 £32,381,000 £2,753,000 10.3p	Interim Comparison +18.0% +13.3% +9.6%
Pegasus pic	Results Revenue PBT EPS	Final - Jul 89 £10,873,000 £3,084,000 36.7p		Final - July 90 £13,039,000 £2,554,000 30.4p	Final Comparison +19.9% -17.2% -17.2%
Proteus pic	Results Revenue PBT EPS	Interim - Sept 89 £8,000 (£226,000) (1.4p) - 5 mons only	Final - Sept 89 £21,000 (£588,000) not available	Interim - Sept 90 £nil (£520,000) (2.44p) - 5 mons only	Interim Comparison n/a Loss both Loss both
Quotient plc	otient plc Results Revenue PBT Interim - June 89 £9,203,000 Final - Dec 89 £19,095,000 Interim - June 90 £9,924,000 ct1,984,000) (£1,984,000) (£1,577,000) £747,000 EPS (10.73p) (8.8p) 3.19p		£9,924,000 £747,000	Interim Comparison +7.8% Loss to profit Loss to profit	
Radius pic			£1,394,000	Interim Comparisor +8.0% +37.3% +28.0%	
Rolfe & Nolan pic	2 110101100 3 22,200,000		Final - Feb 90 £5,460,000 £1,142,000 13.8p (adjusted)	Interim - Aug 90 £2,969,000 £661,000 8.0p	Interim Comparisor +32.0% +27.9% +25.0%
Sage Group pic	Results Revenue PBT EPS	Final - Sept 89 £9,304,000 £2,911,000 12.6p		Final - Sept 90 £13,359,000 £4,731,000 19.2p	Final Comparison +43.6% +62.5% +52.4%
Sanderson Electronic pic	Results Revenue PBT EPS	Final - Sept 89 £12,008,000 £3,013,000 23p		Final - Sept 90 £14,259,000 £3,302,000 24.8p	Final Comparison +18.8% +9.6% +7.8%

Richard Holway Limited - Results Service

SD-SCICON pic	Results Revenue PBT EPS	Interim - June 89 £143,771,000 £1,060,000 0.37p	Final - Dec 89 £283,304,000 £7,230,000 0.59p	Interim - June 90 £138,192,000 (£9,794,000 (6.16p)	Interim Comparison -3.9% Profit to loss Profit to loss
Sema Group pic	Results Revenue PBT EPS	Interim - June 89 £137,682,000 £7,124,000 4.8p	Final - Dec 89 £293,021,000 £17,457,000 11.6p	Interim - June 90 £189,921,000 £7,185,000 4.5p	Interim Comparison +37.9% +0.9% -6.3%
Sherwood Group pic	Results Revenue PBT EPS	Interim - June 89 £12,171,000 £580,000 7.7p	Final - Dec 89 £25,397,000 £2,024,000 25.0p	Interim - June 90 £12,249,000 £883,000 9.5p	Interim Comparison +0.6% +46.6% +23.4%
Star pic	Results Revenue PBT EPS	Final - Jun 89 (Restated £13,927,000 (£1,261,000 (13.7p)	1)	Final - Jun 90 £13,567,000 (£1,995,000) (27.2p)	Final Comparison -2.6% Loss both Loss both
Synapse pic	Results Revenue PBT EPS	Final - Jul 89 £9,074,050 £1,096,967 20.19p		Final - Jul 90 £10,226,373 (£331,919) (8.9p)	Final Comparison +12.7% Profit to loss Profit to loss
Systems Reliability pic	Results Revenue PBT EPS	Interim - June 89 £44,606,000 £3,022,000 6.21p	Final - Dec 89 £134,586,000 £7,863,000 12.76p	Interim - June 90 £95,345,000 £5,012,000 6.25p	Interim Comparisor +113.8% +65.9% +0.6%
Tele- computing pic	Results Revenue PBT EPS	Final - Sep 89 £2,519,080 (£777,000) (16.47p)		Final - Sep 90 £2,101,000 (£103,000) (1.99p)	Final Comparison -16.6% Loss both Loss both
Total Systems pic	Results Revenue PBT EPS	Interim - Sept 89 £860,474 £39,865 0.29p	Final - Mar 90 £1,777,084 (£6,722) (0.08p)	Interim - Sept 90 £966,765 £19,949 0.13p	Interim Comparisor +12.4% -50.0% -55.2%
Touchstone plc (was MBS)	Results Revenue PBT EPS	Interim - Jul 89 £64,398,000 (£7,101,000) (7.0p)	Final - Dec 89 £77,317,000 (£4,817,000) (4.7p)	Interim - Jun 90 £9,809,000 (£66,000) (0.0p)	Interim Comparison Not comparable Loss both Loss both
Trace pic	Results Revenue PBT EPS	Final - May 89 £9,814,976 £1,709,233 9.96p		Final - May 90 £13,933,504 £1,807,644 10.49p	Final Comparison +42.0% +5.8% +5.3%
Vistec Group pic	Results Revenue PBT EPS	Interim - Oct 89 £17,362,000 £1,117,000 0.7p	Final - Apr 90 £36,048,000 £1,580,000 0.92p	Interim - Oct 90 £13,908,000 £78,000 0.04p	Interim Comparison -19.9% -93.0% -94.3%

