Strategic and Financial Gains from Licensing Visual Basic for Applications

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Executive Summary

Situation Analysis

There is currently a clear demand in the marketplace for a standard embeddable scripting language. With the success of Office as a development platform, end users are demanding similar development capabilities from both off-the-shelf and custom applications. Recently there has been an emergence of embeddable products to meet this demand from companies such as Softbridge, Summit Software, Netlogic and Cypress. According to independent sources, Lotus is also aggressively selling an embeddable version of LotusScript.

Microsoft is in a position to capitalize on this market demand while furthering it's strategic and financial goals.

Recommendation: License VBA

The goal of licensing VBA to third party vendors will be to make VBA the standard embedded scripting language, with dozens of applications hosting VBA and hundreds of thousands of additional users writing code in VBA. The sales cycle for a VBA embeddable host should begin in June 1995, with RTM of a VBA '95 SDK in December 1995. The first products with VBA should be on the shelves and in corporations by June 1996, immediately following the release of Office 96. The projected revenues from this program are $10M in year one, $22 in year two and $34M in year three. Costs are estimated at $1.2M per year.

This program meets the following Corporate, Office, and Database and Development tools objectives:

Microsoft Corporate Objectives

- Solidify OLE as the standard object architecture
- Move defensively against competitors who are trying to drive their scripting language into the forefront
- Complete Bill Gates' vision of a "common macro language"

Office and Windows Objectives

- Maintain a competitive advantage over other software suites
- Further the goals of the Office Compatible program
- Sell more Windows and Office through increased community of VB developers and VB and VBA created solutions.
- Entrench Office and Windows in the corporate systems by increasing switching costs to other platforms or applications

Database Development Team Objectives

- Leverage and continue to build brand awareness of VB
- Empower the MS development community by enabling developers to leverage their programming knowledge across many different applications
    Increase sales of development tools, building the foundation for sales of Office and Windows

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Corporate Objectives

Solidify OLE as the standard object architecture

In order to embed VBA an ISV application must conform to the OLE object standard. VBA will be viewed by the host ISVs to be a key differentiating factor, as they can capitalize on the brand awareness of VB, becoming a part of an emerging standard while delivering on benefits demanded by their customers. Their competitors will be faced with a choice of conforming to the OLE standard (in order to later embed VBA) or relying on a proprietary scripting language. For every ISV that decides to host VBA there will likely be a number of competitors of that ISV that will consider adopting OLE, creating a multiplier effect. For example, assume 10 third party applications host VBA in its first year of release and that they promote this new benefit. If each application competes with 5 other products, then 50 additional products will be motivated to support the OLE standard (if they have not already done so) to remain competitive.

Also, as the number of VBA developers and their custom applications increase, so will the demand for OLE components to drive these solutions, thus providing further momentum for the OLE standard.

Defensive move against similar approaches by competitors

Borland, Lotus or Novell will also want to own the standard, and over the next two to three years develop their own embeddable version of a scripting language. According to two independent sources, Lotus is aggressively pushing an embeddable version of Lotus Script. It is in Microsoft's strategic interest to compete against this threat now by licensing VBA.

Also, WordPerfect is developing a scripting language for PerfectOffice with cross-application recording and editing of macros. If this feature or future enhancements are perceived to be of great benefit to end-users the Office Suite could lose VBA as a key competitive advantage.

Licensing VBA to many ISV's extends MS Office's competitive advantage by reducing the threat of being "leapfrogged" by feature sets. Microsoft applications will compete based on being part of an industry standard and on marketing the best set of OLE components, as well as owning the best scripting language.

PR win as MS delivers on 1987 promise of a common macro language

The press will view this as Microsoft's commitment to an industry standard while delivering on the promise of a common scripting language. We can expect favorable reviews while countering the image of MS as promoting a proprietary technology.

Office and Windows Objectives

Maintain a Competitive Advantage over Rivals

Office will maintain an advantage over rivals as competitors will not be allowed to embed VBA.

PRIVILEGED MATERIAL
REDACTED   We can prevent
competitors from embedding VBA in their products by selecting particular ISV's to whom we will license VBA, and entering into signed license agreements with them.

When Microsoft decides to broaden the licensing agreement to include potentially hundreds of ISVs, individual contracts signed by each licensee may not be administratively feasible. In this case we may

develop a shrink wrapped SDK available to any of hundreds of ISVs and sold through more traditional channels.

