

THE MARKET FOR
ICE-BASTED BURGERS
IN THE UK

INPUT

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CUSTOM

AUTHOR

Market for ICL Based Bureaux in
the U.K.

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ICL BASED BUREAUX
IN THE UK

Prepared for SCICON COMPUTER SERVICES LTD

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I - I N T R O D U C T I O N

SECTION I

INTRODUCTION

- This report was prepared at the request of SCICON COMPUTER SERVICES LTD and follows the format confirmed to SCICON in INPUT's letter of 30th June, 1978.

- The sources of data used are as follows :
 - telephone interviews with the key ICL Bureaux, particularly the main competition outlined in section III-D.
 - face to face interviews with ICL personnel for the data presented in section IV-B.
 - the UK section of INPUT's Company Analysis and Monitoring programme (CAMP) from which the directory of ICL Bureaux (Appendix) was derived.
 - INPUT's recent analysis of the largest 1500 Industrial, Financial and Consulting companies in the UK (by turnover).
 - INPUT's recent study of the European Computer Services Markets, which provided the estimates of the total UK market size by category of service.

- A recent (May 1, 1978) INPUT report, on the plans of Remote Computing Services Companies for introducing minicomputers at user sites as a means of providing decentralised processing tied into a network, offers a first-hand analysis of the top seven companies already offering (or about to offer) this type of service. SCICON might find this analysis useful.

II - S U M M A R Y & R E C O M M E N D A T I O N S

II SUMMARY AND RECOMMENDATIONS

A. SUMMARY

- 8 ICL bureaux out of a total of 68 in INPUT's directory are equipped with 2960/70 machines. They earn the bulk of their revenue from batch work and the market leaders, BOC, Baric Computel and Compower have larger shares in more industry sectors than any other non ICL equipped bureau.
- Remote batch and interactive services make up rather less than 25% of the revenue of ICL bureaux although the market leaders are doing a little better than average, notably Computel and Baric, (according to their bureau profile with the top 1500 companies). Professional services and facilities management (FM) also feature poorly as contributors to ICL bureaux revenue.
- The opportunities for acquisition in the ICL bureau sector are better than elsewhere. Nearly half are privately owned. All of those not offering remote computing services (traditional remote batch and interactive or new style 'on site' computing) will suffer severe erosion of their business by turnkey systems companies and more advanced bureaux. Thus acquisitions to broaden Scicon's coverage of the UK would be entirely possible.
- The Milton Keynes catchment area comprising the Northern Home Counties and the Southern Midlands is relatively sparsely served by ICL bureaux; in particular the bureaux in the Northern Home Counties are 1/3 smaller in turnover compared with the national average.
- Four of the top seven ICL equipped bureaux (those with more than £2M ICL machine turnover) are equipped with 2960/70 machines. Two of these (BOC and Computel) do significant business in program conversion / testing. Since ICL does not provide such services the user has only two alternatives - over invest in hardware or use a bureau.

- ICL bureaux occupy 23% of a market worth £248M overall (1977 figures) but the remote computing sub-shares are only half that of the 29% batch subshare. For ICL equipped bureaux offering remote computing services the opportunity exists to at least equal the batch share; were this to be achieved an extra £9.7M would accrue to the revenue of these bureaux.
- Joint development of applications and systems software, particularly the latter, is attractive to ICL. The distribution of applications away from mainframes to remote minis is consciously anticipated by ICL and all that this kind of evolution means in terms of telecommunications systems. They would more than welcome joint development of systems in this area; this must represent a good opportunity for a new commercial 2960/70 bureau to break through with remote computer services, particularly of the 'on site' mini kind.

B. RECOMMENDATIONS

- Scicon is well equipped in every sense (excepting 2900 experience) to quickly become a market leader for ICL remote computer services. ICL is very interested in joint development of the telecommunications system software required; it may also be possible that this development work could also be funded by BP.
- The ICL bureau market is underdeveloped in total and especially so in the remote computing services area. If Scicon was to develop competitive and good services in remote computing services INPUT feel that a very significant impact could be made on the market. (Only a proper field survey could quantify this feeling and establish a confident strategy.)
- On site packaged application systems should follow the more straightforward remote batch and interactive services already referred to. These could again be developed with ICL if appropriate - and this would be so if the object machine was to be the 2904.

- FM contracts should adopt the increasingly distributed approach which is to provide each individual user department with its own facility as opposed to replacing a central site. This would be best accomplished with cost effective user orientated on site packaged systems.
- Scicon's coverage of the UK should be extended on the basis of FM deals and/or acquisitions of small ICL bureaux. This would also be a quick way to build up a profitable load on an MK located 2970 and would enable Scicon to provide the kind of local support required by commercial users.

III - C H A R A C T E R I S T I C S W H I C H T Y P I F Y
I C L B U R E A U X

CHARACTERISTICS WHICH TYPIFY ICL BUREAUX

A. Type of Service

- All ICL equipped Bureaux offer Batch services and obtain more than 75% of their computer time revenue from this type of service.
- More than half of ICL Bureaux offer Remote Batch (56%) and Interactive services (52%) but gain rather less than 25% of the computer time revenue in this way. This is not surprising, since telecommunications software is a facility that is not a strong feature of ICL systems.
- 78% of ICL Bureaux offer software products. The vast majority of these are for 1900 and System 4 equipment.
- Of the 68 ICL-equipped Bureaux included in INPUT's directory, only 8 have ICL 2960/70 machines. Few of the 2960/70 equipped Bureaux are making a noticeable impact on the market with Remote Computing services excepting Computel, whose revenue from this source is approaching one third.
- ICL Bureaux tend to offer their services mainly in the manufacturing, distribution and banking/finance sectors.
- Despite the large number of Bureaux that have a declared interest in Facilities Management, the number actually engaged in FM business in a major way is small.
- In comparison with other Bureaux (i.e. those using a different make of equipment), a very low proportion of ICL-based Bureaux offer professional services (i.e. management consulting, systems consulting, systems design, programming and other professional services).

CAMP SERVICES INDEX - EXHIBIT 1

<div style="display: flex; justify-content: space-between;"> <div style="width: 45%; text-align: center;"> <p>COMPUTER SERVICES MARKET SEGMENT</p> </div> <div style="width: 45%; text-align: center;"> <p>COMPANY NAME</p> </div> </div>	BATCH	REMOTE COMPUTING	FACILITIES MANAGEMENT	SOFTWARE PRODUCTS	PROFESSIONAL SERVICES	OTHER	DIRECTORY	HIGHLIGHTS
ADP AUTOMATIC DATA PROC.	*							
AD SERVE COMPUTING LTD	*	*		*				
ADVANCED COMPUTER SERVICES LTD	*		*	*	*	*		
ALPHA SYSTEMS LTD	*			*	*	*		
APPLIED COMPUTER TECHNIQUES	*	*		*	*	*		
APT COMPUTER SYSTEMS	*		*	*		*		
ARDEN DATA PROCESSING	*			*	*	*		
AUTOMATIC INFORMATION MANAG.	*	*	*	*		*		
BARIC COMPUTING SERVICES	*	*	*		*	*		●
BEAUFORT COMPUTER SERVICES	*	*	*	*		*		
BOC COMPUTER SERVICES	*	*	*	*	*	*		
BOEING COMPUTER CENTRES	*	*		*		*		
CAMBRIDGE COMPUTER SERVICES	*	*	*	*	*	*		
CENTREFILE LTD	*	*						
CHANNEL DATA MANAGEMENT	*	*	*	*	*	*		
CHARRINGTON COMPUTER SERV.	*					*		
CLYDEPORT DATA MANAGEMENT	*		*	*	*	*		
COMPOWER	*	*				*		
COMPUTEL	*	*	*	*		*		●
COMPUTER ASSESSMENTS	*			*	*	*		
COMPUTER DATA PROCESSING	*							
COMPUTER DATA SERVICE (NORTH)	*			*				
COMPUTERLINE LTD	*	*				*		
COMPUTER SERVICES (SOUTH WEST)	*	*	*	*	*	*		
COMPUTERSKILLS	*	*						
CONSTRUCTION COMPUTING	*	*		*	*			
COUNTY COMPUTER CENTRES	*	*	*	*	*	*		
CRL ABACUS	*		*	*	*	*		
CROSS COMPUTER GROUP LTD	*			*	*	*		

CAMP SERVICES INDEX

<div style="display: flex; justify-content: space-between;"> <div style="width: 45%; text-align: center;"> <p>COMPUTER SERVICES MARKET SEGMENT</p> </div> <div style="width: 45%; text-align: center;"> <p>COMPANY NAME</p> </div> </div>	BATCH	REMOTE COMPUTING	FACILITIES MANAGEMENT	SOFTWARE PRODUCTS	PROFESSIONAL SERVICES	OTHER	DIRECTORY	HIGHLIGHTS
DATA NETWORKS	*			*	*	*		
DATA SCIENCES INTERNATIONAL	*	*		*		*		
DATASKIL LTD	*	*	*	*	*	*		
DON COMPUTER SERVICES	*			*		*		
DONOGHUE INFORMATION	*	*	*		*	*		
DUPORT COMPUTER SERV.	*	*	*	*		*		
GALDOT COMPUTING	*		*	*				
GMS COMPUTING LTD	*	*	*	*	*	*		
GRAMPIAN COMPUTER LTD	*	*	*	*	*	*		
GRANDMET INFORM. PROC.	*			*				
HADRIAN COMPUTER SERV.	*		*	*	*	*		
HEYWOOD AND PARTNERS	*		*	*				
INDEPENDENT COMPUTER SERV.	*	*	*	*	*	*		
INTEGRATED COMPUTER SYST'.	*	*		*		*		
INTERCITY COMPUTER BUREAU	*		*	*	*	*		
JANEEN SERVICES LTD	*	*				*		
KBS COMPUTER SERVICES	*		*	*	*	*		
KENDAL COMPUTER SERVICES	*	*	*	*		*		
MILLS ASSOC. LTD	*		*		*	*		
DOUGLAS MOORE	*							
MULTIPLE ACCOUNT. SERV.	*			*		*		
NATIONAL DATA PROCESS SERV.	*	*	*	*	*	*		
PATERNOSTER COMPUTER SERV.	*	*		*	*	*		
POLA COMPUTER SERV. LTD	*							
RADIUS COMPUTER SERV. LTD.	*	*	*	*	*	*		
SHERWOOD COMPUTER CENTRE	*				*	*		
W. H. SMITH AND SONS	*	*	*		*			
SOUTHERN COMPUTER LTD								
SYSTEMS AID GROUP	*		*	*	*	*		

CAMP SERVICES INDEX

COMPANY NAME	BATCH	REMOTE COMPUTING	FACILITIES MANAGEMENT	SOFTWARE PRODUCTS	PROFESSIONAL SERVICES	OTHER	DIRECTORY	HIGHLIGHTS
TCS COMPUTER BUREAU	*	*			*			
TELECOMPUTING LTD	*		*	*	*	*		
TKT COMPUTER SERVICES LTD	*	*		*		*		
TYGOZE LTD	*	*	*	*	*			
UNIVERSITY OF SOUTHAMPTON	*	*		*				
VICKERS LTD. MANAG. SERV.	*	*	*	*	*	*		
WEALDEN COMPUTER SERVICES	*			*	*			
WOODSOME PARK ASSOCIATES	*			*	*	*		

CAMP INDUSTRY INDEX EXHIBIT 2

COMPANY NAME \ INDUSTRY MARKETS	MANUFACTURING	TRANSPORTATION	UTILITIES	DISTRIBUTION	BANKING/FINANCE	INSURANCE	MEDICAL/HOSPITAL	EDUCATION	GOVERNMENT	OTHER	DIRECTORY	HIGHLIGHTS
ADP AUTOMATIC DATA PROC.	*			*								
AD SERVE COMPUTING LTD										*		
ADVANCED COMPUTER SERV.										*		
ALPHA SYSTEMS LTD	*	*		*	*	*		*	*			
APPLIED COMPUTER TECHNIQUES	*	*		*								
APT COMPUTER SYSTEMS	*			*						*		
ARDEN DATA PROCESSING	*				*							
AUTOMATIC INFORM. MAN.					*					*		
BARIC COMPUTING SERV.	*	*		*	*	*				*		●
BEAUFORT COMPUTER SERV.					*	*						
BOC COMPUTER SERV.	*	*		*	*	*				*		
BOEING COMPUTER CENTRES	*				*							
CAMBRIDGE COMPUTER SERV.	*									*		
CENTREFILE LTD					*					*		
CHANNEL DATA MANAGEMENT	*	*								*		
CHARRINGTON COMP. SERV.	*	*		*	*	*		*	*	*		
CLYDEPORT DATA MANAG.		*										
COMPOWER	*	*		*	*	*	*		*	*		
COMPUTEL	*	*		*	*					*		●
COMPUTER ASSESSMENTS						*						
COMPUTER DATA PROCESS.										*		
COMPUTER DATA SERV. (NORTH)					*							
COMPUTERLINE LTD	*									*		
COMPUTER SERV. (SOUTH WEST)										*		
COMPUTERSKILLS	*											
CONSTRUCTION COMPUTING										*		
COUNTY COMPUTER CENTRES										*		
CRL ABACUS	*											
CROSS COMPUTER GROUP						*			*			

CAMP INDUSTRY INDEX

COMPANY NAME \ INDUSTRY MARKETS	MANUFACTURING	TRANSPORTATION	UTILITIES	DISTRIBUTION	BANKING/FINANCE	INSURANCE	MEDICAL/HOSPITAL	EDUCATION	GOVERNMENT	OTHER	DIRECTORY	HIGHLIGHTS
DATA NETWORKS										*		
DATA SCIENCES INTERNATIONAL	*									*		
DATASKIL LTD		*		*	*					*		
DON COMPUTER SERVICES				*						*		
DONOGHUE INFORMATION	*											
DUPORT COMPUTER SERVICES	*											
GALDOT COMPUTING										*		
GMS COMPUTING LTD	*											
GRAMPIAN COMPUTER LTD				*						*		
GRANDMET INFORM. PROCESS				*						*		
HADRIAN COMPUTER SERV.					*					*		
HEYWOOD & PARTNERS										*		
INDEPENDENT COMPUTER SERV.												
INTEGRATED COMPUTER SUST.	*			*						*		
INTERCITY COMPUTER BUREAU				*						*		
JANEEN SERVICES LTD												
KBS COMPUTER SERVICES	*	*		*	*	*		*	*	*		
KENDAL COMPUTER SERVICES	*									*		
MILLS ASSOCIATION LTD				*		*		*		*		
DOUGLAS MOORE												
MULTIPLE ACCOUNT. SERVICES										*		
NATIONAL DATA PROCESS, SERV.	*	*	*	*	*	*	*	*	*	*		
PATERNOSTER COMPUTER SERV.					*							
POLA COMPUTER SERV. LTD.	*			*								
SHERWOOD COMPUTER CENTRE						*						
W. H. SMITH & SONS				*								
SOUTHERN COMPUTER LTD										*		
SYSTEMS AID GROUP										*		
TCS COMPUTER BUREAU	*	*		*	*	*						

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COMPANY NAME	INDUSTRY MARKETS											
	MANUFACTURING	TRANSPORTATION	UTILITIES	DISTRIBUTION	BANKING/FINANCE	INSURANCE	MEDICAL/HOSPITAL	EDUCATION	GOVERNMENT	OTHER	DIRECTORY	HIGHLIGHTS
TELECOMPUTING LTD	*	*		*	*	*						
TELECOMPUTING LTD	*	*	*	*	*	*	*	*	*	*		
TKT COMPUTER SERV. LTD	*											
TYGOZE LTD	*	*	*	*	*	*	*	*	*	*		
UNIVERSITY OF SOUTHAMPTON								*		*		
VICKERS LTD. MAN. SERV.										*		
WEALDEN COMPUTER SERV.										*		
WOODSOME PARK ASSOC.						*				*		