FI Group consolidates software FM service

We were impressed with **FI Group**'s moves in the fast growing software FM market (see *System House* - Nov 90). They have now been awarded a £1.5m "software factory" (FI's name for the service) contract with Thames Water providing development and on-going maintenance support.

Along with "total FM", we believe that software FM will be one of the major growth areas over the next five years. With this kind of major contract under their belt, and a strong cash position, FI should be well on the way to its £19m revenue target for the year and a return to the kind of profits they made in 1989.

Norsk Data moves to services

Norwegian mini maker, Norsk Data, reported losses of c£11.4m on revenues of £203m for 1990. It then surprised many by announcing that it will not be seeking new customers for its proprietary hardware but will concentrate on services. The UK maintenance operation will therefore merge with French TPM Thomainfor in a new 350 strong company expected to be up and running by April.

ICL has continued its expansion into the services arena (see p 8). DEC and IBM are both seeing faster growth in their software and services divisions than in the hardware sector. We still maintain that manufacturers will pose a major threat in the years to come.

System House ____

Acquisitions, disposals and liquidations

Apple's largest dealer fails

CSS, which had AppleCentres in London, Swindon, Birmingham, Manchester and Glasgow, has been placed in administrative receivership. It is said that Apple could be owed up to £2m. Rumour of problems at CSS, and other major Apple dealers, had been rife for months.

Since then, no buyer has been found for CSS as a whole and it is likely that the operation will be broken up. Both Callhaven and SAMS apparently decided not to bid.

CSS was renown for its high discounting which clearly contributed to the current problems as unit price falls coincided with the recession.

Sanderson acquires Harris

Sanderson has bought Harris Computer Developments (HCD), the local authority software house, for "around £100K" from the receiver (see System House Feb 91). Chairman Paul Thompson said "for a small outlay we have acquired 26 users and potential sales prospects. Two had already converted to the Sanderson community charge product". Seven HCD staff, including directors David Harris and Simon Parks, keep their jobs - at least for the time being.

Paxus buys two insurance software companies

Paxus has bought CAPSCO Software Europe, based in Guildford and the Norwegian based Insurance Software & Systems from Swiss Reinsurance, for an undisclosed sum. Swiss Re sold its 51% stake in PCL last month for around £2m in its move out of IT. CAPSCO provides software and consulting services to the financial services industry with a European client base of 40 insurance companies. It employs some 180 staff and had 1990 revenues of £11m. Insurance Software provides online reinsurance systems and had revenues of £2m in 1990.

Australian Paxus had revenues of A\$205m in 1990. Its European HQ is based in Berkshire. IBM took a 15% stake in Paxus in Nov 89 for a consideration of £10m.

Microvitec buys into Logitek

Logitek share price, after falling from a 1990 high of 143p to a 1991 low of 12p after worst than expected interim results (see *System House* Feb 91), has doubled in the last month. On 18th Feb it was announced that Microvitec, Logitek's rival Bradford based micro distributor, had bought 8.43% of Logitek stock. The announcement coincided with news that Southwind had sold its 7.25% holding in Logitek. Microvitec has been on a buying spree this year (see System House Feb 91) which could be considered as surprising given that Microvitec lost £2.4m in the first six months of the current FY.

