

From: Sent: To:

Cc:

Sharon Homstein Monday, February 06, 1995 8:59 AM Bemard Vergnes; Bill Gates: Bill Neukom, Robert McDowell, Brad Silverberg; Charles Stevens: Chns Gibbons: Chns Peters, Craig Mundie, Daryl Rubin, Deboran Willingnam, Jeff Raikes; Jim Alichin; Joachim Kempin, John Neilson; Jonathan Lazarus, Michel Lacombe Mike Brown; Mike Maples; Mike Murray, Nathan Myhrvoid; Patty Stonesifer, Paul Maritt, Pete Higgins; Rick Rashid; Ray Emery, Richard Fade; Roger Heinen, Rolf Skogiund, Steve Barmer Antonella Bronca; Beverly Cotton; Bob Herbold; Cathy Tungsvik; Cathy Waiker, Chantai Poinard; Cheryl Mackay; Chizu Fujii; Christine Turner; Cindy Charleson; Gindy Russell. Christin Walth; Debbie Hill; Debbie Russell; Dianna West; Dorothy Veith, Gina Fleckenstein, Jolene Smallwood; Julie Girone Gwin; Kay Barber-Eck Exec, retreat pre-reading

... materials from Bob Herbold.

Pricing.doc:

Subject:

memo regarding market dynamics, pricing principles and potential action steps.

Mktdyn.doc: (attachment referred to in pricing.doc) memo addressed to the WWRDM attendees regarding market dynamics.

PRICING DOC Tha

k

you. Sharon.



FL AG 0105974 CONFIDENTIAL

To:	Executive Retreat Participants
From:	Bob Herbold
Date:	February 6, 1995
RE:	Market Dynamics, Pricing Principles and Potential Action Steps

The purpose of this memo is to review some basic marketing principles and guidelines that relate to pricing and summarize some relevant experiences from various business categories. Using this material, coupled with what is happening with the market dynamics of PC penetration, we suggest several potential action steps related to pricing that Microsoft should consider.

MARKET DYNAMICS BACKGROUND - The attached document of January 25, 1995, pulls together some excellent work done recently in the Desktop Applications Division on key market trends with respect to PCs, spreadsheets, and word processors. It also shows what is happening to the average price of Office, due to the maturing of these software categories (more upgrade purchases and maintenance agreements) and the introduction of lower price alternatives (Select and Academic contracts).

Stepping back from all of this, a key conclusion is that as the market for certain software tools becomes saturated, our pricing policies become more important and there is a real need for new, on-going revenue approaches.

KEY MARKETING PRINCIPLES RELATED TO PRICING - The following summarizes some fundamental principles and lessons in the area of pricing which seem to be valid across many business categories.

It is important to note here that we should not make the immediate assumption that all of these principles are applicable to the PC software business. Long purchase cycles, small cost of goods percentages, the competitive make-up of a category, and several other factors all play a role in determining what is appropriate for us. On the other hand, it would also be wrong to totally ignore these principles.

1. Product differentiation and product advantages versus competition are generally the best ways to avoid price becoming the key marketing variable: a situation that typically leads to pricing wars.

The ideal is to always have purchase decisions made on product attributes. Naturally, the way to win here is to always have the best product, with clear advantages versus competition, and to always have exciting new features that will be of keen interest. Typically, there is simply no substitute for this approach long-term.

Letting the focus slip off product features over to price often leads to a business category with very low profit margins and in fact, profit losses for many of the products. In a price focused category, there is usually a desperate brand or two whose existence is threatened and its response is typically unnatural price reductions that cause the entire category to become a financial catastrophe. During economic recessions, you often find price focused brands being successful in categories where there is performance parity and the consumer knows it. On the other hand,

FL AG 0105975 CONFIDENTIAL

Microsoft Confidential

Page 1

there are often other categories where economic recession has no impact on the premium priced leader since the consumer knows clearly that the lead brand provides features that are clearly worth that premium.