<center>PRIVILEGED MATERIAL
REDACTED</center>

If our goal is only to prevent a handful of major competitors from using VBA, the enforceability of a shrink-wrapped license probably need not be a major concern because major competitors would be unlikely to risk basing a new product on Microsoft code that is not properly licensed.

In the medium-term, Office will compete by owning the most comprehensive and powerful set of OLE components on the market. As OLE becomes the standard object model, developers will look to Microsoft to provide components that drive their applications.

Further the goals of Office Compatible Program

The goal of the Office Compatible program is to build a family of applications that look and work like Microsoft Office; in effect, extending Office to include the top selling applications in the most important software categories. An end user would choose Office over another suite, as they can be assured a broad range of complementary products and a common interface among many programs.

A hostable VBA product greatly enhances the Office Compatible program as it provides end users a common macro language as well.

Sell More Windows and Office applications

In a MS VB owner's survey (1994 Market Decisions Corporation) 99% of the respondents developed applications for the Windows 3.1 platform, 39% for Windows for Workgroups and 30% for Chicago. VB owners created an average of 1.9 applications for external distribution in a 12 month period, (Independent software vendors and VARs/System integrators created an average of 3.4 and 2.2 applications, respectively). The average number of copies sold or distributed per application was 86.

Therefore, an expansion of the universe of VB developers by 100,000 increases the number of applications developed for the Windows' platform by 190,000. These applications will be distributed on average to 16,430,000 desktops (Note: The actual number of total desktops will be less due to multiple custom applications running on a single computer).

Licensing VBA also opens new vertical markets for Office, leading to additional sales. According to Eric Kim, Vice President of Corporate Technology Strategy at The Dun & Bradstreet Corporation, if D&B were allowed to license VBA he estimates that VBA would be installed on 100,000 developer desktops. D&B sells custom applications into vertical markets such as Sales and marketing, finance, health care, consumer products, and pharmaceuticals. VBA developers in these vertical markets will be motivated to purchase Office to extend the capabilities of their custom application through OLE automation.

Increase switching costs to other platforms and competing applications

As developers create custom business applications that require the Windows platform and/or Office applications to be present on the desktop, the cost of switching platforms and applications increases. All

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custom applications must be rewritten to support a new platform or suite of applications. Switching platforms becomes even more costly with multiple custom applications running on a single desktop.

Also, developers that use VB or VBA are more likely to use Office components in their solutions, as Office represents the best set of OLE components available. As the number of applications created with Office components increase, one can expect a corresponding increase in desktops that must have Office to run these solutions.

Database and Development Team Objectives

Build brand awareness of VBA

The new ISVs that host VBA will become evangelists for the product as they will view the technology as a key benefit and point of differentiation for their applications (similar to how Office positions VBA as a competitive advantage). Promoting VBA as their embeddable scripting language is to their strategic and business advantage. Microsoft will work with key vendors to ensure a unified message to promote the VB brand.

Enable Microsoft developers to leverage knowledge across many Windows applications

Microsoft recognizes the strategic importance of the developer community. Not only do they write the applications that run on the Windows platform, but they purchase more software than end users, and depending on whether they are corporate developers, SPs, or VARs, each developer influences software purchases for 40 to 20,000 desktops.

Providing these developers with a common scripting language enables them to leverage their knowledge of VBA to develop custom applications from within many different Windows applications. It also improves the competitive advantage of the Office Suite as it will be the only suite with VBA, and represents the most comprehensive set of OLE components available today.

Sell More Development Tools

A further benefit of this program will be an increase in market share for VB. Developers that learn VBA to create solutions within ISV applications can use this knowledge to quickly develop applications in VB. Attachmate estimates that 3% of its Extra! For Windows4.0 user base programs with VB, but 6% of their users would program with VBA if it were embedded in their application. With an installed based of over 1,000,000 we can expect 30,000 new VBA developers and hobbyists from this application alone. Micrografx estimated similar percentages of new VBA users if they were able to embed VBA into their products.

Revenue

Direct

Total revenues for the first year (beginning June 1996 when the first ISV products with VBA appear on the shelves) are estimated to be $10M, the second year $22M and $34M for the third year.