Another CSA member hits the dust

Logotech, where Dick Dennys was Chairman, appointed the receivers on 13th Feb. We reckon this is at least the 5th CSA member to go down in the last 12 months. Logotech provided financial management systems to local authorities and had revenues of £716K and PBT of £45K in the year to May 89. Logotech's accountant told us that they had just had a very profitable month but the bank pulled the rug when a "white knight" withdrew.

The others...MBC has sold its Liverpool AppleCentre, which they bought from the receiver in Nov 89, to Fairhurst Chester which already owns centres in Wilmslow and Chester. David Dillistone, who many readers will know, sold his personnel software business in Dec 90, and has now merged his IT recruitment operation with the Firth Consultancy. British Telecom is negotiating to sell its on-line information services like Citycall (much used in the preparation of System House). DCM Services has acquired the UK maintenance activities of leasing company ECS for around £250K. ICC Online Databases has been acquired by Hoppenstedt Bonnier Information (German/Swedish partnership). Bonsal bought Kelator's Acorn distribution business which specialises in the education market. Computer Associates has acquired ManageWare Inc, which provides multi-dimensional financial modelling software under Windows 3. RHM Computing has acquired City Data Processing Services (Citvdp) "boosting RHM's FM business to £5m". Citydp's revenues were £750K last year. The London Borough of Wandsworth is reported to be looking for an FM supplier to run its ICL applications. CW says Datasolve and "a high street bank" are the frontrunners to buy West Wiltshire Software. Computing, however, backs BIS Perthcrest and Municipal Mutual, Mail order company, Parallel Computers, has gone into liquidation with debts of around £600K. Hewlett-Packard has bought 5% of Informix for \$3.5m and will invest a further \$5m in equity in the next year bringing the holding to 10%. Last year ASCII acquired 15% of Informix stock. HP also holds 10% of ASK which acquired Ingres in 1990. The DVLA IT operations are said to be up for sale with Sema and Hoskyns as the likely bidders. Recruitment consultants. Computer Search & Selection, has acquired rival Intercity. CSS now claims revenues of £30m "putting it #2 to Computer People". Hot on the heels of their purchase of word processing company Samna, Lotus has acquired e-mail company CC Mall. Baring Bros reported that they now hold 3.58% of Radius. The UNIX consultancy division of Intelligence Resources (formally known as Sphinx) has been bought in an MBO from Pegasus. Pegasus acquired Sphinx for £2.75m in March 89.

ICL moves into FM

In the same week, ICL has acquired the four external Local Authority FM contracts of Hammersmith and Fulham, after the district auditor had questioned the legality of the operation, and a 75% stake in CFM, which has five LA FM contracts. CFM was previously owned by Midsummer Computing and CSL (itself, like Capita, an MBO from CIPFA). Ken Mander who ran H&F's FM operations joins CFM. No consideration details are available.

By this move, ICL now has a £20m FM operation responsible for operations at 9 LA sites and a mixture of hardware including IBM, Bull and McDonald Douglas as well, of course, as ICL kit.

Rolfe & Nolan in further successes

Rolfe & Nolan, voted one of the System House "Six of the Best" (see Jan 91), has just signed up six of Austria's leading banks for its futures and options software in a deal worth £1m with recurring revenue of £200K pa. Our readers are showing remarkable foresight so far.

_System House ____

March 1991

Index up 9.7%

Despite the continuing Gulf conflict, the CSI Index achieved its largest monthly rise - up 9.7% - beating the FTSE 100 Index; which rose by 7.1%.

Micro Focus surged ahead again this month - is there no end to their rise? They have already increased over fivefold since our index started in April 89. This month, continued buying in the US and a recommendation from Credit Lyonnais seemed to be the main reasons for a further remarkable 48% rise. But we should not forget Rolfe & Nolan, which is the best performing "small company" in our index; having doubled since Apr 89.

At the other end of the scale, Ferrari shares are worth less than 6% of their value in April 1989. Quite how the new ex-Plessey management intend to dig themselves out of this hole is unclear. Perhaps we will see a breakup sale soon.