CAMP APPLICATIONS INDEX - EXHIBIT 3

<div style="display: flex; justify-content: space-between;"> <div style="width: 45%; text-align: center;">APPLICATIONS MARKET</div> <div style="width: 5%;"></div> <div style="width: 45%; text-align: center;">COMPANY NAME</div> </div>	GENERAL BUSINESS	SCIENTIFIC/ENGINEERING	SPECIALITY	UTILITY	OTHER	DIRECTORY	HIGHLIGHTS
ADP AUTOMATIC DATA PROC.	*	*		*	*		
AD SERVE COMPUTING LTD	*				*		
ADVANCED COMPUTER SERVICES LTD					*		
ALPHA SYSTEMS LTD	*	*			*		
APPLIED COMPUTER TECHNIQUES	*						
APT COMPUTER SYSTEMS	*						
ARDEN DATA PROCESSING	*						
AUTOMATIC INFORMATION MANAG.					*		
BARIC COMPUTING SERVICES			*				●
BEAUFORT COMPUTER SERVICES			*				
BOC COMPUTER SERVICES							
BOEING COMPUTER CENTRES	*		*				
CAMBRIDGE COMPUTER CENTRES	*	*					
CENTREFILE LTD	*	*			*		
CHANNEL DATA PROCESSING	*				*		
CHARRINGTONS COMPUTER SERV.	*	*			*		
CLYDEPORT DATA MANAGEMENT			*				
COMPOWER	*	*			*		
COMPUTEL			*				●
COMPUTER ASSESSMENTS			*				
COMPUTER DATA PROCESSING					*		
COMPUTER DATA SERVICE (NORTH)			*				
COMPUTERLINE LTD	*	*			*		
COMPUTER SERVICES (SOUTH WEST)			*				
COMPUTERSKILLS	*	*					
CONSTRUCTION COMPUTING		*	*				
COUNTY COMPUTER CENTRES	*				*		
CRL ABACUS	*						
CROSS COMPUTER GROUP LTD	*		*		*		

CAMP APPLICATIONS INDEX

<div style="text-align: center;">APPLICATIONS MARKET</div> <div style="text-align: center;">COMPANY NAME</div>	GENERAL BUSINESS	SCIENTIFIC/ENGINEERING	SPECIALITY	UTILITY	OTHER	DIRECTORY	HIGHLIGHTS
DATA NETWORKS			*				
DATA SCIENCES INTERNAT.	*	*	*		*		
DATASKIL LTD	*		*		*		
DON COMPUTER SERVICES	*						
DONOGHUE INFORMATION							
DUPORT COMPUTER SERV.	*		*				
GALDOT COMPUTING			*		*		
GMS COMPUTING LTD		*	*		*		
GRAMPIAN COMPUTER FAC.	*	*	*				
GRANDMET INFORM. SERV.	*				*		
HADRIAN COMPUTER SERV.	*						
HEYWOOD AND PARTNERS					*		
INDEPENDENT COMPUTER SERV.	*	*					
INTEGRATED COMPUTER SYST.	*	*	*		*		
INTERCITY COMPUTER BUREAU	*	*					
JANEEN SERVICES LTD							
KBS COMPUTER SERVICES	*				*		
KENDAL COMPUTER SERVICES	*	*					
MILLS ASSOC. LTD	*		*				
DOUGLAS MOORE							
MULTIPLE ACCOUNT. SERV.	*						
NATIONAL DATA PROCESS. SERV.	*						
PATERNOSTER COMPUTER SERV.			*				
POLA COMPUTER SERVICES							
RADIUS COMPUTER SERV. LTD.	*						
SHERWOOD COMPUTER CENTRE			*				
W H SMITH AND SONS							
SOUTHERN COMPUTER LTD			*				
SYSTEMS AID GROUP			*		*		

CAMP APPLICATIONS INDEX

COMPANY NAME	APPLICATIONS MARKET						
	GENERAL BUSINESS	SCIENTIFIC/ENGINEERING	SPECIALITY	UTILITY	OTHER	DIRECTORY	HIGHLIGHTS
TCS COMPUTER BUREAU	*						
TELECOMPUTING LTD	*	*			*		
TKT COMPUTER SERVICES LTD	*						
TYGOZE LTD	*	*			*		
UNIVERSITY OF SOUTHAMPTON		*	*				
VICKERS LTD MANAG. SERV.		*			*		
WEALDEN COMPUTER SERVICES			*				
WOODSOME PARK ASSOCIATES LTD	*				*		

B - OWNERSHIP

- ICL-equipped Bureaux are present in the UK under all forms of ownership. The three categories of ownership for the purpose of analysis have been taken as "Private", "Spin-off", and "Other" ; the latter category includes ownership by a holding company, a trust, the public, the Government and any other form of non-private and non-dependent ownership.
- Spin-offs are companies that began life as the EDP departments of large industrial or financial groups, which were then allowed to offer computer services on the available market.

TURNOVER (£ M)	OWNERSHIP CATEGORY		
	PRIVATE	SPIN-OFF	OTHER
≥ 5.00	-	25%	75%
1.00 - 4.99	21%	37%	42%
0.50 - 0.99	31%	31%	38%
< 0.50	70%	15%	15%
TOTAL	45%	25%	30%

- Not surprisingly, the majority (70%) of small companies are privately owned ; in most cases they are also managed by their owners.
- A significant number (26%) of medium size companies are privately owned. For example among these are :
 - Applied Computer Techniques, Birmingham £2.2M
 - Mills Associates, Wales £1.5M
 - Douglas Moore, Kingston £1.0M (800K ICL)
 - Sherwood Computer Centre, Essex £1.25M (400K ICL)
 - Telecomputing, Oxford £1.2M (300K ICL)
- The remainder of the medium sized companies are evenly divided between Spin-off (100% parent ownership) and other ownership ; the latter companies were previously private companies in some cases which conceded ownership for expansion or survival capital.

For example:

- Cambridge Computer Services owned by Geest.
- Data Sciences International owned by Wallace Arnold Trust.
- Independant Computer Services owned by National Westminster
- Paternoster owned by Charterhouse.
- Beaufort Computer Services owned by Schessinger European Investments.

- Included also in the medium category is one government owned establishment, namely NDPS which is mainly occupied with internal GPO work.
- The Spin Off category of operation is well represented at all size levels. An area of doubt, however, is the extent to which commercial bureau services are offered to external customers. Some of the doubtfuls in this respect are:
 - Charrington Computer Services (Coalite Charrington)
 - Dupont Computer Services (Dupont Group)
 - Grandmet Info. Processing (Grand Met Group)
 - Pola (Port of London Authority)
 - Compower (NCB - 70%)
- On the contrary, BOC and Computel are not doubtful since more than 50% of their workload is with external customers.
- Partial Spin-offs (for example W.H.Smith) are not included in INPUT's directory of computer service companies; however they do in many cases defray their costs with external revenue gained usually from straight time sales. Few if any of these organisations have the marketing skills to develop a wider range of services.
- Nearly half of all ICL bureaux are privately owned and are probably the most approachable category for acquisition. The principals are easily identified and the constraints on their freedom to sell are relatively small.
- Spin-off companies would either be very expensive or impossible to buy (e.g. BOC, Computel, Compower, etc) or too involved with the parent's business, (AIM, Vickers Management Services, Charrington Computer Services, etc).

C. GEOGRAPHIC DISPERSION

- ICL equipped bureaux are concentrated mainly in
 - a) London and the Southern Home Counties, and,
 - b) Northern England.
- With respect to Milton Keynes there is medium concentration in
 - a) Northern Home Counties, and
 - b) Midlands.

(* Note that main computer centre locations are counted only since revenue by branch in large bureaux is unknown.)

- Exhibit 4 shows also that the average size of bureaux (by revenue) is 50% larger than the national average in the Southern Home Counties ; this is due largely to the presence of three majors in the industry, namely BOC (Sunbury), Baric (Feltham) and Computel (Bracknell).

- In terms of ICL component the largest bureaux in the Northern Home Counties are
 - Grandmet Info. Processing (£1.25M)
 - Charrington Computer Services (£412K - INPUT est).
 - Charrington Computer Services (£300K - INPUT est)
 - County Computer Centre (£500K)

Bureaux in this region are smaller than average and the larger ones (as above) are mainly orientated about captive business.

- Although there are relatively few ICL bureaux in the Midlands they are larger than average, for example:
 - Applied Computer Techniques (£2.2M)
 - CRL Abacus (£1.88M)
 - Dupont Computer Services (£1.25M)

- Exhibit 5 shows the disposition of main locations and branches. These can be summarised and compared with the main locations:

GEOGRAPHIC DISPERSION OF ICL BUREAUX

REGION	NO. OF ICL BUREAUX	AVERAGE * REV. (£M)
Northern Home Counties	8	0.52
Southern Home Counties	14	1.32
Midlands	7	1.02
London	10	0.49
Southern England	5	0.69
Ireland	1	0.30
Channel Islands	1	0.19
Western England/Wales	2	1.28
East Anglia	3	0.39
Northern England	14	0.81
Scotland	2	0.42
=====		
OVERALL	68	0.80

* The ICL component in multi supplier bureaux is used only for this analysis. Revenue is taken at the main branch location only and no distribution by branch is given.

MAIN AND BRANCH LOCATIONS

TYPE OF PRESENCE	SCOTLAND	WEST AND WALES	NORTHERN IRELAND	NORTHERN ENGLAND	MIDLANDS	EAST ANGLIA	LONDON & HOME COUNTS	SOUTHERN ENGLAND
MAIN	2	2	1	14	7	3	32	6
MAIN & BRANCH	5	6	2	25	11	3	32	8

Exhibit 5

- It can be seen that additional market coverage is being achieved with branches (terminals and satellite machines) in Scotland, West and Northern England and Wales.

CAMP GEOGRAPHIC INDEX - EXHIBIT 6

GEOGRAPHIC MARKETS COMPANIES	SCOTLAND	WALES	NORTHERN IRELAND	NORTHERN ENGLAND	MIDLANDS	EAST ANGLIA	LONDON AND HOME COUNTIES	SOUTHERN ENGLAND	WEST OF ENGLAND	PAGE NUMBERS	
										DIRECTORY	HIGHLIGHTS
ADP AUTOMATIC DATA PROC.							*				
AD SERVE COMPUTING LTD							*				
ADVANCED COMPUTER SERVICES LTD							*				
ALPHA SYSTEMS LTD					*						
APPLIED COMPUTER TECHNIQUES					*				*		
APT COMPUTER SYSTEMS							*				
ARDEN DATA PROCESSING					*						
AUTOMATIC INFORMATION MANAG.				*							
BARIC COMPUTING SERVICES	*	*	*	*	*		*		*		●
BEAUFORT COMPUTER SERVICES								*			
BOC COMPUTER SERVICES							*				
BOEING COMPUTER CENTRES							*				
CAMBRIDGE COMPUTER SERVICES						*					
CENTREFILE LTD				*			*				
CHANNEL DATA MANAGEMENT								*			
CHARRINGTON COMPUTER SERVICES							*				
CLYDEPORT DATA MANAGEMENT	*										
COMPOWER	*	*		*	*						
COMPUTEL							*				●
COMPUTER ASSESSMENTS				*							
COMPUTER DATA PROCESSING								*			
COMPUTER DATA SERVICE (NORTH)				*							
COMPUTERLINE LTD							*				
COMPUTER SERVICE (SOUTH WEST)									*		
COMPUTERSKILLS				*							
CONSTRUCTION COMPUTING				*							
COUNTY COMPUTER CENTRES								*			
CRL ABACUS				*	*		*				
CROSS COMPUTER GROUP LTD							*				
DATA NETWORKS					*		*				

CAMP GEOGRAPHIC INDEX

COMPANIES \ GEOGRAPHIC MARKETS	SCOTLAND	WALES	NORTHERN IRELAND	NORTHERN ENGLAND	MIDLANDS	EAST ANGLIA	LONDON AND HOME COUNTIES	SOUTHERN ENGLAND	WEST OF ENGLAND	PAGE NUMBERS	
										DIRECTORY	HIGHLIGHTS
DATA SCIENCES INTERNAT				*							
DATASKIL LTD	*			*			*				
DON COMPUTER SERVICES				*							
DONOGHUE INFORMATION					*						
DUPORT COMPUTER SERVICES					*						
FACILITIES MANAGEMENT				*							
GALDOT COMPUTING							*				
GMS COMPUTING LTD				*							
GRAMPIAN COMPUTER LTD	*										
GRANDMET INFORM. PROC.							*				
HADRIAN COMPUTER SERV.											
HEYWOOD & PARTNERS				*							
INDEPENDENT COMPUTER SERV.			*								
INTEGRATED COMPUTER SYST.							*				
INTERCITY COMPUTER BUREAU					*						
JANEEN SERVICES LTD							*				
KBS COMPUTER SERVICES				*	*		*				
KENDAL : LONDON							*				
MILLS ASSOC. LTD.		*									
DOUGLAS MOORE							*				
MULTIPLE ACCOUNT SERV.				*				*			
				*			*				
NATIONAL DATA PROCESS. SERV.				*			*				
PATERNOSTER COMPUTER SERV.							*				
POLA COMPUTER SERV. LTD.							*				
RADIUS COMPUTER SERV. LTD.				*							
SHERWOOD COMPUTER CENTRE							*				
W.H.SMITH & SONS								*			
SOUTHERN COMPUTER LTD								*			
SYSTEMS AID GROUP							*				

CAMP GEOGRAPHIC INDEX

COMPANIES	GEOGRAPHIC MARKETS								PAGE NUMBERS		
	SCOTLAND	WALES	NORTHERN IRELAND	NORTHERN ENGLAND	MIDLANDS	EAST ANGLIA	LONDON AND HOME COUNTIES	SOUTHERN ENGLAND	WEST OF ENGLAND	DIRECTORY	HIGHLIGHTS
TCS COMPUTER BUREAU							*				
TELECOMPUTING LTD				*				*			
TKT COMPUTER SERVICES LTD				*							
TYGOZE LTD							*				
UNIVERSITY OF SOUTHAMPTON								*			
VICKERS LTD MANAG. SERV.				*							
WEALDEN COMPUTER SERVICES							*				
WOODSOME PARK ASSOCIATES LTD				*							

D. MAJOR ICL BUREAUX

- The major ICL equipped bureaux ranked by ICL machine revenue (overall in brackets) are:

Baric	£6.8m
Compower	5.6m (14.0m)
BOC	3.9m (9.6m)
Computel	2.6m
Computer Data Processing	2.5m
Applied Computer Techniques	2.2m

(Note: The revenue figures stated are latest reported figures or INPUT estimates of the current year).

- Three of these bureaux have 2960/70 machines namely BOC, Computel and Compower; the first two do relatively well with program development and testing services.
- Captive revenues are significant in some cases; Compower obtains 70% of its revenue from the NCB and BOC obtains 25% from its parent.
- Market shares for the top four are given in Exhibit 7. The percentage shares given apply to the Times 1000 industrial companies and the largest 500 financial companies. The notable points are:
 - BOC, Baric and Computel have a good spread of batch business over the spectrum of UK industry sectors; in fact these three companies are more effective in this respect than all other UK bureaux.

- Baric has achieved the best mix of the top four industry sector coverage which augers well for their growth in the future. They also have the largest market share in the construction industry easily outdistancing Computel.
 - Computel is the strongest of the top four in remote computing services (remote batch and interactive). Baric is next and does relatively well on 1900 series equipment; they are however planning to install a 2900 range machine.
 - Compower is the leader for remote batch services and has a good share of four industry sectors; there were no indications in the Top 1500 survey of any interactive business.
 - BOC has negligible business in remote computing services - due probably to these services being offered on the IBM 370 and Amdahl machines which offer better telecommunications facilities.
- o Exhibits 8 and 9 give a summary of two of the top four ICL bureaux, Baric and Computel.