The first year estimates are derived from the potential pilot program revenues from the companies listed below. These firms are a subset of nearly 40 companies that have contacted Microsoft over the past six months and have specifically requested rights to license VBA for their products. Over the past two weeks an appropriate representative from each company listed below was contacted and questioned about their interest in VBA, the applications that could potentially host VBA, estimated sales of the application over the next two years and the estimated street price of that application. License fees were estimated to be 2% of revenues for packaged software goods, and $15 per desktop for vertical market applications (similar to OEM pricing). Many of the companies said that at this pricing they would still be interested in licensing VBA.

Subsequent years are based on revenue growth from the pilot companies at 20% (based on worldwide software revenue growth), in addition to new business opportunities equivalent to the first year revenues.

It is reported that Softbridge licenses their VBA clone for combinations of a flat fee and royalties. The range of the flat fee is between $150,000 and $200,000 and royalties range from 1 and 2% of revenues. My understanding from vendors is that they offer different pricing schedules with higher flat fees with low royalties and vice versa.

Pilot Program

Company	Product to include VBA	Estimate of # of licenses	Estimate of Total Rev ($M)	Estimated License fee
D&B	Vertical mkt apps	100,000	n/a	1,500,000
Attachmate	KEA!420	33,000	8	160,000
Attachmate	Extra! For Windows4.0	500,000	120	2,400,000
FileNet	Workflo runtimes	18,000	12	240,000
Intergraph	Document Management	200,000	200	3,000,000
Micrografx	ABC FlowCharter	100,000	30	600,000
Micrografx	ABC ToolKit ($495)	67,000	20	400,000
Cadence	Electronic Design	10,000	10	200,000
Jet Form	Filler Product	500,000	38	760,000
Autodesk	Autocad Lt	100,000	45	900,000
Total		1,553,000	$489M	$10.16M

Indirect Revenue and Benefits

The indirect revenues for VB will stem from the following:

- Increased VB Sales from a larger VBA developer community.
- Increase Office sales from additional sales in vertical markets, increased use of OLE components and increased switching costs for Office.
- Benefit from evangelizing by third party ISVs that host VBA in their products.

Cannibalization

Attachmate and Micrografx estimated that 3% of their user base program in VB. Assume this is average, and 50% of these users will no longer purchase VB, then the cannibalized sales from the pilot program will be .015*1.5M*$130 (upgrade price) or $2.9M. However, the user base for programmers is estimated to increase to 6%, and assuming that 50% of these new users buy VB for the first time due to their exposure to VBA, then the cannibalization of sales will be offset by new sales.

COSTS

The costs associated with this program are summarized below:

Development:	7 additional headcount ($120,000 fully burdened)	$840,000
Marketing:	2 headcount	$240,000
Addtl Mkting	PR, Messaging, travel, misc.	$150,000 EST
Total		$1,230,000/ year

Development

The headcount requirements for development are based on discussions with the development team and Dave Moore. It assumes that either VARs or consultants will handle most of the implementation and PSS support for the pilot program and future releases. The team will be responsible for building the SDK, (including sample applications, end user docs, API docs, deliverables, and test kits), training and working with VARs or consultants, and developing future SDKs after the first year rollout. Additional developer headcount required:

Developers	2
Program Manager	1
Testers	2
User Ed (1 writer and 1 editor)	2
Total	7

Marketing

Marketing expenses will include developing a press kits and press tours , expanding or developing a new "frequent flyer" program to reward ISVs that promote the VBA brand, and creating unified message for VBA. A product manager will be responsible maintaining the program; working with ISV's for unified message on branding VBA, negotiating licensing agreements, and working with DRG and VARs/Consultants on new business development. An additional product manager will be necessary to develop future marketing plans and business development for a mass roll-out plan for the subsequent version of the VBA.

Terms of Agreement

Proposed Licensing Fees

Royalty
- Royalty equivalent to 2% of Revenue from products that include VBA or for custom vertical market applications, $15 per desktop (similar to an OEM pricing).
- Minimum of $5/ unit
- Minimum Royalties of $100,000 per year

Flat Fee
- ISVs will be responsible for paying implementation and product support fees to VARs or Consultants. Estimates range from $50,000 to $100,000 based on time to implement.

ISV Support

Below are two potential plans for ISV support. The first, would be to partner with one or more key VARs that will be responsible for delivering many of the support, marketing and sales functions. VARs that would be considered are InterGroup Technologies, Inc., Summit and Softbridge. In order for a VAR program to be successful, Microsoft would maintain control over many of the account management functions and limit the distribution of VBA by the VARs to third party ISV's. The second plan entails Microsoft handling all implementation and support by working with Microsoft consultants or outside "authorized consultants." If a deal can not be structured with a VAR, then Microsoft would work with consultants who would provide implementation and product support.