Computing Services Share Price Index 22nd Feb 91

Index Rank	15th April 1989 = 1000	Share Price 22/2/91	Index 22/2/91
1	Micro Focus	10.93	5280.19
2	Rolfe & Nolan •	1.67	1972.75
3	Hoskyns	3.64	1775.60
4	Admiral Outperformed	2.31	1673.91
5	Capita FTSE 100	1.57	1570.00
6	Sage Group	2.01	1546.15
7	ACT	0.87	1392.56
8	Sema Group	4.14	1301.89
9	Proteus •	1.00	1190.47
10	Macro 4	2.57	1036.29
11	INSTEM	0.98	980.00
12	Sherwood	1.17	975.00
13	Electronic Data Processing	0.74	755.10
14	Kewill	1.80	711.46
15	Quotient	0.71	617.39
16	Microgen "	1.41	602.56
17	Sanderson	1.40	595.75
18	NMW	0.34	566.67
19	P-E International	1.34	551.44
20	Logica	1.93	528.77
21	Vistec	0.12	524.44
22	Butler Cox	0.90	514.28
23	P&P	1.09	488.79
24	MMT	0.80	476.19
25	Pegasus	1.72	468.67
26	Computer People	1.10	452.67
27	SD-Scicon	0.32	410.26
28	Systems Reliability	0.49	392.00
29	Trace	0.48	384.00
30	Synapse	1.10	379.31
31	Learmonth & Burchett	0.45	375.00
32	Radius	0.43	311.59
33	Misys	0.94	233.83
34	Total	0.10	188.68
35	Star	0.20	166.67
36	Logitek	0.24	138.59
37	Telecomputing	0.11	118.28
38	Touchstone (was MBS)	0.05	106.38
39	Ferrari	0.07	57.14

Note: Index set at 1000 on 15th April 1989. Any new entrants to the market are allocated an index of 1000 based on the issue price.



Graham misquoted

BIS's Chairman and MD, Roger Graham, did not much like our article last month on his presentation to the World Computing Services Industry Congress in Washington.

We guoted Mr Graham factually but failed to add; "Product distribution is often more difficult, certainly with non shrinkwrapped software, in the computing services industry than in others. In fact, we at BIS found that we were able to open, over a period of about six years in the late 1970's and the early 1980s, 17 international offices on a self-seeded basis, moving people who understood not only our product but the way in which our customers could work with it, and that has worked well for us. Systems integration, on the other hand, and indeed processing and network services. do offer themselves to an alliance approach. In these activities it is essential to orchestrate a very wide range of skills, and even quite a small provider in its home base may well have opportunities internationally".

We are sorry if we misrepresented Mr Graham's views. "Self seeding" has clearly worked well for BIS but it can have great risks and there are few other UK CSI companies that have so far succeeded using this route. Conversely, we can name many that have failed. Partnerships, alliances and, with due care and attention, acquistions should still be looked at very closely.

Latest IDC report confirms slowdown

As if we didn't know already, the UK software and services industry is experiencing "serious problems" says the latest report from IDC. "These problems are likely to continue throughout 1991 and lead to a steady and permanent slowing in the sector, which is expected to have an average annual growth rates of only 12% between 1992 and 1995"

However, packaged software should continue to prosper and will make up 44% of the market by 1995. The fastestgrowing area is FM (see page 4) which is expanding at 25% pa "despite some resistance from dp managers".

_System House _

IDC - Analysis of the UK Software and Services Market"



75% of shares rise

Three quarters of the shares in our index rose this month. Logitek doubled as Microvitec started its stake building (p8). Micro Focus continues to defy the laws of gravity with a 48% rise. Quotient was up 61% on news of improving orders. Misys (up 45%) and P&P (up 42%) both benefitted from better than expected results. Vistec recovered the losses of previous months as analysts predict recovery. NMW was up 31% as a result of a bullish Chairman's statement ahead of the full year results.

Telecomputing was the largest loser - down 27% before their shares were suspended at 11p prior to the announcement of the **Gresham** "merger" (p2). **Touchstone** also fell 23% to 5p - less than the all share **Stratagem** bid which is now unconditional (p2). **Ferrarl** also fell 12% and decided to abandon its rights issue.