2 You are generally better off avoiding complicated pricing schemes and pricing merchandising deals that can not be verified.

Complicated pricing tactics quite often lead to surprises in regard to how customers and consumers take advantage of them. For example, complicated promotion deals in the consumer product industry caused many large customers (i.e., supermarkets) to "forward buy" product on deal and build warehouses to store it. Such large quantities were accumulated that they often started up "diverting" services that led to some consumer products being sold not only by their manufacturer but also by the "diverters".

In the case of Microsoft, as we saw in the attached Market Dynamics document, our very complicated set of pricing procedures has caused some surprise with respect to how quickly consumers and customers have found the cheapest way to buy our products. For example, if we consider Microsoft Office for the past six months, such shifting to lower price options has caused a -28% decrease in average unit price versus a year ago. If we experience a similar shift for one more year, we face a major revenue vulnerability. For example, in 1995/96 if our revenue per license drops -10% versus a year ago (quite possible since it dropped -28% in the first half of 1994/95 versus a year ago), and licenses sold grows only +20% due to saturation, revenue will actually decline by -3%. If license volume grows +40%, revenue will only go up +13%. One of the reasons for the price declines is that customers/consumers are using our complex pricing to figure ways to lower their price per license.

The consumer products industry got itself into trouble with complicated merchandising contracts that required customers to verify for manufacturers that they properly merchandised products. This caused manufacturer sales time to be wasted as they tried to help customers verify this performance. Seldom would customers provide adequate records. Eventually, the sales people from the manufacturers simply "trusted" the retailers that they executed the required merchandising support, even though it was generally known that compliance was very weak. Net, the merchandising really did not occur and a lot of cost went into trying to verify that it was occurring. About 20% of sales time was being wasted in this area.

We really have no way at Microsoft to reliably verify CUP and VUP purchases and our Select contracts require people to honestly verify how many licenses they are issuing. Given a tight economy and severe cost pressures in industry today, we face a potential vulnerability of slippage in these areas.

3. Never give a deal you are not ready to offer broadly because you will probably eventually need to.

When people know that others are getting a product cheaper than they are, it eventually ends up being resolved with the vast majority of that population moving to the lower price. In the consumer products business, the east coast retailers in the early 1980's put tremendous pressure on manufacturers for special deals that eventually were provided. It did not take long before customers in other parts of the country demanded similar deals. In some cases, "diverting"

FL AG 0105976 CONFIDENTIAL

Microsoft Confidential

Page 2

networks were set up selling cheap east coast product to accounts in the mid-west and west. In essence, the special east coast deals became national deals.

At Microsoft, we have such a large variety of prices and deals that eventually we risk seeing "creep" of some of these deals into different segments of our business. For example, there are some hospitals now that are getting Academic Select contracts. OEMs are buying our consumer products at very cheap prices versus prices provided to distributors and resellers. Experience suggests that very few pricing variations are kept secret. You generally must assume that the large majority of your customers will be buying your product at prices roughly equivalent to the lower end of your price list. Very simply, humans generally do not allow big price differences to exist for long periods of time.

4. Consumers develop a pricing reference set and if the range of prices in that set is large, consumers will work themselves down that range.

In the consumer products business, the notion of a "deep cut feature price" was very popular in the 1980's. It led to many consumers not purchasing the product off the shelf but waiting for the next "special sale". For example, a normal Crest Toothpaste item that retailed off the shelf for \$2.79 was often found on sale for \$1.69. Consumer research verified that a growing number of consumers were aware of these differentials and totally committed to buying only at the low end. Importantly, they were also willing to buy a competitive product at that low price if they could not find Crest at that low price. Net, the low sale price had become the reference point in that category.

These consumer behavior concerns were the basis for the value pricing initiative by Procter & Gamble that has become the norm in the consumer products business over the last four years. (Value pricing involves the lowering of list prices and funding the decrease by eliminating the special allowances that were intended to fund the temporary price reductions associated with the low "special sale" price.)