MAJOR ICL BUREAU SHARES OF THE TOP 1500 MARKET

I N D U S T R Y	MARKET SHARES (%) BY TYPE OF SERVICE											
	BOC DATASOLVE			BARIC			COMPUTEL			COMPOWER		
	B	RB	I	B	RB	I	B	RB	I	B	RB	I
mining & quarrying	50.0											
food, drink & tobacco	30.4	1.7		6.4			5.5			15.3		
coal & petroleum products				6.5			45.5			2.8		
chemicals & allied ind.				7.8	2.6		6.4			94.1		
metal manufacture	3.7			17.7	21.5		7.4	1.6				
mechanical engineering								2.4				
instrument engineering												
electrical engineering												
shipbuilding & marine eng.												
vehicles	2.9			2.9			2.9			7.8		
other metal goods				9.8			3.7			10.0		
textiles	36.2			3.0						14.5		
clothing & footwear												
bricks, glass, cement etc.				3.2								
timber furniture etc.												
paper, printing & publish.												
other manufacturing ind.												
construction				37.2			19.3	25.9		1.9	25.9	
transport & communication	40.5			9.7			8.2					
distributive trades	12.4	16.7		7.1							17.4	
insurance, financial etc.	5.3			1.4				0.1				
prof. & scientific services												
miscellaneous	15.4			14.7			0.5					

COMPANY HIGHLIGHT

BARIC COMPUTING SERVICES LTD.,
Forest Road,
Feltham
Middlesex TW13 7EJ
Tel: (01) 890 1414

P. B. Holland
Managing Director
Total Sales 1977 : £6.6M
Total Staff : 770

THE COMPANY

- Baric began operations in 1970 and has expanded its ICL-based services to cover time sales, local batch processing, interactive services, remote batch, data entry and facilities management.
- Growth in the total revenues of the company were 12% in 1976/77. On 1978 the budgeted growth is 27%, taking the total turnover to £8.4M.
- Out of a total staff of 770, data preparation accounts for approximately 250 and operations staff for a further 110. In addition, there are 70 salesmen.
- Baric is owned 60% by ICL and 40% by Barclays. This, and their use of ICL equipment provides a mutual lead into "peak-load" processing for ICL users and ancillary work (e.g. file conversion, data capture etc).

COMPUTER EQUIPMENT

- The total Baric "park" of systems is comprised of:
 - 5 x ICL 1904S
 - 5 x ICL 1903T
 - 2 x ICL 1905
 - 2 x ICL 1902T
 - 2 x ICL 2904 (Leeds and Bristol)
- In addition there are a large number of ICL Key edit units, 7503, 8950, 7903 and 7905.

- An ICL 2970 will be added in the Autumn this year to handle a mix of interactive and batch processing.

OFFICES

- In addition to the Feltham HQ, Baric has offices throughout the U.K:
 - Letchworth, Forest Gate, Bristol, Birmingham, Cardiff, Leeds, London, Crewe, Kidagrove, Manchester, Corby, East Kilbride, Belfast.

SERVICES

- Baric offers general accounting, payroll, inventory control and similar general administrative/accounting services but has developed ability in a number of vertical markets:
 - financial modelling
 - photo typesetting
 - pension accounting
 - share issues (e.g. B.P.)
- A COM service is also available.
- Baric is predominantly a batch bureau with 85% of the revenue coming from this source. A small amount of Remote batch business is also transacted, mainly RJE.
- Interactive services, on the 1900s under George 3, make up the remainder of the revenue. This is a larger percentage of the revenue (approximately 12%) than it is in number of customers (approximately 5%).

COMPUTEL LTD
Eastern Road,
BRACKNELL Berks.
Tel : (0344) 23031

W.B. Cousins
Managing Director
Sales 1975/76 : £1.44M
Privately owned
Total employees : 100

THE COMPANY

- Computel was formed in 1969 and its strength lies in the construction and project planning activities inherited from the founding owners : Richard Costain Ltd and John Mowlem and Co Ltd. Financial modelling, CORAL 66 usage and statistical packages allied with the ROBOT data base management are other main revenue earners. More recently, Computel has added a 2960 for "staging" new users of that series.
- So far Computel has not chosen the acquisition route to growth. The 1977 business plan does not call for such a step, but this does not preclude developments in that area should this be deemed suitable in the future.
- Computel aims at the medium-sized and large sized users ; a minimum charge of £200 per month is applied.

KEY PRODUCTS AND SERVICES

- Services are divided into :
 - Computel Business Systems (CBS) ; essentially a suite of payroll, stock control, ledger, invoicing and management information, which were developed by ACT and which are run at night on the ICL 1904S.
 - Special industry packages for the construction and civil engineering industries (the former developed by Richard Costain Ltd, the latter by John Mowlem & Co Ltd).
 - A series of products developed by outside sources, most notable amongst which are :
 - * ROBOT (Database System) from Software Sciences
 - * PERT developed by Computel from ICL's original

- * SPSS (Statistical package) developed by Chicago University
- * FILETAB (file inquiry) developed by the NCC
- * Highway design suite developed by the Dept. of the
Environment
- * EASANAL (finite element analysis) developed by an
engineering consultancy
- * ICL's Applications Library

- ICL 2960 computer workshop time for newly signed 2900 users who can simulate, preprogramme and test their own programs before delivery of their own machine.
- Timesharing on the ICL 1904 S with some remote batch and overnight batch.

- Languages offered include : COBOL, FORTRAN, ALGOL, 68, RPG II, BASIC, CORAL 66, PLAN, JEAN and FORCON.

COMPUTER HARDWARE

- This consists of one main machine dedicated to the interactive and remote batch services, which is also used for overnight batch processing : ICL 1904S, 256K memory, 12 x 60MB disks, 16 magnetic tape units (8 each of 9 and 7 track), three fast printers and a card reader.
- The 2900 computer workshop runs on the 2960 which is charged out at £150 per hour of prime time and £100 per hour at all other times.
- A DEC PDP 11/34 is used for on-line data collection from up to 16 terminals at a time. The disks are used as the data transfer media to the ICL 1904S.

STAFF

- Out of 100 total staff, 24 are in sales and marketing. The total turnover per head in 1976 was £14.4K, well ahead of the UK average of £12.5K.

IV - THE UK MARKET FOR ICL BUREAUX

SECTION IV

THE UK MARKET FOR ICL BUREAUX

A - Estimated Market Size and Growth

- The total UK market for Bureaux services is penetrated by ICL-equipped Bureaux only to the extent of 23% ; this compares with an ICL "hardware share" (by number of vendors) of 40%.

TOTAL UK AND ICL BUREAUX MARKET SIZES (1977)

	BATCH	REMOTE BATCH	INTERACTIVE	OTHER	TOTAL
Total UK	£101M	£40M	£28M	£79M	£248M
ICL-based	£ 29M*	* 6M*	£ 4M*	£18M	£ 57M
ICL share	29%	15%	14%	23%	23%

- Consistent with ICL's weakness in the telecommunications systems areas, ICL-equipped Bureaux have only a small share of the Remote Computing Services market. (*N.B. these figures are based on the proportions of revenue earned for each type of service by Baric and Computel with the top 1500 companies ; they may not be accurate for the total market and all suppliers).
- ICL Bureaux are predictably stronger on Batch services ; if they were stronger on Remote Computing Services, their overall share of the market would be comparable with the ICL hardware share.
- With the advent of the 2900 series this picture is being improved. Baric, for example, almost exclusively Batch-based to date, intends to install a 2970 shortly, which will offer a mix of Batch and Interactive services.
- Those ICL Bureaux which remain solely in Batch services (e.g. Baric) will lose market share due to the small relative growth rate of Batch in the UK compared with Remote Computing services :

UK GROWTH RATES (1976-1977)

BATCH 6%	REMOTE BATCH 10%	INTERACTIVE 29%
-------------	---------------------	--------------------

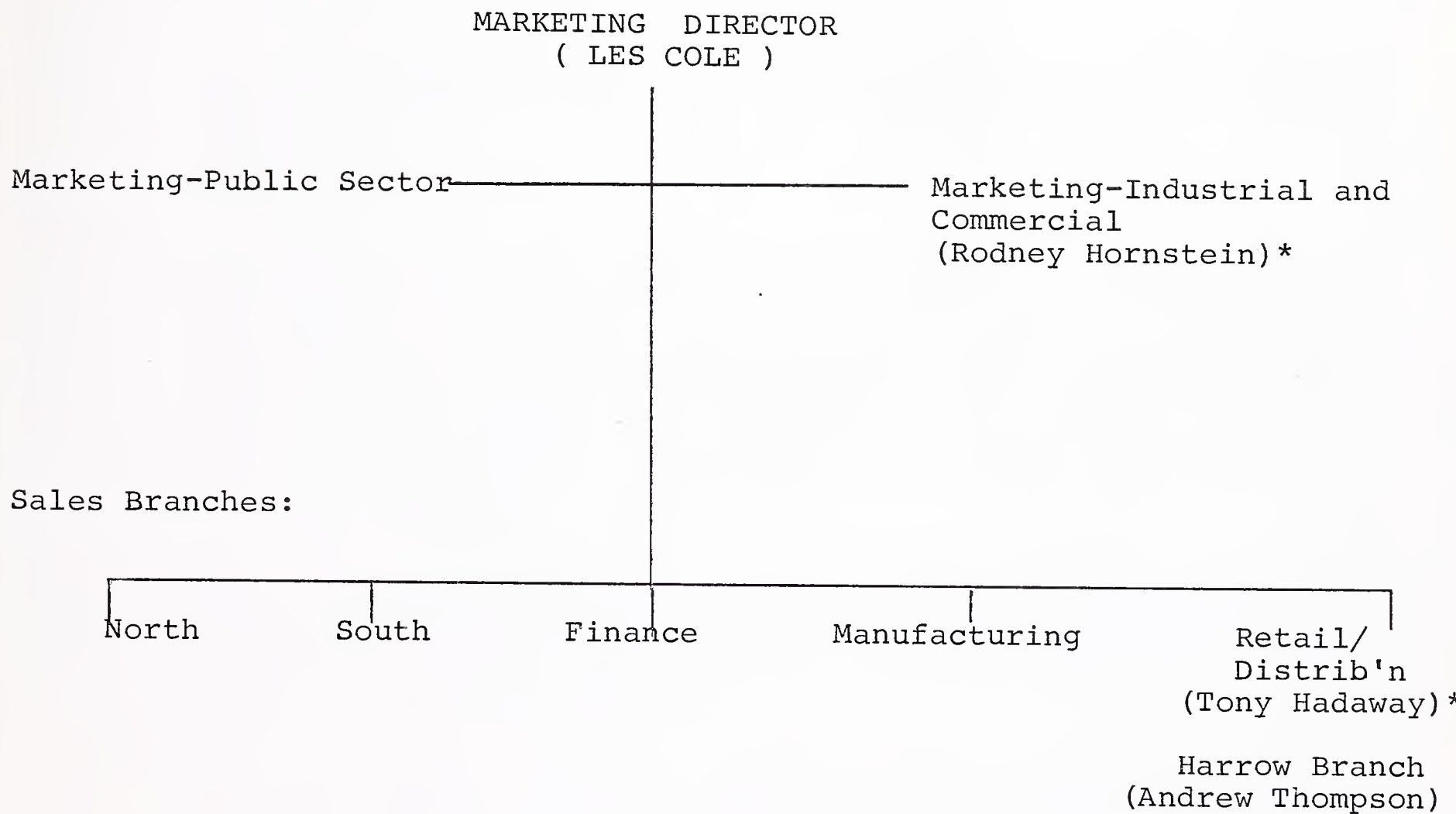
- For ICL-equipped Bureaux offering Remote Batch and/or Interactive services, the opportunity exists to at least equal the Batch share of the total UK market. Were this to be achieved, an additional £9.7M could accrue to the revenue of ICL Bureaux.

B - ICL as a Supplier and Supporter

- ICL claims to be more flexible in its dealings with Bureaux. Since (according to ICL) "Bureaux cannot estimate future capacity requirements well" they are prepared to change delivery dates and configuration specifications during the order period ; additionally, they are prepared to "put earmarks on machines" in advance of formal orders.
- After installation ICL treats its Bureaux customers like any others except that they recognise that the better Bureaux are shop windows for ICL ; for these Bureaux they are prepared to work harder.
- Conversely, ICL is sensitive to being misled as they were in the case of the Brandon "2900 conversion factory" ; this was a "bad experience for ICL" who considers that they were "lead up the garden path" and did not get good exposure - not least of all because IBM machines were being used.
- Joint development of application software is attractive to ICL ; it must, of course, be a commercial proposition. Several such projects have been completed including :
 - SAFES, a production control package developed with Safecomputing (a Chubb subsidiary).
 - SLIM, a distribution and stock control package developed with McAuto.

- Jointly developed packages where ICL has put up part of the development cost attracts a royalty.
- Joint development of systems and operating software is more attractive to ICL, indeed they say that there is "considerable scope" for joint work in this area. The major Bureaux (BOC and Computel included specifically) "have not done much so far".
- BOC are considered to have the best system software team for the 2900 outside ICL itself.
- ICL does not devote any specific part of its organisation to the promotion and support of Bureaux. Instead they prefer to develop a business relationship through a regional or industry branch. For example, Baric is handled by the Finance Branch and Computel by the Southern Branch. In SCICON's case they are included with their parent company in the Retail and Distribution Branch which includes petro/chemical companies. Exhibit 3 outlines ICL's sales and marketing structure.
- ICL does have "commercial directives" for conducting business with Bureaux ; these are required for the "bad end of the Bureaux market".
- ICL does not supply 2900 systems development/program testing services and has no facilities any longer for this purpose.

ICL'S SALES AND MARKETING STRUCTURE



The division contains 250 people. Branches include salesmen and systems engineers on their strength.

*Discussions held with these people.

Exhibit 10

C. MARKET OPPORTUNITIES

1. CONVERSION

- 2900 conversion work and related opportunities are primarily dependant on the installation rate of new machines and the systems software aids supplied by ICL.
- The 2900 order book currently stands at more than 200 machines valued at £250M. Less than half have been delivered (in fact £110M worth).
- Sales of all ICL machines this year (up to September) will be 21% higher than the previous year which showed a growth of 28%. The proportion (by value and units) of 2960's and above will be 40% in the current year and was 24% in the previous year. Thus, the 2900 series is becoming increasingly important in ICL's development.
- ICL's marketing strategy is to concentrate on converting 1900 and System 4 users to 2900, which emphasises the need for conversion assistance and aids.
- 1900 and System 4 emulators are available in two forms depending on the size of 2900:
 - DME is available on the 2950 and 2960; although its use degrades the performance of a 2900 it is nevertheless claimed to be significantly faster than the replaced machines job for job. DME will not operate concurrently with VME/B and each is usually operated in a separate shift. 80% of 2950/60 users are operating DME.
 - BMEEP is the emulator for systems larger than the 2960 (except 2972/74/76) and it can run concurrently with VME/B. BMEEP is more degrading than VME and not many customers are using it.
- Alternate shift operation of DME (for production) and VME (for development/production) is difficult for most installations; straightforward production on a 2960 with program conversion/development or an outside bureau machine is more economical than

upgrading for capacity and concurrency - according to ICL.

- Since ICL does not provide program testing facilities 2900 time for this purpose must be found on either the users own machine or from external and geographically convenient machines. Bureaux and others offering services with 2900's are located as follows:

BOC Datasolve,	1 x 2970, Feltham
Computel,	1 x 2960, Bracknell
Compower,	1 x 2970, Doncaster
Dataskill,	1 x 2970, Reading
W.H.Smith & Sons	1 x 2960, 1 x 2970, Swindon
Telecomputing	1 x 2950 (1979) Oxford
Univ. of Southampton	1 x 2970, Southampton
Vickers Mgt. Services	1 x 2960, Newcastle

- An alternative would be on-line program development and this would be particularly attractive to most users since the number of 2900 equipped bureaux is small. ICL provides a range of system software to accomplish compilation, test running and debugging from a terminal and this is (according to BOC Datasolve) widely used and works well.

2. GOVERNMENT WORK

- 30% of 2960's and 85% of 2970's go to users in government and nationalised industry. On the face of it therefore government would appear to offer substantial opportunity.
- BOC who are probably the leading 2900 equipped bureau (in terms of equipment configuration and software expertise) have very few government customers on their client list. Indeed ICL feel that selling raw machine time to government is a "dead loss"; the reason for this is that plenty of spare time is available within government departments to ensure mutual support. Local government is excluded from this view since they are more cost conscious, but their budgets by the same token are very thin.

- Opportunities for 2900 conversion and other work are only possible with specialised services as opposed to raw time. Scicon's previous experience with Bureau West would seem to be an excellent foundation for selling into government departments, quite apart from the multitude of other government contacts.
- Assistance at an ICL/BP level seems unlikely. In earlier discussion between BP and Chris Wilson, the latter is reported to have been "non-committal".