Computing Services Share Price Movements 25th Jan 91 to 22nd Feb 91

1. 1.				
	and the second state of the second states of	% Change	% Change	and the second second second second
Rank	Contractor St. Barris and a Contract	25/1/91 to 22/2/91	20/4/90 to 22/2/91	P/E
1	Logitek	100.00	-83.10	1.48
2	Quotient	61.36	-32.38	Loss
3	Micro Focus	47.70	95.88	29.22
4	Misys	44.62	-58.22	4.00
5	P&P	41.56	-51.56	5.89
6	Vistec	41.18	-11.11	13.04
7	Star	33.33	-58.33	Loss
8	NMW	30.77	9.68	170.00
9	Sherwood	30.00	-19.31	4.68
10	SD-Scicon	28.00	-59.49	n/a
11	Logica	24.52	-35.23	21.44
12	Systems Reliability	22.50	-52.88	3.84
13	Proteus	17.65	19.05	n/a
14	INSTEM	15.29	8.89	7.60
15	Microgen	14.63	29.36	10.44
16	ACT	12.99	2.35	12.31
17	Macro 4	12.23	-13.18	12.48
18	Pegasus	10.97	-41.30	5.66
19	Sanderson	10.24	-52.22	5.65
20	Rolfe & Nolan	9.87	36.89	12.10
21	Sage Group	7.49	6.91	10.47
22	Total	5.26	-37.50	Loss
23	Computer People	4.76	-58.96	5.05
24	Synapse	4.76	-6.78	Loss
25	Hoskyns	3.70	5.20	28.00
26	Admiral	3.59	5.00	14.26
27	Kewill	2.86	-37.50	6.64
28	P-E International	2.29	-47.24	6.35
29	Learmonth & Burchett	2.27	-61.54	19.57
30	Electronic Data Processing	1.37	10.45	4.26
31	Butler Cox	0.00	-54.77	5.48
32	Radius	0.00	-6.52	9.07
33	Capita	-0.63	-5.99	15.11
34	MMT Same Croup	-4.76	-50.92	7.69
35 36	Sema Group Ferrari	-6.55 -12.50	-6.97 -89.63	35.69
and the second second	Trace	-12.50	-89.63	4.58
	Touchstone (was MBS)	-12.73	-53.40	4.58 Loss
100.000.000	Telecomputing	-26.67	-68.57	Loss
The second	stem House	20.01	00.01	1000

Computing Services Index 22nd February 1991

April 15th 1989 = 1000

776.20 We predicted, last month, that 1991 could see the recovery in smaller company stocks. Feb 91 was the first month when CSI stocks have outperformed the market.

Perhaps the smaller company bull market has started?

Changes in Indices	CSI Index	FTSE 100	
Month 25th Jan 91 to 22nd Feb 91	+14.56%	+10.05%	
22 months 15th April 89 to 22nd Feb 91	-22.38%	+12.69%	
1st Jan 90 to 22nd Feb 91	-15.64%	-2.02%	
1st Jan 91 to 22nd Feb 91	+9.65%	+7.12%	

Oracle UK growth slows just a little

Oracle Corporation (UK) Ltd have now filed their accounts for the year to 31st May 1990. These show revenues up 79.5% at £86m and PBT up 81% at £4.7m. Worldwide, Oracle reported revenues up 102% (see *System House* June 90), so the UK was marginally behind overall growth.



We are, however, pleased to see that the highest paid director at Oracle, where Geoff Squire was MD until his elevation, saw his emoluments increase from £380K to \pounds 484K in 1990.

Results from other US CSI companies

Lotus announced Q4 revenues up 24% at \$186m but a loss of \$32m following a charge on the Samna acquisition. Full year 1990 results are revenues up 23% at \$684m but profits down 66% at \$23.3m....Ashton-Tate's Q4 profits of \$2.1m were turned into a loss of \$5.6m, because of legal costs of \$8.5m defending shareholders accusations of misrepresentation. Full year results show revenue down 13% at \$230m and losses of \$18.1m....EDS results for 1990 show revenues up 12% at \$6.1b and profits up 14% at \$497m. EDS UK turnover grew 25% said MD, Clive Ziegler. More details on the UK performance soon.

System House ____

£148m rise this month

Capitalisation of CSI companies rose by £148m to £1.65b. **Micro Focus** put on £44m and is now worth £137m ahead of **Logica** which also put on £23m. **P&P** increased £24m to £82m, recovering some of its recent fall. **SD-Scicon** regained the #7 slot as cost cutting continues.

