Hardware Vendors Response to Independent Maintenance

INPUT®

Digitized by the Internet Archive
in 2014

HARDWARE VENDORS' RESPONSE TO INDEPENDENT MAINTENANCE

HARDWARE VENDORS' RESPONSE TO
INDEPENDENT MAINTENANCE

ABSTRACT

This study examines the response of the major European hardware suppliers to independent maintenance companies competing for customer service revenues in Europe. While mainframe system vendors do not rate the threat from third-party maintenance as serious, vendors need to be aware of strategies to protect their service revenues. The report highlights the key issues and recommends alternative business strategies for system vendors to follow against independent maintenance providers.

This report contains 59 pages, including 7 exhibits.

F-IHV-520

INPUT

HARDWARE VENDORS' RESPONSE TO
INDEPENDENT MAINTENANCE

CONTENTS

INPUT
F-IHV-520

HARDWARE VENDORS' RESPONSE TO
INDEPENDENT MAINTENANCE

EXHIBITS

INPUT

I   INTRODUCTION

A.   FOREWARD

- Third-party, or independent, maintenance has been a major growth (in percentage terms) industry over the last few years. Indications are that the experience of TPM penetration in the U.S. has been mirrored in the U.K. and is poised to reoccur in continental Europe.

- Several INPUT reports have highlighted the business opportunities opened up by this trend, but one person's opportunity is all too often another person's threat. So it is with independent maintenance. There is an extreme scenario which says that the intervention of independent maintenance companies in the service marketplace is having a detrimental effect in that prices are being forced down without any additional business being generated. In other words, the situation is one of income redistribution rather than income generation.

- The reality is that the situation is neither all black nor all white, but a rather murky shade of grey. Some revenues are being redirected from the hardware manufacturers to the independents, but the independents are also generating new service income by offering to maintain equipment which in some cases the manufacturer is not prepared to maintain.

- As hardware prices fall, service revenues could play an increasingly important role in maintaining overall corporate revenues. As competition erodes both

- 1 -

INPUT

the price for service and the market share which manufacturers control, any developments in the independent maintenance area must be of vital importance to the manufacturers. Service revenues are also well regarded by investors because of their recurrent nature, making them a key asset for raising future capital.

- In this report, INPUT's latest European study, the strategic issues facing manufacturers are discussed and possible courses of action evaluated.

B. METHODOLOGY

- INPUT interviewed 20 hardware vendors and two major TPM vendors to discuss the key issues. A full list of respondents is shown in Exhibit I-1, and it can be seen that they represent a key cross-section of the customer service industry.

INPUT

EXHIBIT I-1

RESPONDENTS TO THE SURVEY

3M	NCR
BASF	Nixdorf (International)
Burroughs	Nixdorf (U.K.)
Bull	Ocè (Netherlands)
Ericsson (International)	Olivetti
Ericsson (Sweden)	Olivetti (International)
Ericsson (U.K.)	Perkin-Elmer
Hewlett-Packard	Philips (International)
Honeywell	Philips (U.K.)
MAI	Rank Xerox
Memorex	Sperry

INPUT
FIHV

II EXECUTIVE SUMMARY

- The independent supplier sector of the maintenance or customer service market does nothing to make the overall market grow--quite the reverse. By generally reducing user costs, it is one factor in causing a slowing in customer services revenue growth.

- The combined results of slackening product sales are changing the nature of products themselves. More reliable equipment, lower costs, and competitive pricing have caused respondents to foresee lower growth rates and even negative growth within three years.

- Mainframe system vendors do not rate the threat from independents as serious and many mini and micro vendors positively embrace them. The main target for independents is high volume, openly marketed, complex systems (i.e., DEC, ICL, and IBM mid-range systems).

- Independents are, however, growing very fast and increasingly attacking the most lucrative, major mainframe site, single-source contracts. They are particularly successful in large distributed network installations where significant field support is needed for multiple terminal locations and mixed vendor products in banking, services, and manufacturing.

- The standalone PC market is successful for independent and approved service representatives, but the sector is not proving the gold mine some expected because users are not prepared to pay contract fees and product reliability obviates the necessity for maintenance.

- 5 -

INPUT

- The independent maintenance market is, in fact, three separate subsectors:

    - Foreign products sold on an 'own/lease' basis by system vendors that are fully supported.

    - Foreign products supported by system vendors and independents as Approved Service Representatives (ASRs).

    - The competitive independent sector where mixed or uniquely foreign equipment sites are fully supported.

- The majority of system vendors are avoiding the competitive sector because:

    - Entry would involve a separation of product sales and service sales strategies which could be damaging.

    - Equally important, entry would involve companies in setting up extensive selling capabilities, with a resulting negative effect on profit margins.

- Most system vendors are concentrating on expense control, efficiency, and productivity measures to enhance service levels and protect profit margins.

    - The risk in this strategy is the possibility of denuding the field of the low level engineering presence needed to support low cost, simple, and widely distributed products such as terminal devices and PCs and thereby opening this market to independent service suppliers.

- System vendors, particularly mainframe product sellers, face the decision of whether to take short- to medium-term action to protect revenue growth, protect profit margins, or concentrate on longer term product-related service strategies.

INPUT

- Most system vendors appear to be concentrating their mid-term action on profit protection with revenue growth enhancement related to developing sales of other services such as consulting and possible software support.

    - Many vendors expect revenue growth to be organised--i.e., relying on a steadily increasing volume of hardware sales.

- The growth and increasing reputation of independent suppliers over the next five years present dangers to system vendors who do not take some positive sales action to combat them or to integrate them positively within their overall service strategy.

    - Positive dissuasion of independents by withholding support is rare and generally ineffective as it tends to alienate customers and increase their resolve to appoint an independent supplier.

    - It may also be illegal.

- Two positive actions are open to system vendors which fall short of entry into the fully competitive independent market. These are:

    - The offering of single-source maintenance service or independent facilities to major customer sites.

    - Entry into joint ventures with other manufacturers or independents to provide field coverage and support for low cost, high volume products.

- Taking such positive short- to medium-term action will potentially slow down the establishment of the independent sector and provide a solid patform upon which to build a longer term strategy.

INPUT

- It is questionable whether the market profile will look the same in five year's time. By then, networks and increasingly reliable products will place emphasis on support resources other than field personnel. Automated diagnostics and preventive maintenance services linked to component swapping and repair through local distributors and repair centres will have become established norms.

- To what extent the current dramatic growth in the independent sector will carry through into this differently profiled market will depend largely upon how successfully these independents are able to generate profits for investment over the next three years and establish full credibility and established infrastructures over that period.

- The key strategic issues are summarised in Exhibit II-1.

- 8 -

INPUT

EXHIBIT II-1

- 9 -

KEY STRATEGIC ISSUES

- Independent maintenance does not increase market size.

- Service revenue growth rates will decline.

- Mainframe vendors do not see a major threat from the independents.

- But, independents are growing rapidly in their targeted areas.

- Hardware manufacturers are not anxious to enter the competitive service market.

- Expense control, not revenue generation, is the rule.

INPUT
FIHV

III   THE MARKET FOR CUSTOMER SERVICES

- Any appreciation of the market for independent maintenance services has to be made within the context of the market for customer services as a whole.

    - Independent maintenance does nothing to make the whole market grow, or indeed change. It shifts maintenance and support revenues from one vendor to another.

    - It does, however, provide some growth in those areas where manufacturers do not support the systems themselves.

- It can be argued that some smaller system vendors who are contributing to growth in product sales are contracting out their maintenance, thereby encouraging the cake to be shared by others. But this is a relatively insignificant part of the overall market and is more than offset by the general downward pressure exerted by independent vendors on contract pricing.

- There are distinct differences between the various sectors of the product market and the resultant needs for and patterns of customer support services.

    - Mainframe, mini, and micro installations and their typical peripherals and terminals place different demands upon their respective support organisations.

INPUT

- Simply stated, the more dependent users are upon their systems, and as a natural corollary the more complex the systems are, the more aware they are of the need for maintenance, the more demanding they are of the quality of support, and the more, relative to hardware price, they are prepared to pay.