From a Microsoft standpoint, our Select contracts train corporate customers to understand what is a fair price for our products. Eventually they want to find out what they need to do to get to the low end of Select pricing. From a consumer standpoint, getting "\$40 off" stickers on products in software stores trains consumers to look for huge rebates. Also, seeing CDs offered for virtually free by equipment manufacturers may cause consumers to fundamentally believe that CDs should be very cheap and hence, delay purchase until they find some kind of price-oriented aggressive offer. That may be why you typically do not see the very popular CDs such as Myst being offered at extremely low prices (i.e., they do not allow bundling with OEMs). It would simply train the consumer to look elsewhere for this item at a very low cost and to not be "suckered into" paving \$60 for something that should be under \$10.

5. Avoid being pulled into low margin businesses.

In the 1980's, east coast supermarket chains put tremendous pressure on consumer product manufacturers to offer large off-invoice discounts to help the chain's profitability and to run "special sales" to attract traffic. The manufacturers were being pulled into the chain's low profit business!

FL AG 0105977 CONFIDENTIAL

Microsoft Confidential

Page 3

In our business, OEMs are constantly trying to pull software manufacturers in to their very low margin business by bundling software. We should do whatever possible to avoid that practice. It not only generates low margin revenue for us but most importantly, suggests to consumers that the prices of software should be very low. Maybe we need low-end "lite" products to satisfy these OEM needs.

6. End of quarter/fiscal year surges rarely yield incremental profit or revenue: they often yield lower margins that never are restored to previous levels.

In evaluating such surges, the tendency is to celebrate the short-term incremental revenue but not face up to the tremendous complexity and cost associated with servicing the unusual peaks and valleys. In many industries, such as consumer products, the costs of excessive sales resources and marketing money to execute temporary surges are being eliminated and the savings are being used to reduce list price. This is also occurring in the automobile business.

7. Volume price breaks tend to work best if there is a cost rationale behind them and the breaks themselves are modest in size.

In the consumer products business, intricate price break structures were typically used, with no solid basis for the break points. Also, some of the price reductions were very large (-5%), causing immense frustration if an account did not qualify for it. This was greatly simplified in the early 1990's by having only one price break. Namely, a lower price was assigned when the order was for pallet loads of product, clearly reflecting the lower cost associated with that method of distribution. This put the price break on a very sound basis and all of the complexity and frustration was taken out of the system.

In our business, the difference between the low level and the high level price for a particular Select contract is often as large as 25%. Additionally, there are different price levels in our MELP, although an account cannot really do anything to get to a certain price level, since they are already buying all they can.

POTENTIAL ACTION STEPS - We should consider the following kinds of things at Microsoft, based on the market dynamics data and the principles sighted above.

1. Given that PC software segments like word processors and spreadsheets are becoming saturated, we really need to develop a method of annual revenue from users of our products. Such a revenue generating mechanism would help us avoid a lot of the merchandising and pricing related pitfalls outlined above. To be attractive, this type of annual subscription must include some new and innovative components besides product upgrades. This issue needs to be thought through from numerous perspectives, such as individual user, LORG, SMORG, student, etc.

2. Our total set of pricing structures, including the fairly complicated Select options, should be simplified whenever possible as we introduce new items and make changes in our prices and procedures. Simplified pricing procedures would reduce our cost of doing business, simplify forecasting, and place more focus on product.

3. We should seriously consider the basis for our Academic pricing policy and ask whether it is relevant or not. The concept of students receiving software for a very low price in order to

FL AG 0105978 CONFIDENTIAL

Microsoft Confidential

Page 4

encourage usage long-term probably makes sense. Having the administrative personnel at a university pay significantly less for software may not make sense. This is certainly the case when you consider that other non-profit organizations could certainly approach us with an argument that they also should deserve "Academic" pricing. This is obviously occurring, since we have at least one case of allowing a hospital to buy via Academic Select.

