

The Economics of Migrating to GUI

By Pancho LaPaz and Greg Grisham

At BASIS International's recent TechCon99, Pancho LaPaz, President of SCS Consulting, gave an insightful presentation on the economic aspects of migrating a character-based, Business Basic application to GUI. Having developed Business Basic applications for 20 years, LaPaz now heads a consulting firm dedicated to providing GUI solutions to businesses internationally. The following is a synopsis of his presentation.

You have a character-based application that you have been running for a number of years and, for a variety of reasons, feel you need to move it into a GUI environment. You are faced with two options: (1) A complete rewrite of the application in a development language that is native to the Microsoft Windows world, or (2) convert your code to BASIS' Visual PRO/5®.

Consider the complete rewrite option.

There are a number of other languages that have either been modified or developed completely to be utilized in a Windows application. Quite often, you must use a language from one vendor and a database package from another. There are obvious problems associated with splitting your development support into two factions.

In most cases, you will also need to utilize one of the higher end database products, such as Oracle, in order to have some sort of growth path. These larger database applications certainly deliver functionality, but with that functionality comes a higher price tag. Usually they also require some significant hardware enhancements, most often, more powerful processors, additional memory and larger disk storage. Your customer's major concern is that your new application deliver at least close to the same performance that the old application delivers. This can be a significant challenge in the Windows environment. Also, implementation of larger database applications contains significant associated expenditures for training, conversion and deployment.

The development language you select is also wrought with overhead. In most cases, the language is designed inherently for Windows and will not support a heterogeneous environment of Windows and non-Windows workstations. Assuming your staff is made up of Business Basic programmers, there are again associated training costs and a learning curve to overcome. Quite often, in order to convert a system to accommodate a complete rewrite, you need to split your staff between ongoing support for the old application and a new-tool development group.

Most importantly, a complete rewrite puts the value of your existing application at risk by jeopardizing the business rules contained in the application. In order to truly rewrite the application, you need a system expert as well as a user expert on the current application to preserve the business rules and shepherd development in the new environment. Quite often, these people may no longer be working for your company or original development specifications and/or knowledge are otherwise not available.

Consider using BASIS Visual PRO/5.

It is important to recognize that Visual PRO/5 is capable of delivering a standard Windows look and feel. It also contains all of the basic connectivity and functionality you currently have

in your application. Using Visual PRO/5, you are still in the Business Basic world you already know, so you can focus effort on the user interface portion of your application exclusively.

First and foremost, this is the easiest way to preserve the business rules in your application. Obviously, a great deal of the complexity of the migration is dependent on the structure of your existing code. The more structure, the greater potential to move chunks of code untouched. The less code you have to touch, the faster the migration.

Another advantage of staying in the Business Basic world means the migration can be gradual. You can selectively move certain points of your application, whether by module or individual screen, to GUI. Ultimately, you can design your code to support BOTH environments within the logic of the same application. Initial reaction to this approach is that it bears too much similarity to operating on a live patient. Not so. Your character application will continue to perform as before in Visual PRO/5 and allow you to "go GUI" at a pace that is comfortable to you and your staff.



Your staff is a significant consideration here also. The Business Basic code they know will still operate and, with a few additional structural code functions, they can come up to speed for GUI very quickly. This means (1) you won't have to hire additional programmers and (2) the core sustaining group can work on a single application. You don't have to split resources and you grow your staff with your application transition.

There is no extraneous data migration to do. In the total rewrite model, there is a large amount of work to migrate data files and maintain data integrity at the point of switch over. This is time consuming, expensive and a high-risk venture that makes testing in a parallel mode almost impossible.

There is no immediate need to do variable conversion. True, with the enhancements to the language, templates and the utility of a data dictionary, there are compelling reasons to make some data conversions. But, like the application, this can be done gradually, at a pace that works for you. The reality is the A\$ variable will perform just fine in the Visual PRO/5 environment.

Lastly, you can see quick results. This has an immeasurable effect on your customers' confidence as well as invigorating your programming staff. Everyone likes to be part of progressive technology. This helps you retain staff and open up a whole new level of program customization requests for your business.

Visual PRO/5 is a strong product and available today. Arguably, the only person who benefits from your migration delay is your competition. Additionally, once your code is in the event-control structure of a Windows application, moving to BASIS' next generation product, BBj™, becomes a seamless transition into the enterprise world. BBj will allow you to run on more hardware platforms than ever before. Integration to the Internet will be significantly enhanced. The time to start your move is now, with Visual PRO/5, in order to be fully prepared to enter the future of business.