    - Hence, in major installations and mainframe sites generally, the product vendor is naturally assumed to be the best support supplier and the full range of contracted services are usually purchased.

    - There are some TPMs who are active in this sector, however.

- In the mini systems sector, the more open sales strategies employed by vendors such as IBM, DEC, Data General, Hewlett-Packard, etc. with the use of OEMs and specialist systems houses being the standard has opened up a freer support environment where the manufacturer is not necessarily assumed to be the natural support vendor.

    - Some significant volumes of systems have been sold, as in the case with IBM and DEC, and healthy independent sector support organisations have thrived.

- The 'personalisation' of system resources with the PC and OPD approach, and the resultant rapid decrease in system resource costs, enables users to reappraise the criticality of their computing resources.

    - For users to be without their personal resources for two or three days, and the likelihood of this being remote anyway, is hardly a risk worth significant expenditure, particularly when a complete standby system could be supplied from a reserve at minimal cost or the deprived user could borrow resources from a colleague temporarily.

- Not only is hardware becoming less critical and more reliable, but operating software, with many more units being sold and many examples achieving a level of standard acceptance, is becoming more robust and reliable.

- 12 -

INPUT

- Finally, there are all the signs of a slackening in the value of product sales as a whole. Basically, the market is becoming saturated with computing resources due to its current level of ability to utilise them and its holding back on some acquisitions in order to take stock of its existing investments and prepare more effectively for future usage.

- In total, all these factors are causing the system vendors at least to view the next two to three years with some caution. This naturally reflects on the view of their support divisions on their own future.

    - No longer can they rely upon their product sales to support a revenue growth in excess of 20%--the average experience of vendors inter-viewed.

    - At least one major respondent foresaw a revenue gap within three years of some 6% compared to that needed to cover existing expense levels.

- The impact of these pressures are shown in Exhibit III-1.

- These fears are particularly relevant to the mainframe systems vendors. Even without any increased threat from independent maintenance vendors, the nature of their own business gives cause for concern.

- Mini systems vendors are already feeling 'pinched' by independent competition in supplying customer services. Although traditionally less dependent upon revenue from services, these predominantly mini system vendors have long aspired to increasing the proportion of sales derived from services and, thereby, overall profitability.

    - As this sector is the most 'open' to independent support, the challenge to the system vendors to maintain, let alone increase, their share of service spending is very real and demanding.

- 13 -

INPUT

EXHIBIT III-1

- 14 -

DOWNWARD PRESSURES ON MAINTENANCE REVENUE GROWTH

INPUT
FIHV
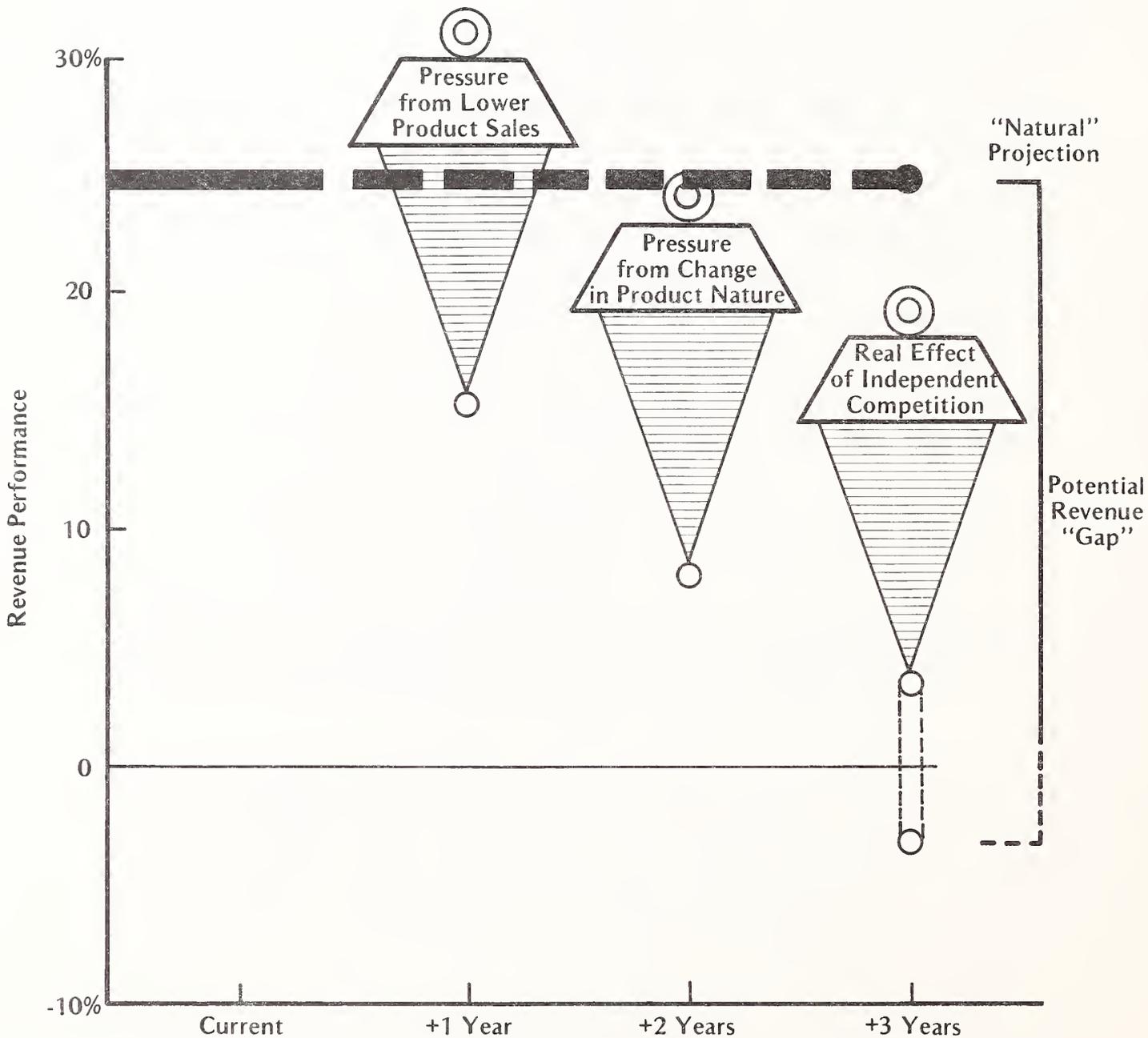
- Probably the best equipped sector of the market to face the challenges of the next few years are those vendors of micro and mini systems with a strong history in office equipment and technology product selling.

    - They are used to dealing with the 'typewriter repair' characteristics of the growing volume market and have the necessary critical mass of support resources to offer a viable and profitable service.

- Given the relatively undemanding nature of the micro system maintenance market, the proliferation of agents, retailers, and distributors supported by the system vendors and a variety of independent maintenance organisations ensures more than adequate support.

    - Although this market has not turned out to be the 'gold mine' for independent maintenance vendors some expected, it is continuing to grow steadily and offer a rewarding source of revenue for those equipped to deal with its peculiarities.

- The main rewards for maintenance and support services are still to be found in the mainframe and major site areas.

    - Just as the product sales organisations are concentrating their efforts on satisfying all the computing needs of major accounts by deeper penetration of the organisation with a variety of systems, so there is an increasing demand upon the support divisions to satisfy the variety of needs generated.

- Traditionally, mainframe-oriented vendors have extended their product range of small systems, communications equipment, and peripherals by establishing sales agencies or 'no label' supply contracts with other manufacturers, thereby forcing support organisations to broaden their capabilities and commit 'de facto' to third-party product support.

- It has been a natural step to undertake single-source management or full support contracts for other, completely foreign equipment within these major customer environments.

● This demand for a broader spread of support capability in a product sense and geographically as well has coincided with pressures created in providing support for intrinsically more reliable and shorter life products.

- The sum of these pressures has forced maintenance providers to develop different field and logistic tactics to serve the market.

● Perhaps the most significant element in the maintenance market as a whole is the trend towards reducing dependence upon manpower and expense-related resources.