4. We should re-evaluate VUP and CUP. Is it possible to verify VUP/CUP conditions in a reliable manner? If not, we should consider phasing them out.

5. We should consider tightening our price difference between the low and high prices for a particular Select contract. Also, we should consider tighten the price differential between the highest price (i.e., FPP) and the lowest (i.e., Academic).

6. We should have each product division clearly articulate their strategy with OEMs. The intent here is to avoid key items being pulled into this low margin business. Having software bundled by OEMs sends a signal to consumers that software really should be cheap/free. Another option here is to make available to OEMs "lite" versions of some of our applications and consumer products. We already do some of this with Works.

We will discuss these pricing principles and potential actions in more detail at the executive retreat and discuss concrete action steps that may be worth pursuing.

RJH

FL AG 0105979 CONFIDENTIAL

Microsoft Confidential

Page 5

To:February 1995 WWRDM AttendeesFrom:R.J. HerboldDate:January 25, 1995RE:Market Dynamics

The purpose of this document is to review the market dynamics of the personal computer business and to forecast the implications of these key trends in the desktop applications area. Also, we review our pricing practices and discuss what those practices have generated in the past year and what we believe the future may hold in the price/revenue area.

<u>BACKGROUND</u> - In recent years, there have been several major efforts to do a better job of quantifying the market dynamics of our categories of business. Recently the Desktop Application Division (DAD) has developed a very thorough model that we hope to reapply in other divisions. It does an excellent job of isolating key measures, enabling us to develop a forecast for the future that is far more factually based than we have ever been able to accomplish before. We will review that model and discuss the short-term implications.

Additionally, our pricing practices have become fairly complex. While Select was certainly a successful step forward in standardizing our approach with major customers, it is complicated. Most importantly, our current pricing procedures have caused drastic changes in the way people are purchasing our products. This has generated a very significant decrease in our revenue per unit and that trend could continue in the future as people learn how to take best advantage of our pricing structure. We review what has occurred recently and estimate what may happen in the future.

<u>KEY MARKETING TRENDS</u> - In early 1994 the DAD organization worked with a highly skilled consultant in pulling together a variety of data sources. The purpose was to develop an overall model of the market size of not only the PC business, but also key software components such as spreadsheets and word processing tools.

The consulting firm used here was International Planning and Research (IPR), headquartered in Philadelphia. This service is used by most of the hardware manufacturers such as Compaq. Apple, IBM, Intel. etc. They primarily track and forecast worldwide PC hardware shipments and market shares. For Microsoft, they are providing a forecast of PC shipments, operating system (OS) installs, and word processing (WP) and spreadsheet (SS) installs. To do this, they have developed algorithms and incorporated key judgments that have been developed over 15 years of experience. Naturally, the validity of this system depends on the breadth and quality of the data sources and none of these forecasts are perfect. On the other hand, this work is clearly the best we have been able to achieve in developing a sound quantitative model for forecasting these important trends.

<u>THE PC FORECAST METHODOLOGY</u> - The PC forecast begins with the development of population estimates by market segment (number of employees, schools, households, etc.). Next, PC penetration rates are applied to the population counts to calculate the size of the PC penetrated population. Then an estimate of the average number of PCs per penetrated population is applied to compute the installed base of PCs.

FL AG 0105980 CONFIDENTIAL

Microsoft Confidential

Page 1

The PC installed base grows through time as a result of population growth, changes in penetration rate, and growth in an average number of PCs per penetrated population. These growth factors are effected by industry events such as new products and price changes as well as overall economic climate. IPR estimates these impacts for each market segment (business, education, government, home). PC units shipped to end customers are calculated as the sum of the changes in the installed based plus the number of existing PCs that are replaced with new PCs.

PC replacements are computed by multiplying the previous year's installed base by an estimated replacement rate (which is also impacted by industry events and the overall economic climate).

SOFTWARE FORECASTING - A software forecast is developed after completion of the PC forecast. While operating system installs are tracked and forecasted, we will not focus on that element here. Instead, we will focus on spreadsheets and word processors.