3. OTHER OPPORTUNITIES.

- Although the 2900 market is in full flood ICL recognise the trend towards distributed systems and the effect that this will have on mainframes. The 2900 range will continue to be enhanced but applications effort is more likely to be invested in remote machine systems.
- A trend towards DDP implies availability of more communication hardware and software - a traditional ICL weakness. Scicon with an impressive record of achievement in operating system development, front ends and interfacing could make a major contribution with two objectives. First, the necessary software could be developed with ICL money and revenue could be gained from subsequent sales. Second, Scicon would then be able to offer remote batch facilities to remote client sites with, for example, mini computers - a service not yet available from any other 2900 bureau.
- Recent INPUT studies in the UK indicate that the best potential for new business for computer services and equipment companies lies in:

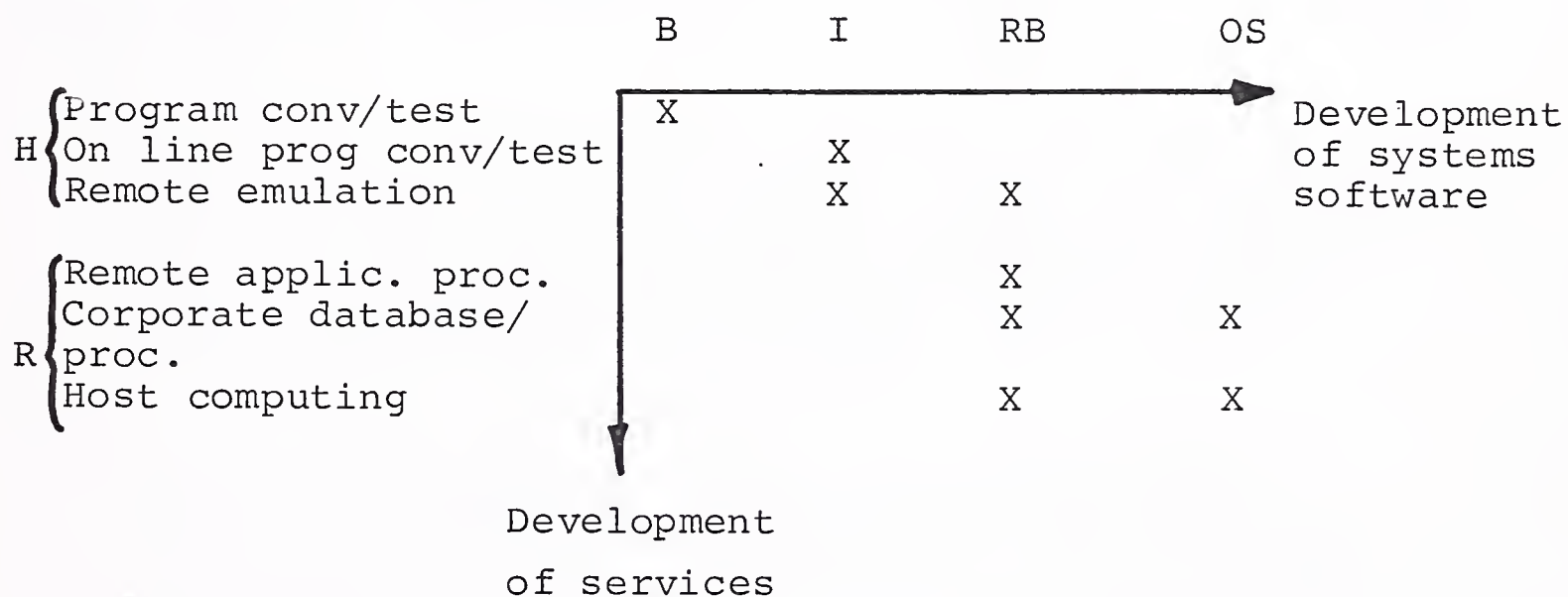
INDUSTRY	APPLICATION AREA
Vehicles	Production control
Transport & Communication	Inventory control
Shipbuilding & Marine Eng.	Marketing/Sales
Timber, Furniture Etc.	Financial Anal./Planning
Electrical Engineering	
Food, Drink and Tobacco.	

- Assuming that SCICON is to adopt the trend towards "on-site systems" these are the industries and application areas for which to develop application software ; presumably ICL would be eager to participate if the remote equipment were to be the 2904 or 2950. (Note: an INPUT report has just been completed which analyses the top ten US Computer Services companies who offer or will offer "on-site hardware").
- The Remote Computing approach so far outlined could also be applied to the establishment, (or in the case of existing SCICON branches), the enhancement of branch offices.
- With around 70 ICL equipped Bureaux, about half of which are privately owned and of branch size sufficient acquisitions to create a national branch coverage should be possible.
- Replacement of aging 1901 and 1902 installations with remote connected minis under an FM contract could be an attractive alternative, for small companies, to the upheaval and expense involved in a conventional upgrading process.

D. POTENTIAL REVENUE AREAS AND MARKET SHARE

1. DEVELOPMENT OF REVENUE POTENTIAL

- On grounds of higher growth and lack of potent competition from other ICL equipped bureaux the opportunity area must be in remote computing services. Development of the means to provide these services should be on an evolutionary basis which enables new services to be offered with each step in the extension of systems software:



Legend: H - Services for new 2960/70 installations which should be considered as host sites for future distributed systems.
 R - Services based on minis (eg 2904, 2950?) for local applications processing with host features to support a network and handle big core/mass storage tasks.

- A batch program conversion/testing service for 2960/70 users in the immediate MK area would be relatively simple means of generating early revenue (nearest 2960/70 bureaux 60+ miles away); an on line service would offer a better and more convenient facility for users and would enable a much larger geographic area to be covered. Systems software required to enable the connection of a large number of programmer work stations to the central system.

- To enable users to limit their hardware investment to production and normal level of program-development work a remote emulation service whereby existing 1900 and S/4 programs could be run (off site would be worth researching). (The chances are that the programs would continue to be run in this way; long term obsolescence being more likely than short term conversion).

- On site minis linked back to the centre offer several possibilities given that the user continues to have the illusion of independence and that back up processing at the centre is transparent to him. Two examples of on site computing are:
 - Daily application processing against local files and/or bureau host machine mounted; peaks, for example week/month/year end automatically handled at the centre after local pre-processing.

 - Corporate database processing when distributed between host and remote depending on file activity; the problem to be solved is that of optimum balance between local processing cost and host processing plus communications cost in a dynamic database situation. (Codysl are working on this one!)
A solution to this problem would enable users at remote sites to enjoy rapid access to the majority of their data whilst keeping house room to a minimum for local hardware.

- Professional services should accompany all of the above services to generate additional revenue, provide application support and to advise users on a continuing basis on how to map hitherto untouched areas with computer systems. Installation set up (eg Bureau West) could be promoted in a determined fashion with excellent prospects of maintaining a heavyweight team of professionals.

- An FM approach should be developed which gives the user the satisfaction of his own (and controllable by him) small machine with most of the good Scicon features.

- The systems software and service development could be largely or wholly financed by ICL and by BP for their 1900 series conversion, replacement and/or back-up.

2. POTENTIAL REVENUE AREAS AND GROWTH

- o The development of services described above could be objectively applied to the industrial/application areas with the best potential:

INDUSTRY	APPLICATION AREA			
	Production Control	Inventory Control	Marketing/Sales	Fin. Anal/Planning
Vehicles	X	X	X	X
Transport & Commun.	X	X	X	X
Shipbuilding etc.	X	X		
Timber Furniture			X	
Electrical Eng.	*	*	*	
Food Drink etc.			X	*

- o The X's in the above table indicate that the majority of companies (in the top 1500) are active in and foresee growth in their usage of computer systems in these application areas. The asterisks indicate relatively little activity in these application areas but foresee much increased activity in the use of computer systems; in this latter case there will be more marketing effort required to initially sell the need.
- o The full revenue potential for a large 2970 configuration is probably in the region of £1.5M to £2.0M per year; each distributed or on site mini attached could attract an additional £200,000 per year. Thus, on very approximate figures (all INPUT estimates), a 2970 bureau operation with on site machines connected could probably generate £2M - £4M. In addition further revenue could be earned from professional services and FM related to each site.

At present market values a revenue of £4M would give a 7% share of the ICL bureau market and increase Scicon's share of the total market by 1.6%.

A P P E N D I X 1

D I R E C T O R Y O F I C L B U R E A U X

1978

Directory of Computer Services Companies

Company ADP Automatic Data Processing

Address Management Dynamics Division

Heathrow House, 5th Floor, Bath Road, Cranford, Hounslow, Middx.

Telephone (01) 759 9191

Contact B. Fitsall Title Sales Manager

Managing Director B. Tytherleigh

Offices also in Manchester - where there is a 2903 (on-line to London-based 1903T).

Acquired in 1977

Associated with

Turnover Year Growth %

Employees Total 106 Operations Sales 3

Owned by ADP Inc. (U.S.A)

EDP equipment

ICL 1903T 1905

- Services offered: [checked] Standard progr. (local), [checked] Custom services (local), [checked] Data entry, [checked] Payroll, [checked] General accounting, [checked] Inventory control, [checked] Industry specialised

- Product categories: [checked] Inventory control, [checked] Industry specialised

Name industry speciality All Sectors

Other products Mainly batch processing for standard programs.

1978

Directory of Computer Services Companies

Company AD SERVE COMPUTING LTD,

Address 30-36, Foley St.,

LONDON W1P 7LB

Telephone (01) 637 9031

Contact G.R. BROOKS Title Sales Director

Managing Director D.B. Shine (Chairman)

Offices also in Subsidiaries : - ABCO Ltd (payroll company)

- AKP Service Bureau Ltd (Data Prep)

LEWISHAM

Associated with _____

Turnover Group: £250,000 Year 1977 Growth % _____

Employees Total 20 Operations _____ Sales 1

Owned by Private (D.B. Shine/G.R. Brooks)

EDP equipment • ICL 2903

• Reality

Services offered Time sales Custom services (local)

Standard progr. (local) Remote batch in 1978 perhaps

Time sharing in 1978 Data entry

Mgt. consulting Facilities management

Software packages Other

Product categories Payroll General accounting

Inventory control Industry specialised

Name industry speciality • Advertising agencies (Press, TV, work-in progress)

• Sales, purchase, nominal ledgers

• Poster advertising and radio

Other products • RPG

• Est. Oct 1971

INPUT

1973

Directory of Computer Services Companies

Company ADVANCED COMPUTER SERVICES LTD

Address London House, 5-11 London Rd
MAIDSTONE Kent

Telephone Maidstone (0622) 58289

Contact Charles Francis Title Sales Manager

Managing Director F.R. Allen

Offices also in _____

Year Estab. 1968

Associated with _____

Turnover £250,000 (E) Year 1977 Growth % _____

Employees Total _____ Operations _____ Sales _____

Owned by _____

EDP equipment ICL 1901 A Data Prep. Cards, Paper Tape

- Services offered Time sales Custom services (local)
- Standard progr. (local) Remote batch
- Time sharing Data entry
- Mgt. consulting Facilities management
- Software packages Other Data Preparation Contract Programme

- Product categories Payroll General accounting
- Inventory control Industry specialised

Name industry speciality Subscription Accounting

Plant register (CCA linked to exposure draft 18)

Production censi

Other products Accounting Purchase Ledger

Sales Ledger Nominal Ledger

INPUT

1978

Directory of Computer Services Companies

Company ALPHA SYSTEMS LTD
Address COMPUTER CENTRE 5, Goldington Rd
BEDFORD
Telephone Bedford (0234) 50552
Contact Mrs. Sale Title _____
Managing Director A.E. Sale
Offices also in _____
Year Estab. 1968
Associated with _____
Turnover £96,000 Year _____ Growth % _____
Employees Total 14 Operations _____ Sales _____
Owned by Privately
EDP equipment ICL 1909
Burroughs B700
ABS Multibus

Services offered Time sales Custom services (local)
 Standard progr. (local) Remote batch
 Time sharing Data entry
 Mgt. consulting Facilities management
 Software packages (few) Other Compiler writing
Product categories Payroll General accounting
 Inventory control Industry specialised

Name industry speciality _____
Manufacturing, Transportation, Distribution, Banking,
Insurance, Education, Government.

Other products Sales Ledger, Nominal Ledger, Purchase Ledger

INPUT

1978

Directory of Computer Services Companies

Company APPLIED COMPUTER TECHNIQUES LTD

Address 6, Vicarage Rd.,

Edgbaston, Birmingham 15 3ES

Telephone (021) 4542151

Contact R.K. FOSTER Title _____

Managing Director R.K. FOSTER

Offices also in Bristol, Leicester, London (3)

Hales owen

Associated with _____

Turnover £2.2M Year 1977 Growth % 65

Employees Total 150 Data entry 40 ; Production 54 ; Systems/Progr. 30
Operations Admin : 20 Sales 6

Owned by Private

EDP equipment 2X ICL 1901 T

ICL 2904

ICL 1902 A

D.G. NOVA

Services offered Time sales Custom services (local)

Standard progr. (local) OCR Remote batch

Time sharing Data entry

Mgt. consulting ACT (Computers Ltd Facilities management

Software packages ICL Other Turnkey ACT (Computers Ltd

Product categories Payroll General accounting

Inventory control Industry specialised

Name industry speciality Mainly manufacturing, Transportation, Retailers.

Other products Formed in 1965, ACT has over 1000 users

INPUT

1973

Directory of Computer Services Companies

Company APT COMPUTER SYSTEMS LTD

Address 5A Cuthbert St.,
LONDON W2

Telephone (01) 262 2444

Contact I. Patterson Title _____

Managing Director A.C. Stevens

Offices also in _____
Estab. 1972

Associated with Kendal Computer Services Ltd (separate entry)

Turnover £400,000 with Year 1977 Growth % 40-50%
Kendal

Employees Total 17 Operations Tech. 15 Sales Admin. 2

Owned by _____

EDP equipment ICL system 220
Singer System 10

- Services offered Time sales Custom services (local)
- Standard progr. (local) Remote batch
- Time sharing Data entry
- Mgt. consulting Facilities management
- Software packages Other Hardware Refurbisher

- Product categories Payroll General accounting
- Inventory control Industry specialised

Name industry speciality Publishers Manufacturing
Wholesalers Photographics

Other products _____

1978

Directory of Computer Services Companies

Company ARDEN DATA PROCESSING

Address Municipal Officer Charles St.
LEICESTER Leics.