- As older systems are replaced with more reliable new ones and new systems become smaller on average, the ability to justify a physical support presence in the field becomes eroded.

● The first step in this proces is that engineers out in the field become less technically skilled.

- More reliable systems demand less high-level technical responses, and smaller systems require a 'typewriter' or 'TV' repair philosophy.

● Having denuded the market of high-level support skills and concentrated these in regional or even continental support centres, and increasingly bolstered even these physical resources with such system facilities as remote diagnostics, fault warning systems, and communications systems, the next step is to explore ways of restructuring all manpower levels in the field to reflect the realities of the market.

INPUT

- This advancing process of reducing expense levels and at the same time covering an increased product range and wider geography is placing a significant demands upon the management skills of support organisations.

  - Without any attempt to address foreign product support markets competitively and positively, mainframe systems vendors have already entered TPM, driven by their product sales organisations, with all the problems this move presents.

INPUT

IV   THE MARKET FOR INDEPENDENT MAINTENANCE SERVICES

- Recent INPUT studies have identified a real opportunity for vendors of maintenance and support services.

    - Although current actual spending on independent maintenance in Western Europe as a whole in 1985 amounts to an estimated $248 million or 2% of the whole maintenance market, research has identified an increasing preparedness amongst users to consider independent suppliers.

    - INPUT's forecast is for the independent maintenance market to grow by an average 20% per annum to reach $637 million by 1990.

- With the independent maintenance market in the U.S. considerably further developed and already representing between 6% and 9.5% of the total market, the expectations of rapid development appears fully justified.

- However, the independent maintenance market, as with any market, is made up of a number of subsectors. For the sake of simplicity, three main sectors are identified:

    - 'Own Label' Sector. As systems vendors take more and more products from other manufacturers to fill out their own product ranges, their support organisations are required to develop the necessary skills to maintain these essentially foreign products.

INPUT

- One step removed from this generally 'own label' sector is supporting the same products under other labels when they are installed in a major site for which the vendor is providing a 'single-source' service.

  - 'Approved Service Representative' (ASR) Sector. A broad arrangement whereby a system vendor contracts out maintenance to another vendor either universally or in specific geographic areas.

  - 'Competitive' Sector. Either system vendors or independent maintenance vendors target foreign installations with the intent of undertaking support in replacement of (or as an alternative to) the initial system vendor.

- Within these three market sectors, various 'product' offerings can be assigned:

  - Single-source maintenance management (major site).

  - Single-source maintenance contract.

  - System maintenance (mainframe, mini, or micro systems and peripherals).

  - Network maintenance.

  - Ancillary services (site planning, configuration planning, etc.).

- It is worth restating that only the 'ASR' market sector can be said to actually increase the total market in that it enlarges the cake for those offering maintenance services. In the other two market sectors, revenue is redistributed, and in the competitive sector particularly it positively depresses the market as users appear to expect and get up to a 15% reduction in price by switching to independent suppliers.

- 20 -

INPUT

- To date, mainframe vendors express little concern about true independent maintenance vendors and even less about the other mainframe vendors competing for their sites.

- At the other end of the scale, the micro vendors, particularly the primary integrators such as Apple, Commodore, and even IBM, rely so heavily upon independent distribution and support channels that they evidently welcome the services of independent maintenance suppliers and indeed contract them in many cases as ASRs.

- The battle in the competitive sense is mainly being fought out between system vendors and independents around larger minicomputer sites.

    - The fiercest battle of all appears to be for DEC installations. DEC has shown its general unease about this sector in a number of ways, attempting to persuade their users that they themselves are the best and fastest source of maintenance.

- IBM has undoubtedly accepted that independents will figure even more significantly in the maintenance of their medium range systems by further opening up their sales and support distribution channels to approved dealers.

- It can be assumed that the immediate and easiest growth area for independents or competitive sector participants will be in the mini- or medium-range systems area.

    - Users want full levels of customer support, are prepared to pay reasonable contract prices, and fully recognize the credentials of independent suppliers.

- In many vertical market sectors there is also considerable scope for ASR agreements.

-       Specialist system vendors will continue to appear, offering added value systems for such vertical markets as banking, retailing, and others who will welcome well-equipped support organisations providing hardware and operating software maintenance.

• The continuing growth of the microcomputer sector will provide a scope for independents attuned to the characteristics of that market and with the necessary investment both in the wide spread of basically skilled engineers and in the overall logistics of swap repair and repair centre facilities.

-       The relatively low unit return and generally 'ad hoc' nature of support needs make this a market unsuitable for everyone. Primarily, mainframe vendors should be cautious about entering the competitive market for micro support services, although they can hardly avoid the 'own label' or 'ASR' markets and simple service contracts.

• Research shows that, in general, system vendors are beginning to temper their enthusiasm for entering truly competitive markets.

-       Even those companies, such as Control Data and Sperry, who have made significant progress with TPM services in the U.S. have tended to slow down their competitive activity in Europe and concentrate upon selected single service contracts and ASR opportunities.

• Control Data's acquisition of Systime puts them firmly in the competitive DEC service market, but at present this is kept at arm's length from their mainline support services.

• Companies that have particularly well-developed platforms upon which to develop competitive services to microcomputer users, such as Olivetti with their typewriter and adding machine heritage and Ericsson with their communications equipment installed base, have developed substantial 'foreign'

- 22 -

INPUT

equipment maintenance bases, but appear to expect nothing dramatic in terms of growth from this competitive sector.

- It can, therefore, be extrapolated that most of the opportunities in the competitive and ASR sectors for mini and micro systems will fall to the independent suppliers such as DPCE and CFM.

- The question mark must hang over the major single-source contracts, particularly those where networking and specifically distributed sytems are involved.

- Despite the apparent unconcern of the major systems vendors at present, those with whom in-depth, face-to-face interviews were conducted admitted to some reservations about the future. Their fears appear to be justified.

- A significant number of major sites have changed hands already, particularly those of users who are likely to be extremely critical about support and service levels.

  - INPUT identifies the typical user of major independent service to be a service-oriented operator.

- Since users are in a position to value everything in terms of real money earned and lost, partly as a result of their obligation to develop high levels of in-house operating and utility software support, they are in a position to acquire IBM lookalike hardware systems and a variety of peripheral and terminal equipment designed primarily to suit their financial demands.

  - They have assigned the same critical and demanding values to their selection of maintenance suppliers and have often selected independents with whom they are more than satisfied.

- Given that it is therefore feasible to use independent vendors in a high dependency mainframe-based situation, and further given that an increasing

- 23 -

INPUT

number of mainframe users are prepared to consider independent suppliers (as proven by INPUT research), this competitive mainframe sector is likely to develop into the most attractive sector of all.

- Whereas, most mainframe vendors not only appear to underestimate the risk of independent competition, they also expect competition to rely predominantly upon price leverage. Certainly this is borne out by past research where independent contracts have realised some 15% less cost to the user.

- Research in 1985 suggests that users are, in fact, far less price sensitive than may be expected, and the better able they are to translate system reliability or availability with financial values, the more critical they can be about quality of service.

- Hitherto, system reliability or availability has been primarily a function of mainframe system reliability. However, as networks and distributed resources become more and more a feature of major users' total installation, so dependence will shift from the mainframe to the network and its control systems.

  - The natural affinity between the seller and maintainer of mainframe systems in the eyes of the user may be further disrupted.

- The maintenance organisation that is best equipped to keep the network and its component resources at the maximum level of availability is likely to be selected by major users.

  - Though this in no way rules out the mainframe system vendor who is highly likely to be intimately involved in the network implementation, it does potentially open the door to alternative organisations such as PTTs, TPMs, or communications carriers.

- At the very best, the combination of changing elements in the market such as increasingly reliable, generally smaller equipment, lower priced resource

INPUT

units, the need to 'de-skill' or even 'de-populate the field of engineers, the increasing use of system resources for diagnostic and preventive maintenance analysis, and the increasing reliance of major users on network resources suggests a more open maintenance and support market, as shown in Exhibit IV-I.