Software package installs are the sum of three components:

1. Software installs which are system related: that is, those packages installed at the time of the purchase of the computer, or at a point in time in the future when the system still has no packages in that software category.

2. Additional software installs which are non-system related: that is, those packages installed onto an existing computer that has one or more packages of this category already installed.

3. Software upgrades which are non-system related; that is, a new version of a software package installed on an existing computer.

There are three parallel software replacement components. The software installed base by software category at the end of a period equals the software installed base at the beginning of the period plus the sum of the installations minus the sum of the replacements. Each of the estimated three software install components by segment in software category are split into revenue status (legal versus pirated). Finally, legal installs are multiplied by an average selling price to compute software revenue.

We should point out that while estimates are made here by outside experts in areas like piracy, second home-machine dynamics, what happens when old machines are passed on, etc. they are certainly not perfect and we plan to work to better understand these things.

Analyzing all of the resulting data, the following are the key findings:

t. The US is fully saturated with word processing and spreadsheets on existing PCs. Both word processing and spreadsheets have exhibited flat penetration rates for the last couple of years. Overall word processor penetration has remained near 75%; that is, on average there are 75 word processor packages for each 100 installed PCs, including pirated packages. Overall spreadsheet penetration has remained near 50% for the last two years. It's clear from this data that saturation for a particular type of software package can occur before penetration reaches 100%.

FL AG 0105981 CONFIDENTIAL

Microsoft Confidential

Page 2

2. Growth in the installed base of word processor and spreadsheets has come from increases in the installed base of PCs. Between the end of 1989 and the end of 1993 the installed base of workplace PCs increased by 12 million and home PCs by 13 million, totaling 25 million. These increases were new PCs in some situations and additional PCs in otners. These increases generated demand for 19 million word processor (WP) packages and 14 million spreadsheet (SS) packages. Importantly, pirates siphoned off about 40% of this new demand, leaving 11 million WP packages and 8 million SS packages for legal sale over this period.

We estimate that an additional 9 million (5 million legal) WP packages and 7 million (4 million legal) SS packages were acquired as version or competitive upgrades.

3. <u>Microsoft accounted for a large share of the legal sales of both WPs and SSs</u>. Specifically, Microsoft sold about 5.5 million WP packages or a share of 35% of total legal sales of 16 million. Microsoft sold about 4.5 million SS packages for a share of 38% of the total legal sales of 12 million.

4. Of Microsoft's 10 million WP/SS packages sold between 1990 and 1993, we estimate most of that can be attributed to growth in the PC market. Specifically, about 62% can be attributed to growth in PC hardware: primarily the 25 million PCs added to the installed base. About 24% can be attributed to Microsoft's success with Windows: that is, the market's acceptance of it as a WP/SS platform as well as Microsoft's high share of Windows applications. The remaining 14% is accounted for by share patterns for each operating system platform (extra high early share on Windows, rising share on Macs) and other normal software churning. All of this is summarized in Exhibit I.

Note that Exhibit 1 shows that 1994 has been a phenomenal year for Microsoft: a 2 million unit increase in new WP/SS units, primarily due to market share gains rather than the impact of growth in the installed base of PCs or the adoption of Windows.

5. We estimate the installed base of PCs (net PC shipments) increased less than 5% in 1994, compared with increases of 44% in 1992 and 19% in 1993. The shift toward Windows was nearly complete by 1993 (72% of WP/SS packages sold in 1993 were for Windows, rising to about 82% in 1994. This 10 percentage point increase is about half as large as the increase between 1992 and 1993). Microsoft market shares of the word processor and spreadsheet markets are provided in Exhibit 11.