Telephone Leicester (0533) 22255

Contact David Hollis Title Managing Director

Managing Director David Hollis

Offices also in _____

Year Estab. 1974

Associated with Port Computer Services - Port Washington, USA

Turnover £200,000 (E) Year 1977 Growth % _____

Employees Total 16 Operations _____ Sales _____

Owned by Privately

EDP equipment Data Prep : Paper tape card (80 Col)
ICL 1901 A

OEM for Xerox Diablo and Commodore PET

Services offered Time sales Custom services (local)

Standard progr. (local) Remote batch

Time sharing Data entry

Mgt. consulting Facilities management

Software packages **Other** Turnkey Systems consulting

Product categories Payroll General accounting

Inventory control Industry specialised

Name industry speciality Finance, textiles, shoes, plastics

Other products _____

INPUT

1973

Directory of Computer Services Companies

Company AUTOMATIC INFORMATION MANAGEMENT LTD (AIM)

Address St. Mary's Court, Lowgate,

HULL HU 1 1PX

Telephone (0482) 25891

Contact A.J. Beharrell Title Sales

Managing Director C.T.S. TELFER

Offices also in Bradford, Newcastle, Dublin

Associated with _____

Turnover £1,675,000 (E) Year _____ Growth % _____

Employees Total 134 Operations _____ Sales 5

Owned by William Jackson & Sons (100%)

EDP equipment ICL 190 3T

ICL 190 3A

12 X Digico

ICL 2903

Services offered

Time sales

Custom services (local)

Standard progr. (local)

Remote batch

Time sharing

Data entry

Mgt. consulting

Facilities management

Software packages

Other

Product categories

Payroll

General accounting

Inventory control

Industry specialised

Name industry speciality Professional Services (lawyers)

Credit finance (consider themselves leaders)

Other products _____

INPUT

1978

Directory of Computer Services Companies

Company BARIC COMPUTING SERVICES LTD

Address Forest Road,
FELTHAM Mddx TW13 7EJ

Telephone (01) 890 1414 Telex 934056

Contact John Kirby Title Marketing Manager

Managing Director P.B. Holland

Offices also in Letchworth, Forest Gate, Bristol, Birmingham, Cardiff,
Leeds, London, Crewe, Kidsgrove, Manchester, Corby
East Kilbride, Belfast

Associated with _____

Turnover £6.8M Year 1977 Growth % 12

Employees Total 770 Data Prep/contr : 250
Operations 110 Sales 70

Owned by ICL 60%/Barclays 40%

EDP equipment 5 X ICL 1904 S + numerous ICL key edit, 7503,
5 X ICL 1903 T 8950, 7903 and 7905
2 X ICL 2904
2 X ICL 1905
2 X ICL 1902 T

Services offered Time sales Custom services (local)
 Standard progr. (local) Remote batch
 Time sharing Data entry
 Mgt. consulting Facilities management
 Software packages Other

Product categories Payroll General accounting
 Inventory control Industry specialised

Name industry speciality Phototypesetting
COM
Pipe stressing
Pension accounting
Share issues (e.g. BP)

Other products Began operations in 1970

INPUT

1978

Directory of Computer Services Companies

Company BEAUFORT COMPUTER SERVICES LTD

Address Renslade House, Whitfield Str.
GLOUCESTER GL1 1PG

Telephone Gloucester (0452) 36062

Contact Peter Brooks Title Marketing Manager

Managing Director D.A. Tolman

Offices also in _____

Associated with _____

Turnover £1,062,500 (E) Year _____ Growth % _____

Employees Total 85 Operations _____ Sales _____

Owned by Schlessinger European Investments

EDP equipment • ICL 1902 T Data Prep : Cards
Paper tape

- Services offered Time sales Custom services (local)
- Standard progr. (local) Remote batch Recruitment
Training
- Time sharing Data entry Mini-computers
Sales to include
- Mgt. consulting Facilities management software pack.
- Software packages Other Data Preparation
- Product categories Payroll General accounting Turnkey
(ICL 1500 for
- Inventory control Industry specialised insurance
brokers)

Name industry speciality Finance
Insurance

Other products _____

INPUT

1978

Directory of Computer Services Companies

Company BOC COMPUTER SERVICES

Address Datasolve House, 99 Staines Road West
Sunbury - on - Thames. Middx.

Telephone Sunbury-on-Thames 85566 Tlx: 8811720

Contact R.B. WALLHOUSE Title MARKETING MANAGER
DR. DOUG A. EYEIONS DIRECTOR EXT. RELATIONS
N. KITE PR MGR.

Managing Director B. W. MILLS

Offices also in LONDON

Associated with _____

Turnover £9,600,000 Year 1976-1977 Growth % 35-40%

Employees Total 800 Operations _____ Sales _____

Owned by BOC LTD, subsidiary of BOC International

EDP equipment
o IBM 370/152 (2) o ICL 2970
o IBM 360/50 o ICL 1904 A (2)
o IBM 360/40 (2) o ICL 1902 (3)
o Honeywell 615 o Amdahl 470/V6

Services offered Time sales Custom services (local)
 Standard progr. (local) Remote batch
 Time sharing Data entry
 Mgt. consulting Facilities management
 Software packages Other

Product categories Payroll General accounting
 Inventory control Industry specialised

Name industry speciality Ratio of work for BOC to external work:
25% : 75%

Other products Network planning: Micrographics: Systems Designs & Processing;
Dedicated Transaction Processing; Graphics & Design
Mailing, Distributed Processing data base.

Began operations in 1964.

INPUT

1978

Directory of Computer Services Companies

Company Boeing Computer Centres Ltd,
Address 31-35, Clarendon Road,
Watford Herts, WD1 1JA
Telephone Watford (0923) 38321
Contact Howard Shapper Title Sales Manager
Managing Director Peter Hooper
Offices also in Luton
Watford (2)
Associated with _____
Turnover £0.75 M Year 1977 Growth % _____
Employees Total 75 Operations _____ Sales 12
Owned by Boeing 100%
EDP equipment ICL 1904A
 Prime 400
 GCS -2100
 IBM 370/168 (3)
Services offered Time sales Custom services (local)
 Standard progr. (local) Remote batch
 Time sharing Data entry
 Mgt. consulting Facilities management
 Software packages Other DB
Product categories Payroll General accounting
 Inventory control Industry specialised
Name industry speciality Manufacturing
 Financial/Professional institutes
Other products Address mailing APL, Financial modelling/budgeting
 Subscription accounting

INPUT

1978

Directory of Computer Services Companies

Company Cambridge Computer Services Ltd,

Address Jupiter House Station Rd

Cambridge

Telephone (0223) 66111

Contact Mike Tissier Title Sales Manager

Managing Director Dr D. P. Bilby

Offices also in London

Peterborough

Birmingham (2)

Associated with Geest Computer Services Ltd

Turnover £0.65 M Year 1977 Growth % 15

Employees Total 60 Data preparations 15 Programmes: 15
Operations 10 Sales 6

Owned by Geest Organisation

EDP equipment ICL 1903A

(ICL compatible terminals)

Texas 990/10

- Services offered
- Time sales
 - Custom services (local)
 - Standard progr. (local)
 - Remote batch
 - Time sharing
 - Data entry
 - Mgt. consulting
 - Facilities management
 - Software packages
 - Other Data preparation

- Product categories
- Payroll
 - General accounting
 - Inventory control
 - Industry specialised

Name industry speciality Motor Industry

Building Industry

Newspaper publishing

Other products Manufacturing (electronic engineering)

Began in 1966

INPUT

1978

Directory of Computer Services Companies

Company Centrefile Ltd

Address Boundary House, 18-22 Furnival St
London EC4

Telephone (01) 405 8700

Contact Alasdair Taylor Title Manager technical Services+ Planning

Managing Director B.S. Duggan

Offices also in Manchester
London (2)

subsidiaries Management Computing Services Ltd; Centre file (Northern) Ltd
~~Associated with~~

Turnover £4,762,500 (E) Year _____ Growth % _____
Consultants: 7 Data Prep: 38 Data Control: 24 Prog: 78

Employees Total 381 Operations 30 Sales 21 Admin: 160

Owned by National Westminster (100%)

EDP equipment IBM 370/155 (3)
 DEC PDP/11 (6)
 ICL 1904A
 Honeywell 3200; 1250; 2x 6400

Services offered Time sales Custom services (local)
 Standard progr. (local) Remote batch
 Time sharing Data entry
 Mgt. consulting Facilities management
 Software packages Other

Product categories Payroll General accounting
 Inventory control Industry specialised

Name industry speciality Building societies ; stockbrokers
 Legal profession ; Departement Stores ; HP
 Civil Engineering & Building (Northern)

Other products Payroll P.O.S.
 Began operations in 1965

INPUT

1973

Directory of Computer Services Companies

Company Channel Data Processing (Jersey) Ltd

Address 108, Halkett Place
St Helier Jersey CI

Telephone Jersey (0534) 24333

Contact R.Day Title Marketing Director

Managing Director Dr R.A.Challinor

Offices also in NONE

Year Est. 1971

Associated with None

Turnover £187,500 (E) Year _____ Growth % _____

Employees Total 15 Operations _____ Sales _____

Owned by Privately

EDP equipment • ICL 2904

Largely a software house ?

Services offered Time sales Custom services (local)

Standard progr. (local) Remote batch

Time sharing Data entry

Mgt. consulting / systems software Facilities management

Software packages Other

Product categories Payroll General accounting

Inventory control Industry specialised

Name industry speciality Knitwear- Production Scheduling

T.V. Advrtising Scheduling

Horticultural/Agricultural-Statistics & Accounts

Other products Airports/Harbours-Statistics & Accounts .Sales,mailing,
Insurance Brokers-Renewals &Accounts , purchase, nominal ledger

INPUT

1973

Directory of Computer Services Companies

Company Charringtons Computer Services Ltd

Address Charringtons House , The Causeway

Bishops Stortford Herts CM23 2EW

Telephone Bishops Stortford (0279) 55166

Contact M.A.Charlton Title Computer Manager

Managing Director V.E.Glasswell

Offices also in None

Year Est. 1971

Associated with _____

Turnover £42,500 (E) Year _____ Growth % _____

Employees Total 33 Data Preparation 15
Operations 8 Admin 3 Sales 4 Customer 3
Support

Owned by Coalite Charrington Ltd

EDP equipment ICL 1902T Data Prep: Cards

Key to tape

Paper ~~/~~ tape

- Services offered
- Time sales
 - Custom services (local)
 - Standard progr. (local)
 - Remote batch
 - Time sharing
 - Data entry
 - Mgt. consulting
 - Facilities management
 - Software packages (not for sale)
 - Other Data preparation
- Product categories
- Payroll
 - General accounting
 - Inventory control
 - Industry specialised

No speciality:
Name industry speciality _____

Manufacturing, Transportation, Construction,
Distribution, Banking/Finance, Insurance, Education,
Govt.

Other products Sales Ledger Assets Accounting Computerised mailing

Purchase Ledger Nominal Ledger

INPUT

1973

Directory of Computer Services Companies

Company Clydeport Data Management Ltd

Address Computer Centre King George V Dock

Glasgow G51 4SD Scotland

Telephone 041 445 3326

Contact W. McGowen Title Sales Manager
Director/General Manager:

~~Managing Director~~ R. J. L. Russell

Offices also in None

Year est 1971

Associated with None

Turnover £ 337,500 (E) Year _____ Growth % _____

Employees Total 27 Operations -3 Progs/Anals -6 Sales Admin 5 Data Control 5 Driver-I

Owned by Clyde Port Authority

EDP equipment 1CL 2904

Redifon Seecheck for input

- Services offered Time sales Turnkey Custom services (local)
- Standard progr. (local) Remote batch (planned)
- Time sharing Data entry
- Mgt. consulting Facilities management
- Software packages Other Data preparation - Papertape Mag. tape
- Product categories Payroll General accounting
- Inventory control Industry specialised

Name industry speciality Ports - accounting

Other products Asset register

Invoicing

INPUT

1978

Directory of Computer Services Companies

Company COMPOWER LIMITED

Address Walsall Road,
Cannock, West Midlands.

Telephone (05435) 2511

Contact Eric Thomas Title Gen. Mgr. Marketing

Managing Director R.A. Hitchcock

Offices also in (Please see separate sheet for locations and the equipment
in each location). In addition to the computer centres, there
are marketing offices in Glasgow and Huthwaite (nr. Mansfield, Notts)

Associated with _____

Turnover	<u>£14,000,000+</u>	Year <u>To March 1978</u>	Growth % <u>17 - 18%</u>
		Systems Prog. <u>250</u>	Mgt./Admin. <u>50</u>
Employees	Total <u>c 1000</u>	Operations <u>650</u>	Sales <u>50</u>

Owned by National Coal Board (100%)

EDP equipment _____
(see separate sheet)

Services offered Time sales Custom services (local)
 Standard progr. (local) Remote batch
 Time sharing Data entry
 Mgt. consulting Facilities management
 Software packages Other

Product categories Payroll General accounting
 Inventory control Industry specialised

Name industry speciality All Sectors
(800 customers)

NCB work: approx. 70%; external work approx. 30%

Other products see reverse

INPUT

1978

Directory of Computer Services Companies

COMPUTER CENTRES:

	<u>Eqpt.</u>
Head office: Cannock	IBM 3033 IBM 370/158
Edinburgh	ICL 1903A IBM 360/30
Gateshead.	IBM 360/40 ICL 1904S
Lowton, Warrington	ICL 1904A
Doncaster	IBM 370/158 ICL 2970
Tredomen (Wales)	IBM 360/50

Proportion of use of IBM to ICL: 50/50

All centres except Lowton also have IBM 1287 Optical Character Recognition machine.

All centres are inter-connected via 48 kilobaud wide-band transmission circuits.

PRODUCTS

Securities Management
Profit Investment management
Road transportation earnings
Vehicle costing
Vehicle maintenance and contract hire
Production control
Project control
Vehicle Parts Distribution
Technical products

Commercial
Products

Also have their own training school

1978

Directory of Computer Services Companies

Company COMPUTEL LTD

Address Eastern Rd

BRACKNELL Berks

Telephone Bracknell (0344) 23031

Contact Kris Wicka Title Marketing Executive

Managing Director W.B. Cousins

Offices also in none

Year Estab. 1969

Associated with

Turnover £1.44M Year 75/76 Growth %

Employees Total 100 Operations Sales

Owned by Richard Costain Ltd, John Mowlem & Co Ltd

EDP equipment ICL 1904 S

ICL 2960

Services offered

- Time sales, Custom services (local), Standard progr. (local), Remote batch, Time sharing, Data entry, Mgt. consulting, Facilities management, Software packages, Other

Product categories

- Payroll, General accounting, Inventory control, Industry specialised

Name industry speciality Construction-project planning

Other products Financial modelling - Statistical packages -

Database management

INPUT

1978

Directory of Computer Services Companies

Company COMPUTER ASSESSMENTS LTD

Address Richmond House Lavender Walk

LEEDS 9 Yorks

Telephone Leeds (0532) 456707

Contact P.A. Riggall Title Senior Programmer

Managing Director R.E. Riggall

Offices also in _____

Year Estab. 1968

Associated with David Craighead & Partners - Insurance consultants

Turnover £312,500 (E) Year _____ Growth % _____

Employees Total 25 Operations _____ Sales _____

Owned by Privately

EDP equipment _____

ICL 2904

- Services offered Time sales Data preparation : Cards
 Standard progr. (local) Custom services (local)
 Time sharing (considering) Remote batch
 Mgt. consulting (insurance) Data entry
 Software packages (insurance) Facilities management
 Payroll Other Systems consulting
 Inventory control General accounting
 Industry specialised

Name industry speciality Insurance

Other products _____

1978

Directory of Computer Services Companies

Company COMPUTER DATA PROCESSING LTD
Address Computer Centre, Oakfield House
Perrymount Rd,
HAYWARDS HEATH, W. Sussex

Telephone Haywards Heath (0444)

Contact _____ Title _____

Managing Director _____

Offices also in _____

Year Estab. 1968

Associated with COMPUTAPRINT

Turnover £2,5M (E) Year _____ Growth % _____

Employees Total 200 Operations/tech. 180 Sales Management 20

Owned by IPC BUSINESS PRESS

EDP equipment 2 ICL 4/72

Services offered Time sales Custom services (local)

Standard progr. (local) Remote batch

Time sharing Data entry

Mgt. consulting Facilities management

Software packages Other

Product categories Payroll General accounting

Inventory control Industry specialised

Name industry speciality Printing
Publishers - subscription service

Other products _____

INPUT

1978

Directory of Computer Services Companies

Company COMPUTER DATA SERVICE (NORTHERN) LTD

Address 50, Brunswick Rd
SHEFFIELD S. Yorks

Telephone (0742) 25775

Contact D.G. Taylor Title Sales/Marketing Mgr.

Managing Director P. Greenwood

Offices also in Worksop
Doncaster

Year Estab. 1970

Associated with GRIMOLDBY DATA SERVICES LTD

Turnover £500,000 Year _____ Growth % _____

Employees Total 54 Operations 35 Sales 2

Owned by Henry Wigfall & Son Ltd Rutland Rd Sheffield

EDP equipment 128K ICL 1903 T : 5 EDS 60 Mag Tape ; paper Tape
Cards ; Comms.