Telecomputing was capitalised at just £700k when the shares were suspended - so the terms of the Gresham "merger" should be very interesting. Misys put on £9m to £29m - still well below their £138m high.



Mixed news from outside the UK

Worldwide, IBM UK reduced PBT by 8.5% in 1990 to £420m on revenues up 3% at £4.32b. UK sales, however, declined by 6% but exports were up 13%. IBM UK Chairman, Tony Cleaver, said "1991 will be a difficult year for the economy. We anticipate intense competition in the marketplace which is unlikely to show significant growth".....Q4 losses at Unisys amounted to \$88.5m, taking the total loss for the year to \$551m on revenues unchanged at \$10.1b.....Control Data also reported a \$48m Q4 loss. Full year profits were just \$2.7m (1989 loss = \$680m) on revenues of \$1.7b...Olivetti warned of 1990 profits "sharply lower than forecast" and has concluded talks on 7000 job losses worldwide Compag, on the other hand, announced a 70% increase in profits to \$135m in Q4 on revenues up 27% at \$788m. Full year results are revenues up 29% at £3.6b and profits up 37% at \$455m...Hewlett-Packard reported Q1 revenues up 10% at \$3.4b, mainly as a result of overseas earnings up 16%. Profits increased 18.5% to \$205m. President, John Young said "Q1 orders for multi-user UNIX computers were up sharply and had become a sizeable business for HP".

Dell's profits increased by 433% to \$27.2m in the year to Jan 91 and revenues increased 41% to \$546m.....Tandon revealed profits of \$25m compared to a loss of \$4.3m last year. Revenues to Dec 90, were up 12% at \$421m....Q2 losses at Businessland more than doubled to \$4.5m on revenue down 11% at \$334m. The UK operation is believed to have broken even towards the end of the year.

Vamp not so healthy

Vamp Health, which supplied free computers to over 1000 doctors, has had to renege on its contract. Users now face the prospect of seeing Vamp go under or paying for their services. Another bright idea hits the dust. March 1991

Computing Services Capitalisation - 22nd Feb 91

Rank		Capital- isation 22/2/91 £m	% Change since 15/4/89	% Change since 25/1/91	Em Change since 25/1/91
1	Sema Group	£373.35	31.42	-6.54	(£26.15)
2	Hoskyns	£327.70	98.85	3.70	£11.70
3	Micro Focus	£136.87	430.50	47.65	£44.17
4	Logica	£117.28	-46.89	24.50	£23.08
5	P&P	£81.70	9.37	41.59	£24.00
6	ACT	£81.33	105.38	12.96	£9.33
7	SD-Scicon	£64.49	-58.97	27.96	£14.09
8	Macro 4	£56.85	5.48	12.14	£6.15
9	Microgen	£54.60	-38.24	14.70	£7.00
10	Systems Reliability	£35.73	-17.86	22.78	£6.63
11	Sage Group	£33.07	56.01	7.39	£2.27
12	Misys	£29.16	-61.53	44.36	£8.96
13	Admiral	£24.74	69.47	3.53	£0.84
14	P-E International	£22.23	-43.87	2.44	£0.53
15	Proteus	£21.49	19.03	17.41	£3.19
16	Capita	£19.98	146.69	-0.59	(£0.12)
17	Kewill	£17.14	2.04	2.65	£0.44
18	Computer People	£14.94	-51.32	4.50	£0.64
19	Vistec	£13.56	516.36	40.66	£3.92
20	Sanderson	£12.07	-38.72	9.75	£1.07
21	Pegasus	£10.48	-47.08	10.65	£1.01
22	Radius	£9.93	-68.87	0.00	£0.00
23	Quotient	£9.72	-37.68	61.22	£3.69
24	Rolfe & Nolan	£9.00	106.04	9.80	£0.80
25	MMT	£8.46	-51.11	-4.75	(£0.42)
26	NMW	£6.99	-43.21	30.81	£1.65
27	Touchstone (MBS)	£6.50	-89.36	-22.99	(£1.94)
28	Electronic Data Processing	£6.39	-24.51	1.37	£0.09
29	Trace	£6.34	-60.61	-12.76	(£0.93)
30	Sherwood	£6.14	-0.28	30.14	£1.42
31	Learmonth & Burchett	£6.00	-58.90	2.39	£0.14
32	Butler Cox	£4.81	-48.39	0.00	£0.00
33	INSTEM	£4.40	-2.13	15.29	£0.58
1000100	Logitek	£4.05	-80.06	99.44	£2.02
35	Synapse	£3.88	-61.96	4.60	£0.17
36	Ferrari	£3.77	-80.77	-12.33	(£0.53)
37	Star	£1.36	-83.19	33.79	£0.34
38	Total	£1.00	-81.13	0.00	£0.00
39	Telecomputing	£0.70	-84.27	-26.67	(£0.25)