6. <u>Microsoft's growth in new licenses for WP/SS in the period ahead is likely to decline steeply</u>. 1994's large share gains by Microsoft are not likely to be repeated. We certainly hope they could be, but we need to be somewhat realistic here. Also, it is not likely that other forces of strength that accounted for Microsoft's growth for 1994 will reemerge in the period ahead. The shift to Windows '95 will not have the same impact as Windows 3.x had on Microsoft's sales, almost regardless of how many PCs adopt Windows '95 since Microsoft's share of Windows 16 bit apps is already so high. This is seen in Exhibit III.

7. The installed base of PCs in the US will continue to expand rapidly, outpacing population growth by at least a factor of five. On the other hand, the rate of change is leveling off and we will likely decline in the period ahead causing a decline in the number of new PCs needing word processors and spreadsheets. These trends are seen in Exhibit IV. It's important to note that the business market is far from full PC saturation (flat PCs per population), but it is relatively mature

FL AG 0105982 CONFIDENTIAL

Microsoft Confidential

Page 3

(60% replacement). "Keyboards" per "white collar" employee is about 70% in major business segments. About 70% of "keyboards" are already PCs.

The home market is less mature (34% replacement) and we will capture a large percentage of the net additions to the PC installed base. The PC growth in the higher income classes is being driven by increasing the number of PCs per household, where piracy risks are likely to be great. Home PC data is in Exhibit V.

<u>POTENTIAL OPPORTUNITIES</u> - There are some factors that could temporarily elevate Microsoft growth versus these forecasts. For example, adoption of Windows '95 could generate a tot more replacement activity and we need to do whatever we can to encourage this.

Piracy is a huge problem. If we could come up with ways to make progress here it would have big revenue potential. Also, there may be larger increases in the PC penetration levels. Again, we need to do whatever we can to encourage this.

THE FORECASTS - Using the methodology that we have briefly described above, we provide here the estimates of PC hardware in the US as well as word processor and spreadsheet volumes. We will not go through the intricate calculations here but instead simply provide the final forecasts.

Concerning PC hardware, while we saw a 26% increase in PC shipments in 1993 and 11% in 1994, the estimates for 1995 and 1996 are 9% and 7.5% respectively.

Concerning word processors, while total market growth rates of 21% and 12% were experienced in 1993 and 1994 respectively, the estimate for the next two years is $\pm 6\%$ annually for both years. If we basically hold our shares with existing word processor offerings and get about a 70% share of Windows 32 bit word processors (as outlined in Exhibit III), we forecast that our WP units would grow about 13% in 1995 and 10% in 1996. This is a dramatic decline from the 27% growth rate in 1993 and 51% growth rate in 1994.

Similarly with spreadsheets, the total spreadsheet market grew 23% in 1993 and 8% in 1994. The estimates for the next two years are +9% per year. Again, assuming we basically hold our shares with existing spreadsheet offerings, and get about a 70% share of Windows 32 bit spreadsheets, our units of spreadsheets should grow at 11% and 13% respectively for 1995 and 1996. This again is a major decline versus the +38% and +58% experienced in 1993 and 1994.

<u>PRICING</u> - Our Select pricing tools have been very valuable to us in bringing discipline to the complicated subject of selling our software to major accounts. On the other hand, the complexity of these offers and the variety of price points within a specific offer has led us to being unable to accurately forecast where all this will lead us with respect to dollars per license and the "mix" of revenue by pricing option.

In Exhibit VI we show what has occurred during the first six months of 1994/95 versus a year ago with respect to dollars per license and license mix. We see that dollars per license have decreased 28%; from a level of \$351 per license to \$252 per license. Importantly, actual number of licenses has increased 121% versus a year ago and that has led to a revenue increase of +59%. Net, while we incurred a price decrease of 28% across our line, this has led to a major gain in

FL AG 0105983 CONFIDENTIAL

Page 4

Microsoft Confidential

market share and the number of licenses sold versus a year ago and a healthy revenue increase (+59%).