EXHIBIT IV-1

THE INDEPENDENT MAINTENANCE TARGET
(GOING UP?)
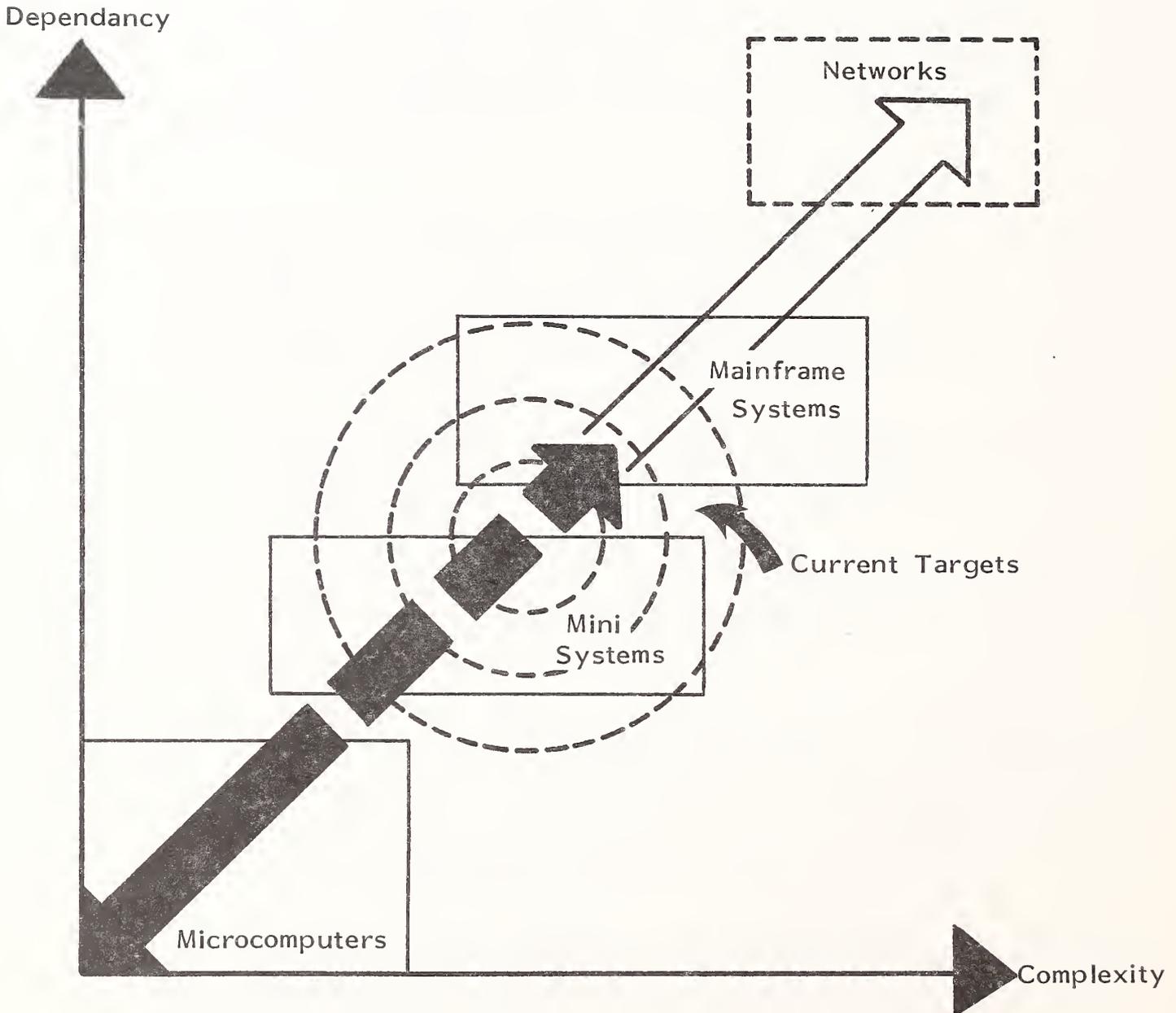
V MARKETING STRATEGIES

- All respondents to the INPUT survey answered that they approached their customer services sector as an identifiable business opportunity. It is INPUT's view this is not really the case. Except amongst independent vendors, the vast majority of revenue managed by customer service divisions of system vendors is generated and largely determined by product sales strategies and performance.

- For the most part, customer service divisions are therefore freed of the problems of carrying their own sales and marketing overhead.

- Whereas the businesses of established independent vendors are already geared to support broad sales resources, the measured profitability of the system vendor operations takes little or no account of sales costs.

- Services revenues, particularly maintenance revenues, are however crucial to most system vendors, representing anything from 20-35% of total corporate revenues.

  - Furthermore, maintenance and support services form a vital component of the total product portfolio of a system company's sales force. Good maintenance is a key factor in successful product selling.

- The question system vendors have to address is whether maintenance services should be directly related to product sales strategies or not, and, as an equally

INPUT

crucial but resultant question, whether they seek continually increasing service revenues or continually improving profit margins.

- If, as seems likely, system vendors' future product sales performance will result in a general slackening of proportionate growth in service revenues, even leading as some fear to a drop in revenue in real terms over the next three years, then should these companies attack the competitive maintenance market to fill the gap?

- In most cases, INPUT believes that the answer should be 'no'. Entering the strictly competitive market will inevitably lead to a separation between product sales strategies and service strategies which could prove detrimental to both.

- Any commitment to developing substantial competitively-gained revenue would so change the profitability patterns of service business as to render the investment and management effort expended unrewarding.

- Inevitably, system vendors will increase the level of 'own label' product sales and lead their maintenance divisions into support activities of a wider nature.

  - Equally, product sales strategies will throw up opportunities for ASR agreements with clearly noncompetitive specialist system vendors in defined market sectors.

- However, there is an inherent risk in attacking ASR or 'own label' lookalike markets without it being a product sales-driven strategy.

  - The sales advantage of having an 'excellent' support services capability will be afforded on an equal ranking to potentially competitive products or sales organisations.

- 28 -

INPUT

- Quite evidently, system vendors have, so far in Europe, held back from making any really competitive approaches to the market both for practical reasons and for strategic reasons stated.

- Perhaps the most telling reason for steering clear of any such commitment is the financial risk involved.

- At present, the support service businesses of system vendors are profitable. Even assuming that these margins face a squeeze from the combined pressures of changing product sales mix and increased product reliability, trying to generate competitively-gained replacement revenue is likely to worsen the picture.

- By including ASR, 'own label', 'own label' lookalikes, and single-source contracts in independent maintenance revenue calculations, some vendors have established an existing base from which to attempt growth.

  - Aggregated statistics from such companies show that they expect to assign a salesman a total revenue support target of between 800,000 pounds and 1,000,000 pounds, of which 10% is expected to be new business.

- Assuming that the fully loaded cost of keeping a salesman on the road would be between 50 and 60 thousand pounds, the ratio of sales cost to revenue involved in growing a fairly well established business by 10% per annum would be about 6% (60-70% of first year new contract revenues). This is demonstrated graphically in Exhibit V-1.

- The faster the growth rate expected on any established business or, even more significantly, from a low base, the higher the sales expense ratios, exponentially.

