

2 below is an example of various fields of data contained in the *td_ARPaymentHistory* table above.

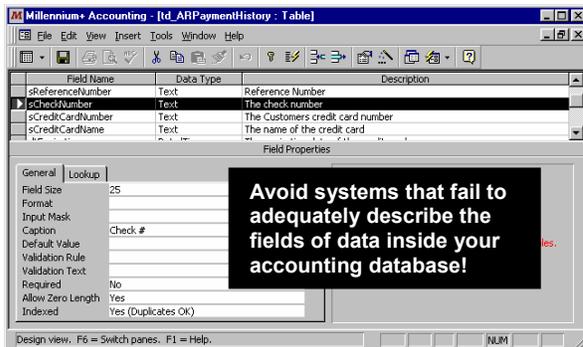


Figure-2

Note that each field of data is fully described. The field of data named *cPaymentAmount* is clearly defined as the amount of the payment.

Why is all of this so important? We have learned after years of work with various organizations of all sizes, that very few accounting systems are purchased off-the-shelf, so to speak, and implemented “as-is”. That just does not happen very often, anywhere. Every organization has unique requirements that are typically best reflected in varying management reports and analyses.

Many “high-end” enterprise accounting systems attempt to anticipate these requirements and build into their products a large number of pre-defined reports. Lower cost systems typically provide a limited number of basic reports. In either case, the real issue is how hard or easy is it to “modify” your accounting system to meet the unique needs of your organization. The key to accomplishing that is an “open” database. We suggest that you avoid systems that have proprietary databases. And watch out for attempts to side step this issue by convincing you to use

various import/export tools. Other than commonly available desktop application programs, you should not have to buy anything extra to be able to easily access the data in your accounting system.

2. Lack of Flexibility

Directly related to the need for an open database is the need to make sure that your accounting system can be easily modified and tailored to meet your needs. One of the first things to check in any system you may be interested in buying is to determine how easy it is to email, fax and/or export any report in the system to commonly used desktop application systems and internet pages.

Shown below in Figure-3 is an example of an accounting report that provides a direct path to exporting accounting information to Microsoft Office tools.

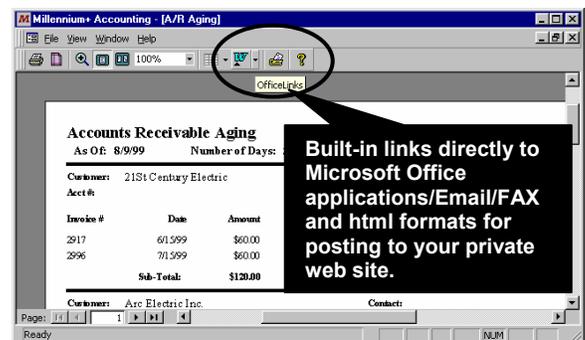


Figure-3

The benefit of this kind of flexibility lies in the ease with which information can be shared in a collaborative manner to increase the productivity of everyone.

Other good tests of flexibility are to determine how hard or easy it is to use tools like MS Query and/or the Pivot Table Wizard built into Microsoft Excel to get data out of your accounting system in order to prepare special

analysis reports for management. Can the data be easily presented in graphical form? Can the data be presented in forms that can viewed by Internet browsers, on your company's private web page?

Shown below in Figure-4 is just one simple example of what we mean by this kind of test. This Excel worksheet is simply displaying in graphical form the top customers for an organization based upon data stored in an open database accounting system.

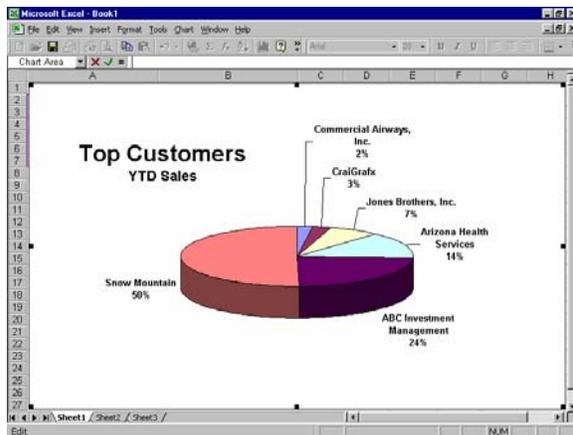


Figure-4

The above took less than 5 minutes to prepare using MS Query combined with the Charting Wizard in Microsoft Excel. Accounting data was extracted from an easily accessible accounting system database. *This could have been just as easily published as a web page for your internal web server.*