Using these trends from the past year, we can forecast what might occur a year from now with respect to our price and license mix. Such a forecast is seen in Exhibit VII. We have assumed a profile for license mix for the first half of fiscal year 1995/96 that reflects recent trends, with the key changes being a further decline in FPP and a further increase in Select and academic. The other changes are fairly modest. Assuming a 10% decrease in dollars per license as customers take best advantage of the various types of purchase options, and using this new license mix profile, if actual number of licenses only increase $\pm 20\%$, we would see a revenue decline of $\pm 3\%$. Hopefully, we will see a larger increase in actual number of licenses sold. As noted on the bottom of Exhibit VII, if we experience a $\pm 40\%$ increase in licenses, our revenue would increase about $\pm 13\%$.

Net, we are probably going to be in for a significantly different type of year in 1995/96 with respect to Office. Namely, we will be impacted by the saturation levels discussed early with respect to hardware and word processor and spreadsheet penetration. This coupled with our pricing schemes could make it a challenging year from a revenue perspective with respect to Microsoft Office.

OVERALL ASSESSMENT - Stepping back from all this, we need to make sure we keep strong pressure against selling our Office and individual word processor, spreadsheet, etc. applications. We should not make these estimates self fulfilling prophecies! Our job is to overachieve in these areas! On the other hand, given our aggressive revenue goals, we need to make sure we are very successful with other elements of our line such as BackOffice and Consumer. It's very important that this be reflected in our up front planning as we tackle our business for 1995/96.

We look forward to our discussion of this material at the WWRDM.

RJH

FL AG 0105984 CONFIDENTIAL

Microsoft Confidential

Page 5

Exhibit I Microsoft's Combined WP/SS Sales

Year	WP/SS Units	Growth	Major Factors
1990 1991 1992 <u>1993</u> 1990-93	1.067.000 1.977.000 3.018.000 <u>3.974.000</u> 10.036.000	85% 53% <u>32%</u>	Windows, PC Growth PC Growth <u>Windows</u> PC Growth (62%). Windows (24%). Other (14%)
1994	6,162,000	54%	Share Gains in Windows

FL AG 0105985 CONFIDENTIAL

Microsoft Confidential

Page 6

HIGHLY CONFIDENTIAL

4.5

Exhibit II Microsoft Market Shares of Windows WPs and SSs

Year	Word Processors	Spreadsheets
1990	88%	98%
1991	57%	77%
1992	50%	54%
1993	47%	48%
1994	52%s	65%

FL AG 0105986 CONFIDENTIAL

Page 7

Microsoft Contidential

. . . . j

Exhibit III Microsoft Word Processor Market Shares

Year	DOS	<u>Win 16</u>	<u>Win 16 -</u> <u>DOS</u>	Estimated Win 32
1990	6%	88%	82%	
1991	6%	57%	51%	
1992	6%	50%	44%	
1993	5%	47%	42%	
1994	10%	62%	58%	
1995		63%		73%
1996		63%		70%n

FL AG 0105987 CONFIDENTIAL

Microsoft Confidential

Page 8

Exhibit IV New PCs and Additional *PCs

Year	Bus	Govt/Ed	Home	Total	<u>°iHome</u>
1990	1758	648	2511	4917	5.1%
1991	1375	713	2819	4907	58
1992	2585	1025	3440	7050	49
1993	2811	1246	4321	8378	52
1994	2587	1140	4932	8658	57
1995	2293	1066	5234	8593	61
1996	2115	1009	5200	8324	63

*Additional means the purchaser already has one PC and this purchase is for an additional PC for that household.