INPUT

EXHIBIT V-1

SALES COST OF NEW BUSINESS GENERATION

	Case 1	Case 2	Case 3 (Optional)	Case 3 (Realistic)
Number of Salesmen	3	5.5	8	10-12
Cost	$60,000	$70,000	$80,000	$90,000
Total Sales Cost	180,000	385,000	640,000	990,000
Total Revenues	3,025,000	3,300,000	3,575,000	3,575,000
Percent Cost/ Revenue	6%	11.6%	18%	25%

Revenue Growth

+$275,000   +$550,000   +$825,000

30%+   20%+   10%+

Total Revenue

SALES PROTECTION
Existing Revenue Supposed Salesman

- 30 -

INPUT
FIHV
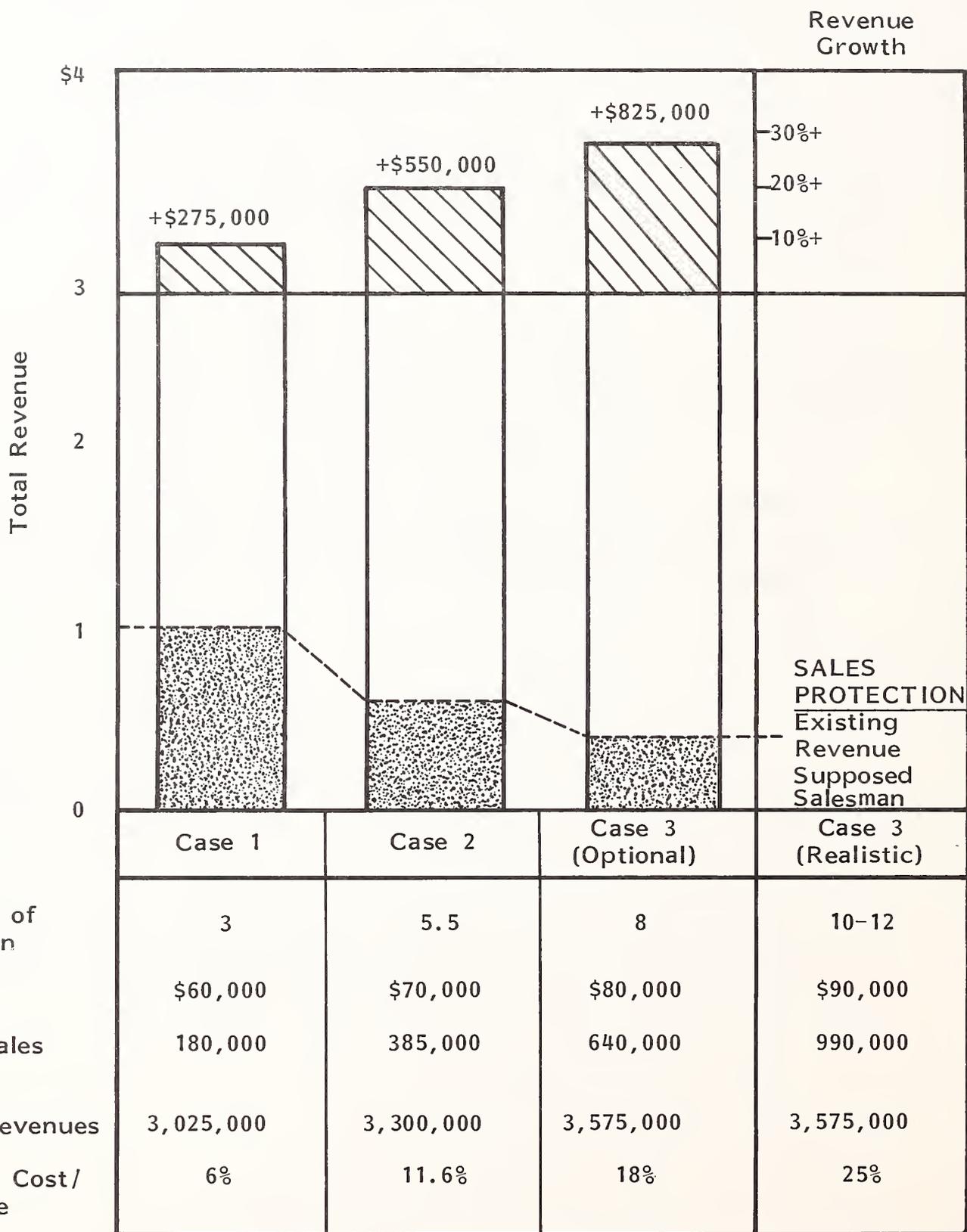
- To match historic growth in maintenance revenues of between 20-25% would almost certainly involve a ratio of sales expense in the order of 30%.

- Another factor affecting the sales ratio would be the product sector targeted. Real volume growth is likely to be more achievable in the mini and micro systems sector where other sales tactics such as telephone selling and direct response advertising are being used. Although this may succeed in holding down the sales expense ratio, the low unit value of such contracts will depress overall margins.

  - Targeting the competitive 'single-source' sector where individual contract values are high could also keep sales expense to revenue ratios down, but only for a few 'winners'. This market sector is already actively pursued by most independent companies and will become increasingly competitive.

- Rather than look to increasing revenue by entering the strictly competitive independent market, manufacturers should look to other opportunities both to increase revenue potential and, perhaps more importantly, maintain profit margins.

- The most obvious possibility is to take on single-source management or full maintenance contracts for their own major sites. This is applicable to manufacturers selling mainframe or network host systems.

- It would appear inevitable that manufacturers will have to respond to the threat of the independents who will spread their activities from the primary IBM and DEC markets into host manufacturers' sites, responding to the market's evident interest in single-source contracts. Where possible, subcontracting of 'difficult' products will enable them to minimise risks.

INPUT

- Manufacturers who already have well established maintenance networks will be in a strong position to compete with the independents whose coverage geographically, particularly in the U.K., is rapidly being extended.

    - Those manufacturers, primarily mainframe vendors, who have been concentrating on centralising support resources and effectively de-skilling and de-populating the more remote field areas will have to seek other solutions to maintaining coverage.

- One alternative could be cooperative ventures with other manufacturers or carefully selected independent maintenance companies.

- By pooling resources, particularly of lower grade engineering skills, a consortium or joint venture company could maintain significant maintenance networks capable of dealing with support requirements of terminals and micro devices.

    - Evidently the right partnerships could generate both a higher and more economic installed base.

- 32 -

INPUT

VI   ISSUE ANALYSES

A.   OVERALL MAINTENANCE STRATEGY

- With only one exception, respondents claimed to manage customer services as an independent business opportunity; however, in only one case were salesmen directly employed within the customer services division. In all other cases, sales were generated by product sales divisions.

- In the exceptional case, salesmen (two) were employed to develop independent maintenance business.

- Although in all respondent cases a marketing function was maintained, it does seem that the maintenance and customer services strategies of host system vendors is not only inevitably interwoven with product sales strategies but is, in fact, subservient to them.

- In two cases, plans for entry into the competitive business of independent maintenance had effectively been quashed by the product marketing executive who rightly feared the potential impact on product sales operations.

- 'Own label' and 'ASR' maintenance business is naturally an extension of product sales strategy implementation.

- 33 -

INPUT

- There is a possibility that ASR deals could be entered into independently by customer service operations and create conflict with product sales tactics. However, as long as selling is carried out by those product sales functions, there remains an ultimate sanction against such conflict.

- If systems vendors are to enter the competitive market for either single-source management, full service contracts, or system maintenance business, then they have to set up their own separate sales capability.

  - Whether this entails a fully independent business operation, as many of the systems companies appear to fear, is doubtful.

- The minimum strategies of developing ancillary product or service sales within major accounts and combating the increasingly severe competition from independent vendors necessitates not only the development of refined marketing capabilities but the development of broader general management skills.

B.   DEPENDENCE UPON CUSTOMER SERVICES REVENUE

- Customer services revenue is a vital component of system vendors' total sales---an average representing some 25% of corporate sales.

- Revenue growth, historically, has been closely related to total growth in product sales and has averaged some 20% annually over the last three years.

- Only one respondent, a relatively small and fast growing mini system vendor, foresaw growth over the next three years exceeding historical rates.

- 34 -

INPUT

- Approximately half of the remaining respondents planned to maintain growth rates, and half expected growth rates to slacken to as low as 5%.

- Vendors questioned in-depth on the issue of future growth all expressed concern about their ability to maintain growth and identified strategies for containing expense levels, increasing pressure to gain acceptance of auto-mated diagnostic aids, and reducing field presence--all evident strategies to maintain profile levels in the face of declining revenues.

- Interestingly, only two respondents foresaw any significant growth in indepen-dent maintenance revenues.

- Although there was no specific questioning of the make-up of total customer services revenue, it would seem from discussion (and supported by other INPUT research) that the vast majority (80%+) of income is derived from hardware maintenance. Consulting services accounted for the largest propor-tion of the remainder, with software maintenance contributing a negligible volume.

- All system vendors planned to extend their consulting activities (installation, configuration, and, in some cases, network planning) and expected 50%+ growth from these services.