Services offered Time sales Custom services (local)

Standard progr. (local) Remote batch

Time sharing Data entry

Mgt. consulting Facilities management

Software packages Other

Product categories Payroll General accounting

Inventory control Industry specialised

Name industry speciality HP/Rental Accounting

Other products _____

INPUT

1978

Directory of Computer Services Companies

Company COMPUTERLINE LTD

Address Station Rd

Addlestone WEYBRIDGE Surrey KT15 2PW

Telephone Weybridge 40298

Contact W.N.J. Pears Title Managing Director

Managing Director S.P.J. Rowe W.N.J. Pears

Offices also in _____

Year Estab. 1971

Associated with The Plessey Company Ltd. (who own and operate the computers)

Turnover £400,000 Year July 1977 Growth % 20%

Employees Total _____ Operations _____ Sales _____

Owned by Privately

EDP equipment • ICL 1906 S

• ICL 1906 A

- Services offered Time sales Custom services (local)
- Standard progr. (local) Remote batch
- Time sharing Data entry
- Mgt. consulting Facilities management
- Software packages (don't sell) Other Transaction processing

- Product categories Payroll General accounting
- Inventory control Industry specialised

Name industry speciality Engineers

Manufacturing - production control

Travel agents - booking system

Other products Financial modelling

PERT, Finite element analysis

INPUT

1978

Directory of Computer Services Companies

Company COMPUTER SERVICES (SOUTH WEST) LTD

Address Millbay Rd

PLYMOUTH Devon

Telephone Plymouth (0752) 68814

Contact F.G. Knight Title Managing Director

Managing Director F.G. Knight

Offices also in none

Year Estab. 1967

Associated with _____

Turnover £250,000 Year Dec 1977 Growth % _____

Employees Total 40 Operations _____ Sales _____

Owned by Public company

EDP equipment ICL 1901 T

Diablo 3200

Services offered Time sales Market Diablo mini (agents)

Standard progr. (local)

Custom services (local)

Time sharing

Remote batch

Mgt. consulting

Data entry

Software packages

Facilities management
 Other Data preparation -
Cards - paper tape

Product categories

Payroll

General accounting

Inventory control

Industry specialised

Name industry speciality Construction - valuation & contract costing
Accountants - Time recording

Other products _____

INPUT

1978

Directory of Computer Services Companies

Company COMPUTERSKILLS LTD

Address Blue Bridge Lane
YORK YO1 4AS

Telephone (0904) 20555

Contact C. Melia, ACIS MBCS Title Commercial Director

Managing Director E. Goodwill

Offices also in _____

~~Year estab. July 1970 ; name changes in meantime however~~

Associated with _____

Turnover £ 300,000 (E) Year _____ Growth % _____

Employees Total _____ Operations _____ Sales _____

Owned by Alne Brick Co Ltd

EDP equipment ICL 1901 T 48K, 6 x 20 Kc magnetic tapes (2 controls)
3 x EDS 60, 1 600 1 pm Line Printer, 1 x 300 1 pm line
Printer, 300 cps paper tape reader, Communications Equip-
ment and Terminals

Services offered Time sales Custom services (local)
 Standard progr. (local) Remote batch
 Time sharing Data entry
 Mgt. consulting Facilities management
 Software packages Other

Product categories Payroll General accounting
 Inventory control Industry specialised

Name industry speciality Manufacturing (industrial) mainly but cover a variety
of industries.

Other products _____

INPUT

1978

Directory of Computer Services Companies

Company CONSTRUCTION COMPUTING LTD

Address Darley Dale
Matlock Derbyshire DE4 3AF

Telephone Darley Dale (062983) 4257

Contact M.E. Fleming Title _____

Managing Director M.E. Fleming

Offices also in none

Year Estab. 1971

Associated with none (£160,000 hardware)

Turnover £ 250,000 Year _____ Growth % £500,000 incl.

Employees Total 35 Syst/prog 7 hardware
Operations 8 Data prep 14 Sales 3 Man 3

Owned by Privately

EDP equipment Bureau Turnkey
ICL 1902 A OEM for DEC
DEC PDP II
Redifon Seecheck

Services offered Time sales Turnkey
 Standard progr. (local) Custom services (local)
 Time sharing Remote batch
 Mgt. consulting Data entry
 Software packages Facilities management
 Other

Product categories Payroll General accounting
 Inventory control Industry specialised

Name industry speciality Only for Building, civil engineering contractors
- complete service including :
Site costing. Estimating. Plant management
Valuations

Other products _____

INPUT

1978

Directory of Computer Services Companies

Company COUNTY COMPUTER CENTRES (OXFORD) LTD

Address Forestry House Gt. Milton Oxon

Telephone Gt. Milton (08446) 777

Contact D. Parks Title Managing Director

Managing Director D. Parks

Offices also in

Year Estab. 1973

Associated with none

Turnover £500,000 (E) Year Growth %

Employees Total 40 Operations Sales

Owned by The Economic Forestry Group (part owned)

EDP equipment ICL 1902 A (upgrading to 2904 in Oct/Nov 1978)

- Services offered: Time sales, Custom services (local), Standard progr. (local), Remote batch, Time sharing, Data entry, Mgt. consulting, Facilities management, Software packages, Other Data Preparation - cards. Tape 7+9 track, Key to disk, Product categories: Payroll, General accounting, Inventory control, Industry specialised

Name industry speciality Printing-costing, work in progress

Other products General commercial accounts

INPUT

1978

Directory of Computer Services Companies

Company CRL ABACUS

Address 48 Queens Rd
COVENTRY CV1 3EH Warwicks

Telephone Coventry (0203) 58089

Contact C.W.G. Harris Title _____

Managing Director Joint General Managers Ian Pye, Tony Yates

Offices also in London
Manchester
Leeds

Associated with CRL BUREAU, FACILITIES MANAGEMENT LTD, RECRUITMENT & RESOURCES LTD
~~CRC INTERNATIONAL~~

Turnover £1,875,000 (E) Year _____ Growth % _____

Employees Total 150 Operations _____ Sales _____

Owned by Computer Resources Group Ltd MDs David Whitehead
Ian Orrock

EDP equipment _____
● ICL 2903
in Coventry
● IBM 51/10

- Services offered Time sales Custom services (local)
- Standard progr. (local) Remote batch
- Time sharing Data entry
- Mgt. consulting Facilities management
- Software packages Other Systems + Software consultancy
- Product categories Payroll General accounting
- Inventory control Industry specialised

Name industry speciality _____

Other products General commercial work.

INPUT

1978

Directory of Computer Services Companies

Company CROSS COMPUTER GROUP LTD

Address Barry House, 20-22 Worple Rd
WIMBLEDON LONDON SW19 4DH

Telephone (01) 947 7411

Contact J.C. Shingleton Title Marketing Manager

Managing Director P.J. Cross

Offices also in none

Year Estab. 1969

Associated with WILLIAMS + CROSS LTD- bureau, CROSS COMPUTER MANAGEMENT LTD

Turnover £360,000 (E) Year _____ Software Consultants _____ Growth % _____

Employees Total 30 Anal/prog - 17 Operations 7 Sales Consults/Mans 6

Owned by Privately

EDP equipment ICL 2904
(to be replaced late 1978)
OEM

Services offered Time sales Turnkey (mini + small mainframe)
 Custom services (local)
 Standard progr. (local) Remote batch
 Time sharing (planned) Data entry
 Mgt. consulting Facilities management
 Software packages (Reinsurance only) Other Systems Consulting

Product categories Payroll General accounting
 Inventory control Industry specialised

Name industry speciality Reinsurance Local government

Other products General commercial + accounting

INPUT

1978

Directory of Computer Services Companies

Company DATA NETWORKS (COMPUTER BUREAUX) LTD

Address Moor St.

BRIERLEY HILL West Midlands

Telephone Brierley Hill (0384) 76221

Contact D.M. Homer Title Operations Manager

Managing Director R. Hayhurst E. Blazier

Offices also in Colchester - (Data preparation)

Year Estab. 1970

Associated with none

Turnover £750,000 (E) Year _____ Growth % _____

Employees Total 60 Data Prep - 20 Technical - 30
Operations 10 Sales _____

Owned by Privately

EDP equipment 3 • ICL 1903

OEM for Cincinatti Milacron mini

- Services offered Time sales Custom services (local)
- Standard progr. (local) Remote batch
- Time sharing Data entry
- Mgt. consulting Facilities management
- Software packages Other Data Preparation -
key to disk
- Product categories Payroll General accounting
- Inventory control Industry specialised

Name industry speciality Builders + plumbers merchants - accounting

Other products Sales Ledger - Purchase Ledger - Invoicing

Price books

INPUT

1978

Directory of Computer Services Companies

Company DATA SCIENCES INTERNATIONAL LTD

Address sheepscair St South

LEEDS W. Yorks LS7 1AW

Telephone (0532) 41541

Contact S.L. Valdez Title Marketing Director

Managing Director DENTON Y. SMITH

Offices also in Leeds - Birmingham - Manchester

Year Estab. 1962

Associated with

Turnover £1,750,000 Year Dec. 1977 Growth % 23%

Employees Total 200 Prog -40 Ops - 40 Data control - 36 Data Prep 40 Operations Admin. 25 Sales 19

Owned by BARR + WALLACE ARNOLD TRUST 100%

EDP equipment 3 ICL 1904S, 1903T 1903A

- Services offered: Time sales, Custom services (local), Standard progr. (local), Remote batch, Time sharing, Data entry, Mgt. consulting, Facilities management, Software packages, Other

- Product categories: Payroll, General accounting, Inventory control, Industry specialised

Name industry speciality Motor Trade Estate Agents, Garment Trade Engineering Production Control, Retail Trade

Other products Mailing Systems

1978

Directory of Computer Services Companies

Company DATASKIL LTD

Address Reading Bridge House Reading Bridge Approach

READING Berks RG1 8PN

Telephone (0734) 581258

Contact D. BOXSHALL, Alec BURNS Title Marketing Manager

Managing Director R.V. HOLLEY

Offices also in Wilmslow Paris

Edinburgh The Hague

Associated with

Turnover £ 12,500,000 (E) Year Growth %

Employees Total 1000 + Operations Sales

Owned by ICL 100%

EDP equipment 2 ICL 2900 Model 70

2 ICL 1903 T

1 ICL 2903

1 SINGER System 10 o System 1500

x Turnkey

Services offered [checked] [x] Time sales [x] Custom services (local)

[x] Standard progr. (local) [x] Remote batch

[] Time sharing [] Data entry

[x] Mgt. consulting [x] Facilities management (2900)

[x] Software packages [x] Other Contract staff-operat.

Product categories [checked] [] Payroll (sell package) [] General accounting

[] Inventory control (sell package) [x] Industry specialised

Name industry speciality Banking, retail distribution, vehicle scheduling

Hotel reservation, (Estate agents package, G.P.s systems

Magistrate court system - under development)

Other products Database (IDMS), Stock/Production Control (BOM- Complete S)

Financial Planning (PROSPER)

(TPM) Tele-processing Manager, Information Retrieval Pack.

INPUT

1978

Directory of Computer Services Companies

Company DON COMPUTER SERVICES LTD

Address Livesey St.
SHEFFIELD S6 2AP S. YORKS

Telephone Sheffield (0742) 349391

Contact Derek Greenwood Title SystemsManager

Managing Director General Manager J.F. Whidborne

Offices also in none

Year Estab. 1973

Associated with none

Turnover £250,000 (E) Year _____ Growth % _____

Employees Total 20 Operations _____ Sales _____

Owned by George Basset Holdings Ltd

EDP equipment • ICL 1903 A

Int: Ext:

Most work is internal to the group 98% - 2%

Services offered Time sales Custom services (local)

Standard progr. (local) Remote batch

Time sharing Data entry

Mgt. consulting Facilities management

Software packages (payroll) Other Data preparation - key to disk

Product categories Payroll General accounting

Inventory control Industry specialised

Name industry speciality Retail. Co-operatives. Chain Stores.
(Geo. Basset - Confectionery - Distribution service)

Other products _____

INPUT

1978

Directory of Computer Services Companies

Company DONOGHUE INFORMATION SYSTEMS LTD

Address Shenstone Drive
Aldridge West Midlands

Telephone Aldridge (0922) 56955

Contact T.P. Jackson Title Bureau Manager

Managing Director L. Gwynne

Offices also in Ireland
Manchester - facilities management at Oldham Batteries
Year Estab. 1972

Associated with none

Turnover £562,500 (E) Year _____ Growth % _____

Employees Total 45 Technical 16
Operations 10 Data Prep 9 Sales Other 10

Owned by Privately

EDP equipment 3 • ICL 2903

Services offered Time sales Custom services (local)

Standard progr. (local) Remote batch

Time sharing Data entry

Mgt. consulting Facilities management

Software packages Other Data Preparation - CMC 150 Key to disk

Product categories Payroll General accounting

Inventory control Industry specialised

Name industry speciality _____

Other products Purchase Ledger Order processing
Nominal Ledger - Sales Ledger - Invoicing

INPUT

1973

Directory of Computer Services Companies

Company DUPORT COMPUTER SERVICES LTD

Address Sedgley Rd. East

TIPTON West Midlands DY4 7RT

Telephone (21) 557 4922

Contact Colin Brown Title Marketing Manager

Managing Director D.M. Kelson

Offices also in none

Year Estab. 1972

Associated with COMBYTE SOFTWARE MARKETING LTD

Turnover £1,250,000 (E) Year _____ Growth % _____

Employees Total 100 Operations _____ Sales _____

Owned by The Duport Group

EDP equipment ICL 1904 S

ICL 1903 S

Services offered

Time sales

Custom services (local)

Standard progr. (local)

Remote batch

Time sharing

Data entry

Mgt. consulting

Facilities management

Software packages

Other Data Preparation -
InterScan Key to disk

Product categories

Payroll

General accounting

Inventory control

Industry specialised

Name industry speciality Furniture manufacturers - 2 dimensional cutting to
minimise loss

Exhibition enquiry service

Other products

On-line data capture & remote printing

INPUT

1978

Directory of Computer Services Companies

Company GALDOT COMPUTING

Address The Galdot Centre 52, Brighton Rd

SURBITON Surrey

Telephone (01) 399 1300

Contact A.M. Keene Title Managing Director

Managing Director A.M. Keene

Offices also in _____

Year Estab. 1971

Associated with _____

Turnover £90,000 Year 76/77 Growth % _____

Employees Total 6 Operations _____ Sales _____

Owned by Private

EDP equipment ICL 1903 32K

Services offered

Time safes

Custom services (local)

Standard progr. (local)

Remote batch

Time sharing

Data entry

Mgt. consulting

Facilities management

Software packages

Other

Product categories

Payroll

General accounting

Inventory control

Industry specialised

Name industry speciality Membership mailing for clubs + societies

Contact mailing for businesses

Other products _____

INPUT

1978

Directory of Computer Services Companies

Company GMS COMPUTING LTD

Address PO BOS 14-4 Smithfield House Blonk St.
SHEFFIELD S1 2BU S.Yorks

Telephone Sheffield (0742) 730191

Contact Charles Smith Title Senior Sales Executive

Managing Director Martin Chatwin

Offices also in none

Year Estab. 1974

Associated with none

Turnover £580,000 Year 1976/77 Growth % 25%

Employees Total 63 Technical - 31
Operations 16 Data Prep 7 Sales Adm/Man 9

Owned by The Johnson & Firth Brown Group special steel/original

EDP equipment 1 • IBM 370/138
3 • ICL 2903/4
2 • Inforex 7000

Services offered Time sales computer output Custom services (local)
 Standard progr. (local) Remote batch
 Time sharing Data entry
 Mgt. consulting Facilities management
 Software packages (as service) Other Data Preparation -
also sell Inforex key to disk

Product categories Payroll General accounting
 Inventory control Industry specialised

Name industry speciality Steel industry - melt optimisation, die stock opti-
misation - bar cutting, sheet cutting
Pensions administration

Other products Production control - Founry/Forging/Steel Making
Fixed asset accounting

INPUT

1978

Directory of Computer Services Companies

Company GRAMPIAN COMPUTER FACILITIES LTD

Address Whitemyres Avenue

ABERDEEN AB9 2YY Scotland

Telephone Aberdeen (0224) 692903

Contact A.R. Peters Title D.P. Manager

Managing Director I.C. Greig

Offices also in none

Year Estab. 1970

Associated with _____

Turnover £500,000 Year _____ Growth % _____

Employees Total 50 Data Prep 20 Operations 14 Control 5 Sales _____
Systems 7 Adm. 4

Owned by The Aberdeen Construction Group

EDP equipment • ICL 1902 A

• ICL 2903

• ICL 2904

Services offered

Time sales

Custom services (local)

Standard progr. (local)

Remote batch

Time sharing

Data entry

Mgt. consulting

Facilities management

Software packages

Other

Product categories

Payroll

General accounting

Inventory control

Industry specialised

Name industry speciality Construction - Integrated system -

Whisky - Integrated warehouse control

Other products Commercial packages - Communications

INPUT

1978

Directory of Computer Services Companies

Company GRANDMET INFORMATION PROCESSING LTD

Address Wyvern Way Rockingham Rd

UXBRIDGE Mddx

Telephone Uxbridge 58111

Contact Mrs. D. A. Shermer Title PR Executive

Managing Director L. F. Green

Offices also in none

Year Estab. 1972

Associated with none

Turnover £1,250,000 (E) Year Growth %

Employees Total 100 Operations Sales

Owned by Grand Metropolitan Group

EDP equipment 2 ICL 1903 T 2 IBM 370/145

1 AS5 (ITEL)

(IBM 3031 due in October to replace the current ICL and IBM Machines)

Services offered

- Time sales, Custom services (local), Standard progr. (local), Remote batch, Time sharing, Data entry, Mgt. consulting, Facilities management, Software packages, Other

Product categories

- Payroll (Packages), General accounting, Inventory control, Industry specialised

Name industry speciality Food, Drink and Leisure industries.