Flexibility also means being able to call things what you want to call them in your system. So another test of flexibility would be to find out how hard or easy it is to change the names or labels of a menu step or report in the system you might be considering. Is the system table-driven? Can you easily access the table(s) that provides names

of things? After accessing that data, can you change labels and descriptions?

Keep in mind what I said earlier. Perhaps your organization is different, but my experience tells me that the best assumption to make is to assume that the day after you have purchased your new accounting system, someone in your organization is going to ask you for new information that has never been produced before. Assume that your organization merges with another organization. What then? In short, the acid test question becomes how will your system deal with change. Can *you* change your system . . . without spending hours and hours and thousands of dollars in custom programming work?

We are passionate about the need for flexibility in accounting systems! You should be too. Just make sure that the flexibility you are being sold does not inject another layer of complexity into your world. The key is to learn how to use common desktop tools you likely may already have on your PC.

3. System Not Easily Scalable

In practical terms here's what we mean by scalability. Ask yourself this question. If you purchase the system you are considering what would happen tomorrow if your organization doubled or tripled in sized?

One of our leading competitors offers at least four *different* accounting systems for small to medium sized organizations. They all have different designs that end-users would need to learn how to use.

There's a better way. What you need to look for is a system that will allow you to buy *no more or less basic capability than you actually need* to start with, then in case you do need to grow, will allow you to do so without re-training your users, regardless of how large your organization may become.

The key to scalability is to buy a system designed to run proven infrastructure technology. We have designed our systems so that the same functionality, navigation and user screens are used from our smallest system that might be used on a single desk-top (Microsoft Access version), right on up to hundreds of desktops in a large-scale, enterprise environment (Microsoft Server 2003/SQL Server 2000/2005 version). The key to our scalability is our application design combined with the power and flexibility of Microsoft (from their Small Business Server version up to their full Enterprise model).

When Microsoft SQL Server is combined with Windows Server 2003 in a client/server structure, our systems have the ability to grow dramatically in numbers of concurrent users, and/or size of database as dictated by the volume of transactions that must be processed.

The acid-test question comes back to people. People costs, as we all know, are the more significant costs in any system. Scalability means not having to buy a different system as your organization grows, or having to re-train your users every time you expand.

4. Non-Intuitive GUI & Awkward Navigation

The graphical user interface (GUI) and ability to navigate in and around your accounting system is one of the most important keys to making a “difficult” application system a bit easier to use.

Anyone who tells you an accounting system is an easy system to properly setup and start using is either naïve or very much ill informed. Accounting systems by their very nature are typically a lot more difficult to setup and use than most computer applications. That is why most accounting systems are selected by accountants, Controllers, Chief Financial Officers, and business owners. (We'll talk later about why they often make many of the mistakes discussed in this report).

The key issue is to avoid systems that have a “BIG” ego. What do I mean by that? Systems with big egos typically have spent a lot of time and effort (that you are going to pay for one way or the other) creating their own unique tool bars and menu controls and the like . . . often to accomplish many of the routine tasks like file open, printing, saving, cut, copy and paste . . . that users have already learned to use with their word processing or spreadsheet applications.

Try to select systems that have earned some sort of independent certification related to their ease of use or compatibility with other common desktop applications. One example of that is shown below in Figure-5. This is a screen that is used to prepare itemized billings.