- Software maintenance remains a problematic sector.

- In summary, system vendors rely heavily on maintenance revenue for profit contributions. If, as seems likely, there is to be a slackening of growth in this area, vendors have to consider one of two fundamental strategies:

    - Growth by competitive selling.

    - Profit protection by cost and expense management.

INPUT

- A superficial view of the independent sector suggests that if they can achieve such rapid growth, the growth strategy should be the most attractive option.

    - INPUT seriously questions this assumption. As a systems vendor, companies would lack the one key to sales success--independence. If system vendors were to set up arm's length independent maintenance operations, they would endanger the coherent management style of their total support service capability.

C.   VIEW OF INDEPENDENT COMPETITION

- On the whole, system vendors do not view independent sector companies as serious threats to their mainline maintenance businesses. They view competition from their own ranks even less seriously.

- In-depth questionning of key respondents suggests that this apparent complacency is more fragile than the simple responses suggest.

- At its highest level, the independent maintenance market in the U.K. represents only just over 6% of the total maintenance market, and overall in Western Europe just under 2%. In these numbers alone, the independent maintenance threat can be said to be marginal.

- If growth in this independent sector is as buoyant as it would appear, with companies actively turning away business, then the next three years could see the independent maintenance sector building revenues of $450 million in Western Europe by 1988. In any terms, this would be serious for the systems vendors.

- 36 -

INPUT

- Systems vendors perceive the competition from independents to be exclusively based upon price. Responses to this question were quite remarkable for their consistency.

- If these answers truly reflect the views of the systems vendors, they show some arrogance in relation to an understanding of customer needs.

- Certainly price is a key criteria in users' selection of independent suppliers, but this is not at the expense of other criteria. The types of users of independent services suggest that they are more, not less, demanding in other respects.

- Independent vendors themselves quote their preparedness to offer on-site engineering support and 24-hour on-call network coverage as well as the key advantage of single-source support for the whole range of client equipment installed as the reasons for winning business.

D.   SUPPORT FOR TPMs

- Systems vendors were consistently in favor of enhancing their service levels and options as a counter to the threat of independent vendors. Increasing sales efforts was voted a close second.

- Dissuasion of independent vendors through withholding support or supply of support resources--the 'dirty tricks' brigade as the independents call it--was largely disavowed.

- It must be said, however, that 'dissuasion' does exist, and the independents themselves are acutely conscious of the risks they face mostly within the strictly legal bounds of 'fair trading'.

INPUT

- In the end, it would seem that most dissuasion is counterproductive. Vendors who practice the more extreme forms, such as withdrawal of customer software rights or loading software support and maintenance fees, risk alienating customers to the extent of not only losing maintenance contracts but eventually losing the installed hardware.

E.   INDEPENDENT MAINTENANCE COMPANIES' ATTITUDES

- While the system vendors, particularly mainframe vendors, are concentrating their management effort on reducing expense levels, increasing productivity, developing system support facilities (remote diagnostics), and generally centralising high level skills, independent companies are operating in almost the completely opposite mode.

    - Their actual growth rates, let alone the growth rate they feel they could achieve, causes them to be on the constant trail of more qualified field engineers.

- They appear to be highly conscious of the fragility of their image in the marketplace. If they cannot do a job well, they prefer to turn it down rather than risk bad publicity or reference sites.

- Their view of their own success is that they perform services with a real need in the market, such as:

    - Field and even on-site engineer availability.

    - Total product range responsibility in any given installation.

    - Realistic, although not necessarily discounted, pricing.

INPUT

- The main fears they express, apart from the one of overextending and thereby weakening their range of skills and product knowledge, is that of the potential 'dirty tricks' by system vendors.

  - They appear to have some justification for this fear as some manufacturers have undoubtedly crossed the line between fair competition and restrictive sales practices.

- The number of respondents, both system and independent vendors, who quoted recent discussions with the U.K. Office of Fair Trading, suggests that the definition of what constitutes fair sales practice is currently being studied with some urgency.

- Evidently at the heart of this problem lies responsibility for systems software. Without contracted maintenance income, system vendors are seriously inhibited in the amount and type of support they are able to give to systems software.

  - Traditionally, these hardware and software elements have become 'bundled', and increasingly the system vendors' hardware maintenance engineers have become responsible for primary software support.

- The independent companies are fundamentally not in the business of software support and thereby open the door for original system vendors to dissuade customers from changing to independent hardware service companies by identifying the potential and real software support risks.

  - If customers persist in their desire to change, then the need for a contract for software support arises and a price has to be set.

  - The independents' fear is that the original system vendor can either withdraw software support or price at an 'unfair' level in relation to the overall 'bundled' support price.

- 39 -

INPUT

- Although there has been litigation in this area, it would seem that the primary motivation of most systems vendors is a reasonable desire to protect both their own interests and those of their users.

  - If users need software support, they must be prepared to pay for it and weigh the potential difficulties involved against the benefits of employing a single independent hardware maintenance supplier.

  - System vendors for their part have to be seen to be fair and reasonable. One of the primary reasons for seeking independent maintenance is the user's desire to be free from potentially monopolistic practice of hardware suppliers, and any restrictive selling is likely to harden their resolve rather than bring them back into the system vendor's fold.

- One question that becomes more insistent the more that study is made of the independent market is why the independents are apparently finding it so easy to develop new business.

  - Is it that the system vendors are not satisfying their users' needs either in quality or type of service?

  - Is it that the incidence of networked installations and therefore mixed product and vendor sites is increasing and causing a spontaneous need for single-source maintenance?

  - Is it perhaps that the positive strategies of mainframe vendors to decrease reliance upon field located, expensive engineers is leaving a gap for the independents?

- Above all, is the trend permanent and therefore is the market for independent services a long-term growth-oriented development?

INPUT

- The reluctance of system vendors to fully commit to competing in the independent market may partly be the result of complacency, but on the whole it seems more likely that this strategic thinking is related to a longer term view that field maintenance is becoming an increasingly obsolescent product in view of the type and mix of future hardware devices, their intrinsic low unit value, and basic reliability.

- Therefore, while the buoyancy of the independent market is very real, it may, in fact, be relatively short lived.

- It is a fact that some of the mainframe sites won by independents are older systems for which the original manufacturer is relatively happy to lose responsibility. Although continued maintenance support gives immediate value by increasing the life expectancy of some systems, replacement will happen sooner rather than later, and the newer installed systems are likely to have characteristics which are less applicable to an independent support solution.

- This argument does not fully hold good for the rapidly expanding terminal or remote systems market. Many of the significant gains of independent companies have been in the financial and services sectors where there is a high incidence of remote devices and high dependence upon their continual availability--ATM terminals for instance.

- Here, by generally reducing their field presence, the system vendors are leaving a niche for the independents.

- INPUT's belief that some manufacturers, particularly those with a tradition of 'typewriter' selling resulting in well-established and extensive field maintenance forces, will be in a strong position to combat the incursion of independents in such installations is relevant here, as is the recommendation that other manufacturers consider joint venture operations to develop and/or cost justify the retention of extensive field coverage.

INPUT

- In summary, we believe that the market for the independents will indeed remain buoyant for some years, but that the system vendors, rather than entering the strictly independent competitive maintenance market, are right to concentrate on matching their longer term support services strategies to their overall product development and marketing strategies.

INPUT

VII   STRATEGIC ALTERNATIVES

- In the previous chapter the question was raised as to the longer term nature of the independent maintenance market; whether, in fact, the changing nature of the products in the marketplace would cause the threat from independent service suppliers to be short lived.

- The question could be posed as to whether the system vendors were right to play down the threat from independents as research suggests that they are doing.

- Evidently, there is no one satisfactory answer, but systems vendors, if they are not already doing so (as most are), have to face a number of decision options.

- The first decision is whether a vendor feels there is a short- to medium-term problem in maintaining or developing maintenance revenues satisfactorily.

    - The problem could be caused by competitive independent activities or other more deep-rooted factors within the market as discussed in Chapter I.