Retail.

Other products Note : The service offered will change with the new machine in October

INPUT

1978

Directory of Computer Services Companies

Company HADRIAN COMPUTER SERVICES LTD

Address Northumbria House Samson Close

Killingworth NEWCASTLE-Upon-Tyne

Telephone Newcastle (0632) 685506

Contact J.A. Moodie Title General Manager

Managing Director J.D. Weightman

Offices also in Nottingham (projected : Dublin and Bristol)

Year Estab. 1969

Associated with SYSTEM 800 LTD

Turnover £562,500 (E) Year _____ Growth % _____

Employees Total 45 Technical 35 Operations 10 Sales none

Owned by CATTLES (HOLDINGS) LTD

EDP equipment • ICL 2903

• Philips P350 - Philips P410 - Philips P320

IBM Series 1 • IBM 5110 - System 32 - System 800

Services offered Time sales Custom services (local)(main business)

Standard progr. (local) Remote batch

Time sharing Data entry

~~Mkt.~~ Systems Facilities management

Software packages Other Computer supplies

Product categories Payroll General accounting

Inventory control Industry specialised

Name industry speciality HP Accounting - Retail stores

Other products General commercial accounting

INPUT

1978

Directory of Computer Services Companies

Company HEYWOOD & PARTNERS LTD

Address 30 Exchange St. East

LIVERPOOL L2 3QB

Telephone (051) 236 0881

Contact G.K. Long Title Computer Manager

~~Managing Director~~ Partners

Offices also in None

Year Estab. 1975

Associated with none

Turnover £475,000 (E) Year _____ Growth % _____

Employees Total 38 Technical 28
Operations 6 Sales 4

Owned by Duncan Fraser - actuaries

EDP equipment • ICL 2904

Specialise in software development

- Services offered Time sales Custom services (local)
- Standard progr. (local) Remote batch
- Time sharing Data entry
- Mgt. consulting Facilities management
- Software packages Other

- Product categories Payroll (Pensions) General accounting
- Inventory control Industry specialised

Name industry speciality Pension fund administration

Other products _____

INPUT

1978

Directory of Computer Services Companies

Company INDEPENDENT COMPUTER SERVICES LTD

Address Queens Rd

BELFAST BT3 9DT N. Ireland

Telephone Belfast (0232) 56435

Contact D. Laird Title Manager-Sales

Managing Director T. Winter

Offices also in Dublin - 18 Claremont Pl.

Cork - Mayfield

Year Estab. 1967

Associated with Centrefile Ltd - National Westminster Group

Turnover £1,875,000 (E) Year Growth %

Employees Total 150 Operations 60 Sales 10

Owned by Ulster Bank - which is part of Nat. West. Group

EDP equipment i) Batch bureau ICL 2904

ii) Time-link 4 DEC PDP 11/70 (2 in Belfast, 1 Dublin 1 Cork)

iii) End user machines - sell hardware - Turnkey service for DEC on mini range

OEM for Digital Eqpt co. DEC OEM

x Turnkey (m/cs)

Services offered [x] Time sales [x] Custom services (local)

[x] Standard progr. (local) [x] Remote batch

[x] Time sharing [x] Data entry

[x] Mgt. consulting [x] Facilities management

[x] Software packages [x] Other Data preparation - CMC key to disk

Product categories [x] Training education [x] General accounting

[x] Payroll

[x] Inventory control [] Industry specialised

Name industry speciality

Other products Commercial accounting & scientific applications

Member of ADAPSO

INPUT

1978

Directory of Computer Services Companies

Company INTEGRATED COMPUTER SYSTEMS LTD

Address PO BOX 2
REIGATE Surrey

Telephone Reigate 48400

Contact R.M. Ball Title Managing Director

Managing Director R.M. Ball

Offices also in Offices and agents at various places in UK

Year Estab. 1966

Associated with REIGATE COMPUTER CENTRE, 40-44 Church Street, Reigate

Turnover £250,000 Year _____ Growth % _____

Employees Total 14 Operations Techn. 13 Sales Man/Ad. 1

Owned by Privately

EDP equipment • ICL 2903

Chartered secretaries - specialising in integrated
accounting systems - conforming to established
accounting practice & auditors trailing

Services offered Time sales Custom services (local)

Standard progr. (local) Remote batch

Time sharing Data entry

Mgt. consulting Facilities management

Software packages Other Turnkey

Product categories Payroll General accounting

Inventory control Industry specialised

Name industry speciality Specialised consultancy in construction,
manufacturing and distribution industries and the
professions

Other products Note : Data transmission network throughout the UK and
many countries overseas

INPUT

1973

Directory of Computer Services Companies

Company INTER-CITY COMPUTER BUREAU LTD

Address 12 Brunswick St.

LEICESTER LE1 2LL Leics.

Telephone Leicester (0533) 27781

Contact A.J. Corbett Title Director

Managing Director M.N. Cockayne

Offices also in none

Year Estab. 1969

Associated with none

Turnover £300,000 Year March 1978 Growth % 20%

Employees Total 40 Techn. 6 Operations 9 Data Prep 16 Sales 2 Man/Adm. 3 Engineers 3

Owned by Privately

EDP equipment 3 • ICL 1903

• ICL 1500 (intelligent terminal)

- Services offered: Mailing service, Time sales, Standard progr. (local), Time sharing, Mgt. consulting, Software packages, Payroll, Inventory control, turnkey, Custom services (local), Remote batch, Data entry, Facilities management, Other Data Preparation - Cards - key to tape, General accounting, Industry specialised

Name industry speciality Wholesale distribution/pharmaceuticals-on-line orders Civil engineers - integrated accounting entry

system including payroll & labour costing

Other products Computerised direct mailing - Payroll

1978

Directory of Computer Services Companies

Company JANEEN SERVICES LTD

Address 10-11 Crescent

LONDON EC3

Telephone (01) 709 9640

Contact S. Wesil Title Deputy Ops Manager

Managing Director P. Valentine

Offices also in _____

Year Estab. 1972

Associated with _____

Turnover £375,000 (E) Year _____ Growth % _____

Employees Total 30 Operations _____ Sales _____

Owned by HOGG ROBINSON GROUP (Insurance)

EDP equipment ICL 1902 T

- Services offered Time sales Custom services (local)
- Standard progr. (local) Remote batch
- Time sharing Data entry
- Mgt. consulting Facilities management
- Software packages Other Data Preparation
- Product categories Payroll General accounting
- Inventory control Industry specialised

Name industry speciality _____

Other products _____

INPUT

1978

Directory of Computer Services Companies

Company K.B.S. COMPUTER SERVICES

Address State Insurance Bldg 14, Dale St.
LIVERPOOL L2 4TH

Telephone (051) 236 7711

Contact L.A. Brown Title Placement Manager

Managing Director A. Bowes

Offices also in Coventry and London

Year Estab. 1969

Associated with _____

Turnover £350,000 (E) Year _____ Growth % _____

Employees Total 50 Operations 40 + _____ Sales - 10

Owned by Private (Mr. Bowers)

EDP equipment ICL 2903
Olivetti 730

Services offered Time sales Custom services (local)

Standard progr. (local) Remote batch

Time sharing Data entry

Mgt. consulting Facilities management

Software packages not their own Other

Product categories Payroll General accounting

Inventory control Industry specialised

Name industry speciality All sectors - mainly commercial
Training specialists for industry and Government
under training OPP Scheme

Other products Application packages

INPUT

1978

Directory of Computer Services Companies

Company KENDAL COMPUTER SERVICES LTD

Address Kendal House 8, Lodge Drive Palmers Green
LONDON N1S 5LB

Telephone (01) 882 2055

Contact P.H. Barnett Title Sales Manager

Managing Director A. Kendal A.I.D.P.

Offices also in _____
Year Estab. 1962

Associated with A.P.T. COMPUTER SYSTEMS LTD

Turnover £400,000 (with Year _____ Growth % 40-50%

Employees Total 50 (incl. ^{APT} part time) Operations 35 Tech. Dir. 2 Sales Adm. 7

Owned by _____

EDP equipment 5 • ICL System 10s

- Services offered Time sales Custom services (local)
- Standard progr. (local) Remote batch
- Time sharing Data entry key to disk
- Mgt. consulting Facilities management
- Software packages Other
- Product categories Payroll General accounting
- Inventory control Industry specialised

Name industry speciality Publishing Light Engineering
Clothing Manufacturing - Furniture Manufacturing

Other products _____

INPUT

1978

Directory of Computer Services Companies

Company MILLS ASSOCIATES LTD

Address Wonastow Road

MONMOUTH, Wales NP5 4YE

Telephone 0600 2131 and 4611

Contact John Chapman Title Sales Manager

Managing Director R.G. Mills

Offices also in Total 10 bureaux

Year Estab. 1962

Associated with _____

Turnover (group) £1,500,000 Year May 1978 Growth % c. 40%

Employees group Total c. 180 Operations c. 120 Sales c. 40

Owned by Privately

EDP equipment • ICL 1900 Series
(mainly 1903s, 1902s)

- Services offered Time sales Custom services (local)
- Standard progr. (local) Remote batch
- Time sharing Data entry
- Mgt. consulting Facilities management
- Software packages Other

- Product categories Payroll General accounting
- Inventory control Industry specialised

Name industry speciality General accounting services. Insurance records.
Private schools accounting system ;
Deeds of Covenant - Quantity surveying -

Other products _____

INPUT

1973

Directory of Computer Services Companies

Company DOUGLAS MOORE LTD

Address 169, London Rd

KINGSTON Surrey KT2 6PA

Telephone (01) 549 2121

Contact J. DIXON Title Sales Manager

Managing Director R.A. Hazelton

Offices also in Wembley - Beckenham - Southampton

Zutphen (Holland)

Year Estab. 1976

Associated with

Turnover £1,000,000 Year 1977 Growth %

Employees Total 120 Operations 60 Sales 14

Owned by Private Ltd Co

EDP equipment ICL 1901 A ICL 1901 T KL 190/A

ICL 1903 A IBM 360/30

Services offered

- Time sales, Standard progr. (local), Time sharing, Mgt. consulting, Software packages, Custom services (local), Remote batch, Data entry, Facilities management, Other

Product categories

- Payroll, Inventory control, General accounting, Industry specialised

Name industry speciality

Other products

1978

Directory of Computer Services Companies

Company MULTIPLE ACCOUNTING SERVICES (MAS) LTD

Address Bank Chambers 16A Market Place
CHIPPING NORTON, OX7 5NA

Telephone (0608) 2900

Contact J.F. Birtles Title M.D.

Managing Director J.F. Britles

Offices also in York

Year Estab. 1965 (limited since 1977)

Associated with

Turnover £120,000 Year 1977 Growth % 25%

Employees Total 20-25 Operations Sales

Owned by Private

EDP equipment SINGER/ICL 1500

- Services offered Time sales Custom services (local)
- Standard progr. (local) Remote batch Batch Process
- Time sharing Data entry
- Mgt. consulting Facilities management
- Software packages Other Data Preparation
- Product categories Payroll General accounting
- Inventory control Industry specialised

Name industry speciality Farms and agricultural companies, mainly.
Some commercial organisations also

Other products Speciality : Bookkeeping service for small companies

1978

Directory of Computer Services Companies

Company NATIONAL DATA PROCESSING SERVICE

Address Tenter House 45, Moorfields
LONDON EC2Y 9TH

Telephone (01) 432 9191

Contact J.R. Mabey Title Sales Manager

Managing Director J.L. Howells

Offices also in LEEDS

Year Estab. 1968

Associated with _____

Turnover £1,250,000 (E) Year _____ Growth % _____

Employees Total c 100 Operations 75 Sales 25

Owned by Post Office Machines belong to GPO

EDP equipment *ICL 2980 (x2); ICL 2970 (x2); (2) GEC 4080
IBM 370/168 (4) GEC 2050
System 4 ICL (x12) ICL U326 (x10)

*By end of 1978: BurroughsB5500 (2) 95% GPO work
ICL 2960 (x2) 5% external work

Services offered Time sales Custom services (local)
 Standard progr. (local) Remote batch
 Time sharing Data entry
 Mgt. consulting Facilities management
 Software packages Other

Product categories Payroll General accounting
 Inventory control Industry specialised

Name industry speciality All sectors

Other products _____

INPUT

1978

Directory of Computer Services Companies

Company PATERNOSTER COMPUTER SERVICES (FELTHAM) LTD

Address Astronaut House Hounslow Rd

FELTHAM Mddx TW14 9AD

Telephone (01) 751 0908

Contact H. NORTON Title Company Secretary

Managing Director D.M. Downie

Offices also in none

Year Estab. 1972

Associated with _____

Turnover £300,000 (E) Year _____ Growth % _____

Employees Total 24 Operations 19 Tech 5 Sales _____

Owned by Charterhouse Group

EDP equipment ICL 1903 T

- Services offered Time sales Custom services (local)
- Standard progr. (local) Remote batch
- Time sharing Data entry
- Mgt. consulting Facilities management
- Software packages Other Mangement consulting
- Product categories Payroll General accounting
- Inventory control Industry specialised

Name industry speciality _____

Other products Financial modelling

Account consolidation

INPUT

1978

Directory of Computer Services Companies

Company POLA COMPUTER SERVICES

Address Pola Computer Centre
TILBURY DOCKS Essex RM18 7EH

Telephone Tilbury (03752) 3444

Contact T. Atkin Title D.P. Manager

Managing Director .Computer systems Manager : G.W. Ryle

Offices also in _____
Year Estab. 1969

Associated with _____

Turnover £875,000 (E) Year _____ Growth % _____

Employees Total 70 Techn. 26 Operations 22 Data Prep 13 Sales Adm. 9

Owned by Dept of Port of London Authority

EDP equipment • ICL System 4

Limited service to external clients

- Services offered Time sales Custom services (local)
- Standard progr. (local) Remote batch
- Time sharing Data entry
- Mgt. consulting Facilities management
- Software packages Other

- Product categories Payroll General accounting
- Inventory control Industry specialised

Name industry speciality _____

Other products Note - Phasing out bureau operation for external
clients within the next 18 months

INPUT

1978

Directory of Computer Services Companies

Company RADIUS COMPUTER SERVICES LTD

Address Wykeland House 47, Queen Street

HULL Humberside

Telephone Hull (0482) 227181

Contact Gary Wilson Title Senior Consultant

Managing Director E. Sharp

Offices also in

Year Estab. 1974

Associated with

Turnover £625,000 (E) Year Growth %

Employees Total 50 Tech 20 Operations Sales 2 Man/Admin.