Microsoft Confidential

FL AG 0105988 CONFIDENTIAL

Page 9

Exhibit V The Home PC Market

Year	New Home PCs	Additional Home PCs	Home Total	<u>° a Adds</u>
1990	1.500.000	1.011.000	2,511,000	40
1991	1.703.000	1,116.000	2.819.000	20
1992	2.307.000	1,133.000	3,440,000	33
1993	2.807.000	1,514,000	4.321.000	35
1994	2,707,000	2.225.000	4,932,000	- 45
1995	2,589,000	2.645,000	5.234.000	50
1996	2.409.000	2,791.000	5.200.000	54

FL AG 0105989 CONFIDENTIAL

Microsoft Confidential

Page 10

Exhibit VI <u>Microsoft Office</u> <u>Price and License Mix Shifts</u> <u>Worldwide Data</u>

Licenses

Price Option	FY94 - H1	<u>FY95 - H1</u>	% Change
Competitive Upgrade	215	688	-220%
Special Agreement	54	187	-246%
Academic	36	274	-661%
OEM	6	96	-1.500%
FPP	486	494	+2%
MLP/MOLP (STD)	185	246	+33%
Select (STD)	54	327	-411%
Total	1.046	2.313	+121%

S Per License

Price Option	FY94 - <u>H1</u>	FY95 - H1	% Change
Competitive Upgrade	252	229	-9%
Special Agreement	172	139	-19%
Academic	200	100	-50%
OEM	333	137	-59%
FPP	428	400	-7%
MLP/MOLP (STD)	352	332	-6%
Select (STD)	331	243	-27%
Average	351	252	-28%

License Mix

Price Option	FY94 - H1	FY95 - HI
Competitive Upgrade	21%	30%
Special Agreement	5%	S%
Academic	3%	12%
OEM	1%	4%a
FPP	46%	21%
MLP/MOLP (STD)	18%	!1%
Select (STD)	6%	14%

Revenue in S Thousands

Price Option	FY 94 - HI	FY95 - HI	% Change
Competitive Upgrade	54,158	157.657	+191%
Special Agreement	9,392	26,125	+178%
Academic	7,178	27,387	+282%
OEM	1.968	13,152	+568%
FPP	207.748	197.563	-5%
MLP/MOLP (STD)	65.112	81,719	+26%
Select (STD)	21,128	79.516	+276%
Total	366,684	583,119	+59%

FL AG 0105990 CONFIDENTIAL

Microsoft Confidential

Page 11

Exhibit VII <u>Microsoft Office</u> <u>Price and License Mix Shift</u> Worldwide FY96 - H1 Forecast

License Mix

Price Option	Actual FY95 - H)	Assumed FY96 - H1
Competitive Upgrade	30%	30%
Special Agreement	8%	10%
Academic	12%	14%
OEM	4%	6%
FPP	21%	10%
MLP/MOLP (STD)	11%	9%
Select (STD)	14%	21%
T		

Licenses

Price Option	Actual FY95 - HJ	FY96 - H1*
Competitive Upgrade	688	832
Special Agreement	187	277
Academic	274	388
OEM	96	167
FPP	494	277
MLP/MOLP (STD)	246	250
Select (STD)	327	583
Total	2.312	2.774

*Total license growth of +20% broken out by license mix.

S Per License

Price Option	Actual FY95 - H1	Assumed % Change	Estimated FY96 - H1
Competitive Upgrade	229 .	-10%	206
Special Agreement	139	-10%i	125
Academic	100	-10%	90
OEM	137	-10%	123
FPP	400	-10%	360
MLP/MOLP (STD)	332	-10%	299
Select (STD)	243	-10%	$\frac{219}{227}$
Average	$\frac{2+3}{252}$		227

Revenue (License @ S Per License) in % Thousands

Price Option	Actual FY 95 - HI	Estimated FY96 - H1	% Change	
Competitive Upgrade	157.657	171.392	-9%	
Special Agreement	26.125	34.625	+33%	
Academic	27,387	34,920	+28%	
OEM	13,152	20.541	+56%	
FPP	197,563	99.720	-50%	
MLP/MOLP (STD)	81,719	74,750	-9%	
Select (STD)	79.516	127,677	+61%	FL AG 0105991
Total	583.119	563.625	$\frac{+61\%}{-3\%}$	CONFIDENTIAL

Note: If actual licenses increase by +40% versus the +20% assumed above, total revenue grows by +13%.

Microsoft Confidential

Page 12

HIGHLY CONFIDENTIAL