- If, indeed, such a problem is perceived, and research has proved that the majority of respondents do perceive some slackening in maintenance revenue growth over the next three years at least, then there are two positive routes that can be taken. They are to find other sources to fill the revenue gap, and

- 43 -

INPUT

to manage the business with possible flattening revenue while protecting profit margins.

- The alternative of ignoring the signs of short-term market change is not realistic.

- Finding new revenue sources to maintain or increase revenue growth leads, of course, to the temptation of selling into the competitive independent maintenance marketplace. For reasons already stated, we feel this is a significant risk option, implying as it does divergence from overall product marketing strategies.

- The alternative of developing revenue from semi-independent maintenance services such as ASRs, expanding 'own label' product support, or offering single-source contract services within key account environments is realistic. There are risks of dilution of profit margins through recruitment of field service engineers, training, and parts stocking for foreign equipment. The advantage is that it stems the development of competitive service vendors.

- Entering into joint venture arrangements with other manufacturers to extend coverage geographically and cover smaller units within the total product range is another viable alternative.

  - Shared 'royalty' arrangements whereby a percentage of the contract fee is returned to the systems vendor to cover documentation and development will help to distribute profits equitably.

- Development of other services--consultancy, site and configuration planning, telecommunications support, and planning and software maintenance--is being pursued by most respondent vendors.

  - However, these represent relatively small percentages of overall income and even dramatic growth will have marginal overall impact.

- 44 -

INPUT

- Protecting profit margins by generally controlling overall expense levels represents the second major alternative.

    - The risks implicit in this approach are that without positive marketing to combat competition from independent service companies, these companies could erode revenues more than can be compensated by expense control, and worse, this would allow independents to establish themselves firmly in markets which may be essential to the manufacturer within a longer term strategy.

- Centralisation of specialist support resources is a classic action to reduce manpower expenses and is being pursued by most respondents.

- The development of system aids to diagnose and pre-warn of faults is an obvious and potentially very rewarding investment.

    - Although it appears there is considerable current market resistance, particularly to remote diagnostics, this will inevitably diminish, and such aids must bring operational and financial advantages.

- Entering joint venture arrangements whereby the cost of field support particularly can be spread over a greater installation base is obviously a real contributor to cost effectiveness.

    - Subcontracting on a formal basis to certain approved service vendors in single-source situations is an economic solution similar in effect to joint ventures.

- If responses to the questionnaire and interviewing process are to be fully believed, most system vendors rate the threat of independent service vendors so low as to justify concentration only on the longer term strategic issues relating to the overall changes affecting the maintenance market.

INPUT

- INPUT believes that the growth of independent service revenues as a proportion of the overall market over the next three to five years represents sufficient threat to merit serious short-term decisive action.

- It is conceivable that more vendors will positively embrace the independent service sector and contract out maintenance of their more prolific, lower value products.

  - For vendors with very small product sales levels, appointing an ASR, particularly at the early stages of market penetration, is almost unavoidable.

  - Many small micro system vendors have never set up their own field maintenance capabilities, concentrating only on repair centres and provision of parts to approved maintainers.

- For mainframe or mini system vendors this option of 'contracting out' would seem an unpalatable and ineffective choice. Only IBM would seem to have sufficient market 'clout' and potential growth from product sales themselves to justify an entirely open-hearted approach to independent companies both selling and distributing their mid-range system products and offering a range of support services.

- The strategic question which must be dominant in longer term consideration is the extent to which centralised support and repair facilities, linked to more advanced remote diagnostic and preventive maintenance tools, can supplant the need for extensive field engineering forces.

- Evidently, in the short- to medium-term, development of an extensive field presence is a key to the success of the independents. If future product characteristics and the overall communications environment suggest that such

- 46 -

INPUT

a field presence is either unnecessary or unprofitable for any single vendor, then the independents may be creating a 'rod for their own backs'.

- The 'high street' distributor may be all that is required to offer the first line component exchange service backed by the repair centre and overall support facilities of the manufacturers.

- Evidently, any longer term strategy is subservient to overall product marketing strategy, and perhaps it is the continued interrelationship between product and service strategy development which is the overriding issue to be resolved by system vendors who are tempted to address the opportunities apparent in the competitive independent maintenance market. Can services be operated as an independent product line within a system vendor environment?

- The strategic decisions facing systems vendors are summarised in Exhibits VII-1 and VII-2.

- 47 -

INPUT

EXHIBIT VII-1

STRATEGIC BUSINESS ALTERNATIVES
(SYSTEMS VENDORS)

INPUT
FIHV

EXHIBIT VII-2

- 49 -
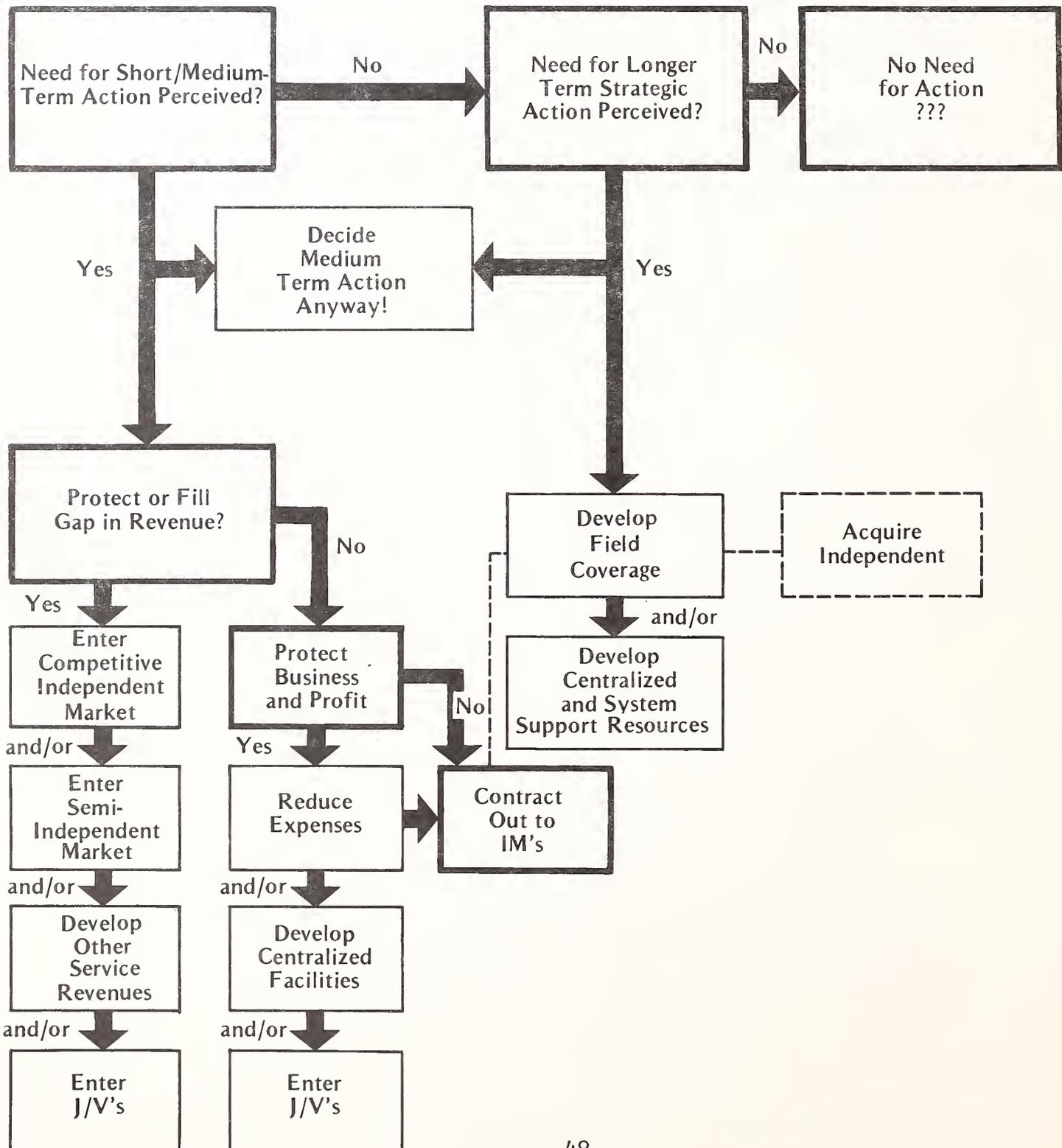
MARKET SECTOR DECISION GRID

	SINGLE SOURCE CONTRACT	SINGLE SOURCE MANAGEMENT	PRODUCTS MAINTENANCE CONTRACT	AD-HOC MAINTENANCE
Own and "Own Label" Products	X	X	X	X
"Lookalike" Products	X	X	X	X
Approved Service Representation	X	X	X	X
Competitive Products	X	Sub-Contracts	X	X

X = Possible

QUESTIONNAIRE - HARDWARE VENDORS

GROUP 1   Analysis of Vendors Overall Strategy for Maintenance and
           Customer Support Services.