Owned by Privately

EDP equipment Bureau Software House

ICL 2904 specialising in ICL Burroughs IBM + minis

+ Plessey remote light penstations

+ Terminals 7502 + videos, printers etc

x Turnkey (mini + mainframe) x Data Prep - cards,

Services offered [checked] Time sales [checked] Custom services (local) DDE key to disk

x Contract staff [checked] Standard progr. (local) [checked] Training Courses Financial modelling

Data Prep [checked] Time sharing [checked] Remote batch Programming systems

OPS [checked] Mgt. consulting [checked] Facilities management

Progs Analysts [checked] Software packages (use & Sale) [checked] Other Systems consulting

Product categories [checked] Payroll [checked] General accounting

[checked] Inventory control [] Industry specialised

Name industry speciality Retailing/multiple stores

Manufacturing - parts explosion

Other products Note: Software is the most important part of business

Also market Diablo 3200

1978

Directory of Computer Services Companies

Company SHERWOOD COMPUTER CENTRE LTD

Address 11 St. Edwards's Way

ROMFORD Essex

Telephone (70) 24411

Contact Alan Gardiner Title Director

Managing Director T.C. Dicken

Offices also in 180 South St. Romford (Shortly to be integrated into main address)

Year Estab. 1970

Associated with _____

Turnover £1,250,000 (E) Year _____ Growth % _____

Employees Total 100 + Operations 50 + Sales 6

Owned by Private independent

EDP equipment • ICL 1903 T

- Services offered Time sales Data preparation Custom services (local)
- Standard progr. (local) Remote batch
- Time sharing Data entry
- Mgt. consulting Facilities management
- Software packages Other

- Product categories Payroll General accounting
- Inventory control Industry specialised

Name industry speciality Insurance, plus one other client

Other products Systems for : Lloyds of London, Insurance companies
Insurance brokers

Balance work on non technical data

INPUT

1978

Directory of Computer Services Companies

Company W.H. SMITH & SONS

Address Greenbridge Industrial Estate
Swindon, Wiltshire.

Telephone 0793 36271

Contact Alan Halfacre Title Consultant

Managing Director Neil Thomas (M.D. of W.H. Smith & Sons)
(Computer Manager: David Gaylor)

Offices also in _____

Associated with _____

Turnover _____ Year _____ Growth % _____

Employees Total _____ Operations _____ Sales _____

Owned by _____

EDP equipment _____
ICL Dual 2970, 2903
2960
1904S, 2904

- Services offered Time sales Custom services (local)
- Standard progr. (local) Remote batch
- Time sharing Data entry
- Mgt. consulting Facilities management
- Software packages Other
- Product categories Payroll General accounting
- Inventory control Industry specialised

Name industry speciality _____
ICL

Other products _____

INPUT

1978

Directory of Computer Services Companies

Company _____ SOUTHERN COMPUTER LTD _____

Address _____ C/O Clough Smith Ltd Stephenson Way, _____
_____ CRAWLEY, W. Sussex _____

Telephone _____ Crawley (0293) 26156 _____

Contact _____ W.H. Lipyeat _____ Title _____

Managing Director _____ E. Chambers _____

Offices also in _____

Associated with _____

Turnover _____ £37,500 (E) _____ Year _____ Growth % _____

Employees Total _____ 3 _____ Operations _____ Sales _____

Owned by _____ Clough Smith Ltd - electrical contractors _____

EDP equipment _____ ICL 2903 _____

- Services offered _____
- Time sales
 - Custom services (local)
 - Standard progr. (local)
 - Remote batch
 - Time sharing
 - Data entry
 - Mgt. consulting
 - Facilities management
 - Software packages
 - Other Data Prep ; DDE key to disk

- Product categories _____
- Payroll
 - General accounting
 - Inventory control
 - Industry specialised

Name industry speciality _____ Electrical - technical diary for drawing offices _____

Other products _____ Costing _____

INPUT

1978

Directory of Computer Services Companies

Company SYSTEMS AID GROUP

Address West End House 165 Broadway,
SOUTHALL Middx

Telephone (01) 574 5286

Contact D.K. Mitchell Title Director, Customer Serv.

Managing Director N. Waterhouse

Offices also in _____

Year Estab. 1968

Associated with _____

Turnover £275,000 (E) Year _____ Growth % _____

Employees Total 22 Operations 20 Sales 2

Owned by Private partnership

EDP equipment ICL 2903/40

Services offered Time sales Custom services (local)

Standard progr. (local) Remote batch

Time sharing Data entry

Mgt. consulting Facilities management

Software packages Other

Product categories Payroll General accounting

Inventory control Industry specialised

Name industry speciality Travel industry

Animal Breed Registration

Other products TOURPARS - integrated passenger reservations and bookings
administration for travel operators

INPUT

1978

Directory of Computer Services Companies

Company TCS COMPUTER BUREAU LTD

Address 5-7 Albemarle Road
BECKENHAM Kent BR3 2HZ

Telephone (01) 658 3621

Contact E.R. Chalker Title Marketing Director

Managing Director " also chairman

Offices also in Guildford

Year Estab. 1967

Associated with _____

Turnover £450,000 Year 1977 Growth % _____

Employees Total 33 Operations 25 Sales 8

Owned by Privately

EDP equipment Honeywell 1200
ICL 1902 A
Digico M16E

Services offered Time sales Custom services (local)
 Standard progr. (local) Remote batch
 Time sharing Data entry
 Mgt. consulting Facilities management
 Software packages Other

Product categories Payroll General accounting
 Inventory control Industry specialised

Name industry speciality Commerce and Industry (all branches)

Other products Main activity - to write programs for clients - i.e.
no standard packages

INPUT

1978

Directory of Computer Services Companies

Company TELECOMPUTING LTD

Address Seacourt Tower West Way

OXFORD OX2 OED

Telephone (0865) 723621

Contact W.N. Whaley Title Marketing Director

Managing Director C. Howe-Davies

Offices also in Handforth (Nr Manchester) London projected

Year Estab. 1977

Associated with Telecomputing Pacific Pty Ltd., Sydney, Australia.

Telecomputing Products Ltd., Dublin

Telecomputing BV, Amsterdam. Telecomputing Systems (UK) Limited

Turnover £1,200,000 Year 1978 Fiscal Growth % +200%

(with Telecomputing Systems Ltd.)

Employees Total 60 Operations 40 Sales 20

Owned by Privately

EDP equipment ICL 2904

ICL 2950 as at 1979

Services offered Time sales Turnkey Custom services (local)

Standard progr. (local) Remote batch

Time sharing Data entry

Mgt. consulting Facilities management

Software packages Other

Product categories Payroll General accounting

Inventory control Industry specialised

Name industry speciality Specialise in On-line systems

Software development

All sectors with ICL mainframes

Other products TPS - On-line program development system

INPUT

1978

Directory of Computer Services Companies

Company TKT COMPUTER SERVICES LTD

Address Solway Estate
MARYPORT Cumbrid CA15 3NG

Telephone Maryport (090081) 2842

Contact G. McAteer Title Manager systems Develop.

Managing Director I.L. Kerr

Offices also in _____
Year Estab. 1969

Associated with _____

Turnover £140,000 Year April 1977 Growth % _____

Employees Total 15 Operations 10 Systems 4 Sales 1

Owned by Privately

EDP equipment 2 NCR Century
• ICL 2903 (in Sept)

Services offered Time sales Data prep - cards
 Standard progr. (local) Custom services (local)
 Time sharing Remote batch
 Mgt. consulting Data entry
 Software packages Other systems consulting

Product categories Payroll General accounting
 Inventory control Industry specialised

Name industry speciality Clothing manufacturing

Other products General commercial + accounting
payroll package

INPUT

1978

Directory of Computer Services Companies

Company TYGOZE LTD

Address 103-105 Brighton Rd
COULSDON Surrey

Telephone (01) 668 2468

Contact Roy Gamble Title Director

Managing Director Clive Makin

Offices also in _____

Year Estab. 1970

Associated with _____

Turnover £175,000 (E) Year _____ Growth % _____

Employees Total 14 Operations 11 Sales 3

Owned by _____
Privately

EDP equipment _____
ICL 1500
digico M16

Services offered _____ Time sales Custom services (local)

Standard progr. (local) Remote batch

Time sharing Data entry

Mgt. consulting Facilities management

Software packages Other

Product categories _____ Payroll General accounting

Inventory control Industry specialised

Name industry speciality All sectors

Other products Design software - write emulators - stock production
Own purpose built Language & compiler

INPUT

1978

Directory of Computer Services Companies

Company UNIVERSITY OF SOUTHAMPTON COMPUTING SERVICE

Address University Rd Highfield
SOUTHAMPTON S09 5NH

Telephone Southampton (0703) 559122

Contact A. Schulkins Title Head of User services

Managing Director of computing M.W. Sage

Offices also in _____
Year Estab. 1968

Associated with _____

Turnover £ 625,000 (E) Year _____ Growth % _____

Employees Total 50 Operations _____ Sales _____

Owned by _____

EDP equipment ICL 2970

Services offered Time sales Custom services (local)

Standard progr. (local) Remote batch

Time sharing Data entry

Mgt. consulting Facilities management

Software packages Other

Product categories Payroll General accounting

Inventory control Industry specialised

Name industry speciality Technical & scientific
Engineering design/CAD
CAD survey & Statistical analysis

Other products _____

INPUT

1978

Directory of Computer Services Companies

Company VICKERS LIMITED MANAGEMENT SERVICES DIVISION

Address Interlink House, Scotswood Rd
NEWCASTLE-upon-Tyne

Telephone Newcastle (0632) 738891

Contact D.R.T. Thompson Title Operations Manager

Managing Director P.W. Fellows

Offices also in none

Year Estab. 1973

Associated with none

Turnover £1,875,000 (E) Year _____ Growth % _____

Employees Total 150 Prog 40 Techn. Serv. 7
Operations 53 Data Prep 16 Sales 8 Man/ADm 26

Owned by operating division of VICKERS LTD

EDP equipment • ICL 2960

2 • ICL 2904

• ICL 2903

- Services offered turnkey Time sales Computer O/P to microfiche
 Standard progr. (local) Custom services (local)
 Time sharing Remote batch
 Mgt. consulting Data entry
 Software packages (usage and sale) Facilities management
 Other Data prep- key edit
Product categories Payroll General accounting
 Inventory control Industry specialised

Name industry speciality x micrographics-doc reduction
tp microfiche

engineering

Other products Production control

Market hardware/software system for local data

INPUT

1978

Directory of Computer Services Companies

Company WEALDEN COMPUTER SERVICES LTD

Address Bridewell Lane
TENTERDEN KENT TN30 6HS

Telephone Tenterden (05806) 3566

Contact Peter Hubbard Title Computer operations supervisor

Managing Director D.J. Beaton

Offices also in LONDON

Year Estab. 1976

Associated with none

Turnover £110,000 Year 1978 Growth % 20%

Employees Total 25 Anal 2 Prog 6 Operations 2 Adm 13 Sales Punch girls 2

Owned by The Phonotas group Ltd

EDP equipment ICL 2903/30
28K 3 x EDS 30

Services offered Time sales (negotiable) Custom services (local)

Standard progr. (local) Remote batch

Time sharing Data entry

Mgt. consulting (nominal, purchase) Facilities management

Software packages (payroll sales) Other

Product categories Payroll General accounting

Inventory control Industry specialised

Name industry speciality Contract cleaning

Other products General commercial work

INPUT

1978

Directory of Computer Services Companies

Company WOODSOME PARK ASSOCIATES LTD

Address 4 Rowley Lane Fenay Bridge
HUDDERSFIELD HD8 OJG W.Yorks

Telephone Kirkburton (0484 83) 5370

Contact Roger Freeman Title D.P. Manager

Managing Director Malcom Sykes

Offices also in none

Year Estab. 1977

Associated with none

Turnover £175,000 (E) Year _____ Growth % _____

Employees Total 14 + part time consultants Operations _____ Sales _____

Owned by an accountants and an oil company

EDP equipment • ICL 2903

Services offered Time sales Custom services (local)

Standard progr. (local) Remote batch

Time sharing Data entry

Mgt. consulting Facilities management

Software packages Other Data prep - cards
key to disk

Product categories Payroll General accounting

Inventory control Industry specialised

Name industry speciality Accountants

Oil company

Other products _____

INPUT

APPENDIX 2 : DEFINITIONS

● COMPUTER SERVICES

These are services provided by vendors which perform data processing functions using vendor computers, or assist users to perform such functions on their own computers.

The following are definitions of the modes of service used in this report:

● REMOTE COMPUTING SERVICES (RCS)

Provision of data processing to a user by means of terminals at the user's site/s connected by a data communications network to the vendor's central computer. The three sub-modes of RCS are:

1. INTERACTIVE (timesharing) is characterised by interaction of the user with the system, primarily for problem solving timesharing, but also for data entry and transaction processing; the user is "on-line" to the programme/files.
2. REMOTE BATCH is where the user hands over control of a job to the vendor's computer which schedules job execution according to priorities and resource requirements.
3. DATA BASE is characterised by the retrieval of information from a vendor-maintained data base. This may be owned by the vendor or a third party.

● BATCH SERVICES

This includes data processing performed at vendor's sites of user programmes and/or data which are physically transported (as opposed to electronically by telecommunications media) to and/or from those sites. Data entry and data output services, such as keypunching and COM processing, are also included. Batch services include those expenditures by users which take their data to a vendor site which has a terminal connected to a remote computer used for the actual processing.

● FACILITIES MANAGEMENT (FM)

(Also referred to as "Resource Management" or "Systems Management".) The management of all or part of a user's data processing functions under a long-term contract (not less than one year). To qualify as FM, the contractor must directly plan and control as well as operate the facility provided to the user on-site, through communications lines, or in mixed mode. Simply providing resources, even though under a long-term contract and/or for all of a users' processing needs, does not necessarily qualify as FM.

● PROFESSIONAL SERVICES

Management consulting related to EDP, systems consulting, systems design and programming, and other professional services are included in this category. Services can be provided on a basis of: "Time and Materials", whereby the user pays for the time used of an individual on a daily or other fixed rate, or "Fixed Price", where the user pays a fixed fee for a specific task or series of tasks.

● SOFTWARE PRODUCTS

This category is for users' purchases of systems and applications packages for use on in-house computer systems. The figures quoted include lease and purchase expenditures, as well as fees for work performed by the vendor to implement and

maintain the package at the users' sites. Fees for work performed by organisations other than the package vendor are counted in professional services. The two sub-categories are:

1. SYSTEMS PACKAGES are operating systems, utilities, and language routines that enable the computer/communications system to perform basic functions. This software is provided by the mainframe manufacturers with their hardware; other vendors provide improved versions of this and special-purpose routines. This classification includes compilers, data base management software, communications packages, simulators, performance measurement software, diagnostic software, and sorts.
2. APPLICATIONS PACKAGES are software which perform processing to serve user functions. They consist of general purpose packages, such as for accounting and inventory control, and special purpose packages, such as personal trust, airline scheduling, and demand deposit accounting.

● PROCESSING SERVICES

Processing services encompass FM, RCS, and batch services: they are categorised by type of service, as distinguished from mode of service, bought by users as follows:

- GENERAL BUSINESS services are processing services for applications which are common to users across industry categories. Software is provided by the vendor; this can be a complete package, such as a payroll package, or an application "tool", such as a budgeting model, where a user provides much of the customising of the finished product it uses. General business processing is often repetitive and transaction oriented.
- SCIENTIFIC AND ENGINEERING services are the processing of scientific and engineering problems for users across industries. The problems usually involve the solution of mathematical equations. Processing is generally problem solving and is non-repetitive, except in the sense that

the same packages or "tools" are used to address different, but similar, problems.

- INDUSTRY SPECIALITY services provide processing for particular functions or problems unique to an industry or industry group. The software is provided by the vendor either as a complete package or as an application "tool" which the user employs to produce its unique solution. Speciality applications can be either business or scientific in orientation; data base services where the vendor supplies the data base and controls access to it (although it may be owned by a third party) are also included under this category. Examples of industry speciality applications are: seismic data processing, numerically-controlled machine tool software development, and demand deposit accounting.

- UTILITY services are those where the vendor provides access to a computer and/or communications network with basic software that enables any user to develop its own problem solution or processing system. These basic tools include terminal handling software, sorts, language compilers, data base management systems, information retrieval software, scientific library routines, and other systems software.

ABOUT INPUT

INPUT provides planning information, analysis, and recommendations to companies in the information processing industries. Through market research, technology forecasting and competitive analysis, INPUT supports client management in making informed decisions. Continuing services are provided to users and vendors of computers, communications, and office products and services.

The company carries out continuous and in-depth research. Working closely with clients on important issues, INPUT's staff analyze and interpret the research data, then develop recommendations and innovative ideas to meet clients' needs. Clients receive reports, presentations, access to data on which analyses are based, and continuous consulting.

Professional staff have, on average, nearly 20 years experience in the information processing industry. Most have held senior management positions in operations, marketing, or planning. This expertise enables INPUT to supply practical solutions to complex business problems.

Formed in 1974, INPUT has become a leading international consulting firm. Clients include over 100 of the world's largest and most technically advanced companies.

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