Plan A

Microsoft will license technology to a selected number of VARs. The VARs will partner closely with Microsoft to ensure:
- Limited distribution of VBA
- Microsoft maintains account management role
- Unified marketing message for branding of VBA

The "Value added" of the VARs will include:
- Language integration experience
- Consultative sales to potential ISV clients
- Implementation and product support to VBA customers
- Account maintenance
- An installed user base that could be switched to VBA
- A single point of contact for the MS development team

Plan B

ISV's will contract with MS or "Authorized" consultants that are trained by the MS VBA development team for implementation support.

Current estimates are for one full time consultant for two accounts over a six month implementation period. The consultant role will be to:
- Implementation and product support to VBA customers.
- A single point of contact for the MS development team

Ongoing support will be through Microsoft PSS programs, paid for by the ISV. The level of support will depend on the ISV's need.

The ISV will be responsible for their end-user support in both Plan A and Plan B. Microsoft will provide incentives for ISV's to have VBA certified training professionals as part of their product support team.

Program Roll-out

Pilot Program- Year 1

The pilot program will consist of 10 to 20 ISV's that would partner with MS in embedding VBA into their applications. The goals of the pilot program are to:

- **Make VBA the standard scripting language:** VBA will become the defacto standard language if 10 of the top world-wide ISVs host VBA in their applications.

- **Develop a support infrastructure.** An ISV development team will need product support to embed VBA in their applications. The pilot program will enable MS to develop the appropriate support structure before rolling out the program to potentially hundreds of ISV's.

- **Build awareness of VB brand:** Microsoft will work with the partners to manage the marketing messages delivered by each ISV in promoting and building the VBA brand. A marketing product rollout plan will insure maximum PR and momentum for the standard.

- **Maximize revenues:** The top 10 ISVs that would embed VBA will account for a significant portion of the overall revenue from the program. We can expect higher royalties if some are granted a one year exclusivity.

Mass Distribution Year 2

After the one year pilot program Microsoft will officially launch the VB SDK. To preserve revenues from the major ISV's, pricing will need to be a combination of a flat fee and royalty. In the second year we estimate an additional 30 ISV's will embed VBA.

Risks

- End users use VBA in third party software applications to call Lotus or WordPerfect objects, hard coding competing applications into the corporate systems.

- VBA causes applications to crash after release, causing degradation of the VB brand.

- MS VBA development team has never supported more than one client at a time. Bug fixes, revisions, and general support for multiple outside clients could cause significant internal support problems.

- VBA upgrades become more difficult with outside applications, perhaps lengthening the development cycle for new versions of VBA. Office could lose VBA as a competitive advantage if rivals are quicker to upgrade their scripting languages. Also, if VBA versions are delayed, this could cause delays in the launch of MS products that host VBA.

- Potential backward compatibility problems with outside ISV products.

Other Prospects

	WorldWide Rev	Products
Aldus	206	PageMaker
Attachmate Canada		
Autodesk	405	3D studio, Autocad, Autosketch
Axon Instruments		
BBN Software	233	AI/Expert Systems
Cadence		
California Software		
Cambridge Scientific Software	22 employees	Engineering/Scientific
Century Computing		Do front end for GEnie
Cognos	150.1	Decision Support
Computer Vision	827.3	Information Technology/CAD CAM
Comshare	105.2	Decision Support
Coromondel		Database File Management
Cycare Systems	71	Health Services
D&B Software		
Escalade		
FileNet	158.8	Forms Processing
First Data Resources		
FirstFloor		
Great Plains Software	600 employees	Desn Support
HP Gas Chromatic	20	Very interested
Intellution		have 4gl need scripting language
Interleaf	117	Document management
Legent	440.18	Disaster Recovery for Mainframes
Micrografx	60.5	
Nielsen (Nielsen Workstation)		
Oracle	2000	Database/File Management
Peoplesoft	69.2	HR
Prodigy Services		
Protosoft		Object oriented case tool-talking to Softbridge
Scopus		have 4gl need scripting language
Software Publishing Corp	104.3	Harvard Graphics
Solomon	100 employees	Inventory Control
SPC (Software Publishing Corporation)		
Stac Electronics		
Sunquest Information Services	60	Health Services
Symantec		
Vantive		have 4gl need scripting language