Q.1.1   In general is your Company's overall strategy for Maintenance
           and Customer Support Services best described as:
                                          (tick as appropriate)

   a)   to be managed as a positive business opportunity

   b)   to be managed as a profit centre but without positive
         marketing

   c)   to provide a service to Company product sales

   d)   to provide a supporting service to independent
         maintenance agencies

         -    for certain products

                   eg ....

                      ....

         -    in certain areas

                   eg ....

                      ....

         -    in all cases

                   eg ....

                      ....

   Comments:

   (Note Q.1.1.d may be answered in addition to a, b or c)

INPUT
FIHV

Q.1.2   Which of the following services does your division offer to clients using your Company's systems?

(tick as appropriate)

a)   Hardware maintenance on   -   mainframes

minis

micros

peripherals

terminals

all above

b)   Software support and maintenance

c)   Training

d)   Installation planning

e)   Remote diagnostics -   hardware

software

f)   Other   ....

....

Comments:

Q.1.3.   Does your Division (or any other Division or Company in your Group *) offer maintenance services on foreign equipment?

-    within a mixed installation for any product

-    for certain specific products

....

-    for any foreign system as an independent maintenance contractor

INPUT
FIHV

*   Specify ....

Q.1.4   Does your Company have arrangements with particular
            independent maintenance contractors?   YES/NO

Q.1.5   Would you identify the significance of maintenance
            and support services revenues:

            -       as a proportion of total company revenues   ......%

            -       proportion of maintenance revenues derived
                    from support of foreign equipment   ......%

            Details:

            -       average total revenue growth over last 3 years   ......%

            -       anticipated growth over next 3 years   ......%

            -       revenue earned per engineer/p.a   ......%

            -       expected growth in revenue from services
                    to foreign equipment   ......%

        Comments:

Q.1.6   What proportion of your total number of contracts involve
            support of foreign equipment?

            -       where attached to your own systems   ......%

            -       where foreign systems are installed   ......%

        Comments:

- 53 -

INPUT
FIHV

Q.1.7   Does your Division have its own sales and
        marketing capability   YES/NO

        -    how many salesman are employed   ......

        -    what revenue is each expected to manage in
             total per year   ......

        -    what is their new business target p.a.   ......

        Comments:

        -    what sales or marketing management functions
             exist within your Division (please specify)

                     ....

                     ....

INPUT
FIHV

GROUP 2   Analysis of your Company's attitudes to independent
           maintenance Companies where they are seen primarily as a
           competitive threat.

Q.2.1   On a scale of five (1 = v. serious, 5 = none) do you see a
           real threat to your maintenance business coming from:

    a)   independent maintenance contractors   1 2 3 4 5

    b)   other hardware manufacturers   1 2 3 4 5

          Who specifically do you rate as significant competition
          (in order of importance if possible):

          1)

          2)

          3)

    Comments:

Q.2.2   Do you feel the threat of independent maintenance competitors
           (on scale 1 -5 where 1 is serious, 5 is not a threat):

    a)   in mixed installation sites where your
          system is sold   1 2 3 4 5

    b)   in mixed installation sites where your
          products are attached to other systems   1 2 3 4 5

    c)   where types of system are sold:

                        - mainframes   1 2 3 4 5

                        - minis   1 2 3 4 5

                        - micros   1 2 3 4 5

    d)   in certain geographic areas (please specify)

          -    Countries 1 2 3 4 5

          -    Regions 1 2 3 4 5

- 55 -

INPUT
FIHV

e)   in certain vertical markets (eg banking, retailing,
       etc) (please specify)

       .... 1 2 3 4 5

       .... 1 2 3 4 5

Comments:

Q.2.3   Upon what grounds do you believe competition from TPMs is
          most serious (scale 1 - 5)

          -     price   1 2 3 4 5

          -     more flexible contract terms   1 2 3 4 5

          -     quality of service   1 2 3 4 5

          -     other 1 2 3 4 5

Comments:

Q.2.4   What do you believe to be the most effective ways in which you
          combat competition from IMs (1 = very effective)

     a)   increased sales and marketing effort   1 2 3 4 5

     b)   increased quality of service/support   1 2 3 4 5

     c)   offer of enhanced range of services
          (eg remote diags. etc)   1 2 3 4 5

     d)   'Dissuasion' of IM's by lack of parts,
          documentation, or training supply   1 2 3 4 5

- 56 -

INPUT
FIHV

e)   price competition   1   2   3   4   5

f)   other ....

Comments:

Q.2.5   Apart from formal agreements with IM Companies (as detailed in
         Section 3) do you provide support on a general basis?

         -      by supplying parts   YES/NO

         -      by provision of documentation   YES/NO

         -      by training engineers from IM's   YES/NO

         -      by offering escalation facilities   YES/NO

         -      other ....

Comments:

GROUP 3   Formal Relationships with Independent Maintenance Vendors?

Would you identify Companies with when you have formal
'agency' agreements and the products and/or areas they cover
on your behalf?

Company   Products Maintained   Areas
_____

1.

2.

3.

4.

(Please continue on blank sheet if necessary or attach relevant
documentation.)

- 58 -

INPUT
FIHV

Notes to Questionnaire

* All responses will be treated as Confidential and used to aggregate purposes only. Comments or quotations way be used in the final report for illustrative purposes but will not be assigned.

* It is requested that completed questionnaires are returned to INPUT although each respondent will receive a telephone call to clarify any points required and to discuss certain key issues.

* Any published documentation such as sales literature, standard contracts or service descriptions which might help to identify your Company's offerings or policies would be welcome as attachements to the completed questionnaire.

INPUT

INPUT provides planning information, analysis, and recommendations to managers and executives 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 members 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.

Many of INPUT's professional staff members have nearly 20 years' experience in their areas of specialization. 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 planning services firm. Clients include over 100 of the world's largest and most technically advanced companies.

Offices

NORTH AMERICA

Headquarters
1943 Landings Drive
Mountain View, CA
94043
(415) 960-3990
Telex 171407

New York
Park 80 Plaza West-1
Saddle Brook, NJ 07662
(201) 368-9471
Telex 134630

Washington, D.C.
11820 Parklawn Drive
Suite 201
Rockville, MD 20852
(301) 231-7350

EUROPE

United Kingdom
INPUT, Ltd.
41 Dover Street
London W1X 3RB
England
01-493-9335
Telex 27113

France
La Nacelle
Procedure d'abonnement 1-74
2, rue Campagne Premiere
75014 Paris
France
322.56.46
Telex 220064 X5533

Italy
Nomos Sistema SRL
20127 Milano
Via Soperga 36
Italy
Milan 284-2850
Telex 321137

Sweden
Athena Konsult AB
Box 22232
S-104 22 Stockholm
Sweden
08-542025
Telex 17041

ASIA

Japan
ODS Corporation
Dai-ni Kuyo Bldg.
5-10-2, Minami-Aoyama
Minato-ku,
Tokyo 107
Japan
(03) 400-7090
Telex 26487

Singapore
Cyberware Consultants (PTE) Ltd.
2902 Pangkor
Ardmore Park
Singapore 1025
734-8142

INPUT®
Planning Services For Management

INPUT® 41 Dover Street, London W1X 3RB, England, 01 493 9335