Kerridge in decline

Kerridge was one of the stars of the industry in the late 80s. Latest results filed at Companies House, however, show revenues static and PBTdown 53% for year to Feb 90.



Centre-file's profit growth slows

Centre-file, the computing services subsidiary of the Nat West Bank, increased revenues by 13.2% to £82.6m in the year ending Sept 90. However, profits growth slowed from last year's 49% rise to 4.3% this year. PBT reported was £12.1m, which we are sure will put Centre-file well into our Top Ten when all the 1990 results have reported. Centre-file is one of a dwindling group of CSI companies to have increased profits every year for the last decade. As the diagram below shows, profit margins had also been improving.



Centre-file is now 25 years old and MD, Jim Graycon, said "I am delighted that, despite the difficult conditions this year, we have continued our strong growth"

Centre-file now employs 1200 staff, up over 100 on the year. Their card services unit now services 10,000 customers processing 12m transactions per month on 28 different types of plastic card. Centre-file's system house, the General Systems Division, had *"another excellent year"* with revenues up 20% at £30m. A Consultancy Group has also been established.

Order Form: Please supply:-

Review of Acquisitions involving UK Computing Services Companies in 1990 @ £195

One year's subscription to *System House* @ £265 for 12 issues

Cheque (payable to Richard Holway Ltd) with order Only. Send to: Richard Holway Limited 18 Great Austins FARNHAM Surrey GU9 8JQ

CSA shows deepening recession

The latest business survey from the CSA demonstrates the deepening recession. Staff employed decreased by 1200 employees in Q4 - see page 1.

If you look back, although the forecasts have always been optimistic, the trends have been remarkably accurate. If you accept this theory, profits will rise in the next quarter (probably on the basis that they have sunk so low that the only way is up). The *only* areas where revenues are forecast to increase are database, turnkey and processing (incl FM) services. Every other graph points downwards. The only area which "got it wrong" was TPM, which had forecast an upturn but the actuals were the opposite.

Granada drops 2300 small TPM contracts

Granada Computer Services, which reported a 68% decrease in profits to £6.5m for the year to Sept 90, is pulling out of small contracts. Peter Edwards says that 2300 contracts with revenues of less than £5000 pa represented over 60% of the client base but only 5% of the revenue. "We have to lose hundreds of thousands out of our cost base" and will do this by "aligning the operation to support an emphasis on large contract business".

Edwards says "The independent maintenance market remains one of the fastest growing service sectors because growth comes from transfer of market share from the manufacturers, rather than depending on enlargement of the market". But it will not be an easy ride. The manufacturers are jealously guarding their support revenues which recently has been the fastest growing area for both DEC and IBM (see Feb 91 System House). Competition is intense and margins are often pared to the bone. Indeed, INPUT forecast "a rapid decline in TPM revenues in the latter half of the 1990s".

Acquisitions Review

We have been delighted at the response to our 1990 Review of Acquisitions. To date we have sold 50% more than the final count for the 1989 edition. Order form below.



Postcode _____ Telephone

Signature _____ Date

System House is published monthly by Richard Holway Limited, New Acre, 18 Great Austins, FARNHAM, Surrey, GU9 8JQ. Telephone 0252 724584; which also publishes the annual "Holway Report". Richard Holway is a director of six computing services companies including NMW and an adviser to the board of Misys.

© 1991 Richard Holway Limited. The information contained in this publication may not be reproduced without the written permission of the publishers. Whilst every care has been taken to ensure the accuracy of the information contained in this document, the publishers cannot be held responsible for any errors or any consequences thereof. Subscribers are advised to take independent advice before taking any action.