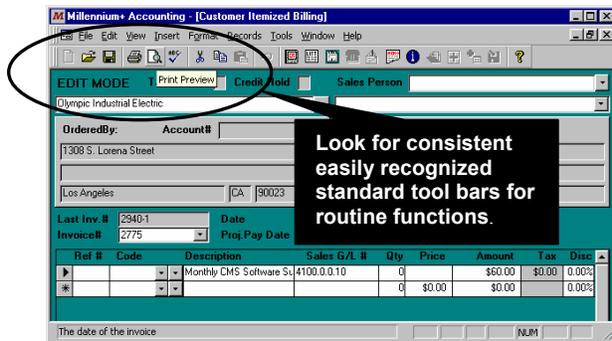


Figure-5

Note above that on the left side of the screen near the top, all of the tool bars are exactly the same as are found in Microsoft Word, Excel and other Microsoft desktop systems. This is one of the benefits of selecting systems that are Microsoft Office compatible. Print preview, for example, works the same regardless of where you are in the system.

Another key to ease of use in your accounting system is the ability to navigate your way through and around all of the various modules or components built into your system. A good test is to ask someone who will be doing a lot of the day to day work, in more than one accounting module, to tell you how hard or easy it is for them to simultaneously be entering data, let's say, into an AP invoice, but need to quickly answer a question from an aged AR analysis. Or run a comparative balance sheet report from the general ledger module.

As shown below in Figure-6, this particular system deals effectively with overall system navigation through the use of a simple tab control that allows users to access any module in their system at any time, then either enter data, perform inquiries, generate reports, or take actions (process transactions like

sales orders) . . . all from a single, common, easy to understand "main menu". *Caution:* avoid systems that require you to navigate using a "file explorer" style. Why? We, like most of our competitors, have over 250 possible combinations of data entry, inquiry, reports and action modules (before getting down into various report and/or drill-down filters). A +/- file explorer technique is not nearly as easy to learn and use.

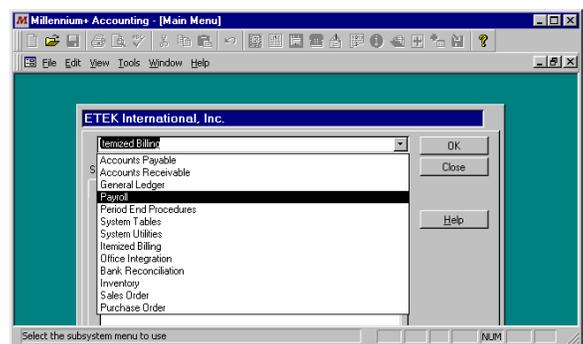


Figure-6

By selecting a system that provides a consistent and easily understood graphical user interface, and intuitive and natural navigation ability, you will be focusing everyone's efforts on the application itself. With the natural complexity built into accounting systems simply because they are what they are, practical GUI design goes a long ways towards making users more productive.

5. Weak Audit Trails

All accounting systems have to perform accounting functions essentially the same way, namely, in accordance with GAAP (Generally Accepted Accounting Practices) FAS-95, as subsequently amended by FAS-102 and FAS-104. That is assumed. What is not assumed is the presence of practical audit trails built into the system, not so much from the

point of view of the accountant or auditor (those are also a given), but equally, if not in some ways more importantly, audit trails on *the use of the system*. Who did what, when . . . to the system?

Enter	Exit	User	Sta	Form Name
8/2/99 8:32:48 AM	8/2/99 8:34:00 AM	Admin	0	Im_PRRReview
8/2/99 8:29:24 AM	8/2/99 8:31:54 AM	Admin	0	Im_PRRReview
8/2/99 8:23:33 AM	8/2/99 8:24:03 AM	Admin	0	Im_PRRReview
8/2/99 8:19:16 AM		Admin	0	L_SYSGlobalValues
7/30/99 10:24:45 AM		Admin	0	L_SYSGlobalValues
7/29/99 10:44:05 AM	7/29/99 11:22:26 AM	Admin	0	Im_AIRInvoice
7/29/99 10:43:17 AM	7/29/99 10:43:51 AM	Admin	0	Im_AIRInvoice
7/29/99 10:39:13 AM		Admin	0	L_SYSGlobalValues
7/29/99 10:38:34 AM		MTX	0	Serial Number: 903960-11111-1111-1111
7/28/99 9:44:19 AM		MTX	0	Serial Number: 903960-11111-1111-1111
7/12/99 9:36:14 AM		MTX	0	Serial Number: 903960-11111-1111-1111
7/6/99 8:27:08 AM		Admin	0	L_SYSGlobalValues
7/6/99 7:51:35 AM	7/6/99 7:53:00 AM	Admin	0	Im_AIRInvoice
7/6/99 7:48:04 AM	7/6/99 7:48:12 AM	Admin	0	tp_ARPeriodicBillingUpdate
7/6/99 7:46:52 AM	7/6/99 7:47:58 AM	Admin	0	Im_AIRInvoice

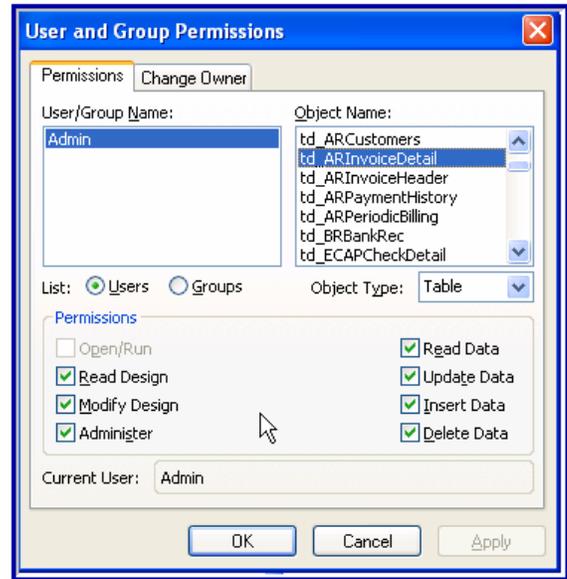
Figure-7

Shown above, merely by way of example, is one approach to providing management (and your system vendor's Help Desk) with a practical internal systems audit trail in the form of an on-line inquiry to a *system activity log*. This kind of audit trail is thankfully found in more and more modern systems and can go a long ways towards answering the age-old question . . . "What were you doing before the system did!
!@#\$\$%^&*?"

The ability to intelligently fix problems and prevent repeated mistakes starts with the ability to re-create the scenario that led to the problem or mistake in the first place. Too many users underestimate the practical value of system activity logs and/or related audit trails. Don't make that mistake. Make sure your new system has built-in system audit trails that are useful to you.

Related to audit trails is the issue of system security. Shown below is an example of setting security as granular as down to specific objects, where

objects can be defined as specific screens (forms), queries, reports, actions, or even specific tables, etc.



Your system should not only allow you to define who can access and use which module, but within that module, define various access rights and permissions.

6. Help Fails To Anticipate Problems

In our own accounting software business, speaking in all candor, I will likely never be completely satisfied with our efforts to provide more effective on-line help, user documentation, training and support.

Most reputable surveys confirm that users of computer systems do not, in fact, feel that the systems they use are as simple and easy to use as they would like. As we add more and more features to our products, the truth is, we have to guard against adding complexity. All of a sudden what we thought was a fairly easy thing to do, and a "cool" new

feature to add, winds up becoming too confusing and complex.

We are constantly fighting the battle against complexity in our business. And the ultimate key for us is to focus on providing HELP that really HELPS!

What to look for? Shown below in Figures-8 and -9 are simple examples of how one system incorporates checklists and trouble-shooting into their on-line help file.

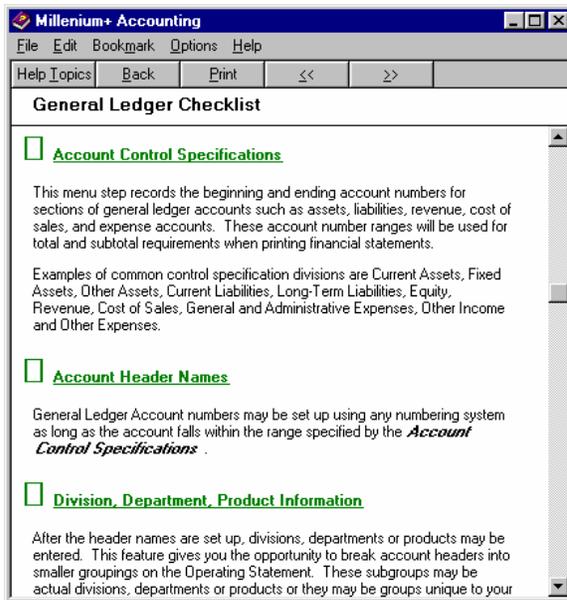


Figure-8

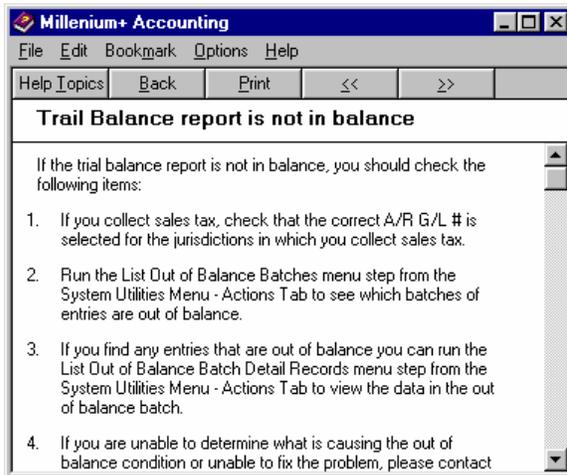


Figure-9

In today's marketplace, I would look for systems where your accounting system provider also provides you with on-line internet access to the same knowledge-base used by their technical support staff so that, beyond the contents of the help file built into your system, you can be assured that your users have immediate access, at any time, night or day, to the latest technical information and updates about your system. We are increasingly finding better ways to use our web site for such services for our customers. An example of that is our increasing use of web-based streaming videos. To see first-hand how that works, point your browser to:

http://www.etek.net/web_videos/getstarted.wmv

7. Lack Of Compliance With Industry Standards

There are a number of standards that are applicable and important ranging from obvious issues like Y2K compliance, to subtle but equally important issues like use of consistent *object naming standards*.

Vendor certifications such as Microsoft Office compatibility, designed for Microsoft Windows 95/98/2000, designed for Windows NT, designed for Microsoft BackOffice, etc., are also important because they result from testing by independent software testing labs. Just keep in mind, however, that these kinds of tests DO NOT confirm that the internal processing of Accounts Payable, for example, is handled correctly or posted to your trial balance and general ledger properly. What labs test are such things as: Do the tool bars work exactly like Microsoft Office applications (Microsoft Office

compatibility)? Does the system install and run correctly on Windows Server 2003 in a client server environment? Is Microsoft SQL Server 2000/2005 used correctly (Microsoft BackOffice)? Does the Help File work in a manner consistent with Windows XP/XP Pro? I suspect the more certifications the better. Up to a point.

There is an important “industry standard” we have learned the hard way is also terribly important if you are concerned about the long-term protection of your investment in an accounting system. It is a standard very rarely, if ever, discussed in various CPA, Accounting or Financial trade magazines and reviews. It relates directly to flexibility and the ease (or difficulty) in integrating your accounting system with other business application systems used in your organization. The issue is: *object-naming standards*.

Without getting bogged down into too much technical detail, please know that in the software industry, the “internals” of software products are almost always evaluated by professional software engineers. One of the very first things they look for is how all of the various “internal objects” have been named, or labeled by the programmers who developed the system. What they are looking for is logically consistent names that will help them, should they ever be called upon to modify or maintain your system. They want to be able to accomplish their work in as short of period of time as possible, with the least amount of potential for error.

Typical objects contained in the accounting software you are considering consist of the following: tables, views,

queries, forms, reports, macros, ActiveX controls, dll’s, and the list goes on. For simple illustrative purposes, here are the names of two tables in two entirely different commercial computer systems:

pbcatfmt
td_ARCustomers

Can you guess what data exists in the table named “pbcatfmt”? Probably not. Even after I opened this table, since the fields of data were described as “text1, text2, etc.”, there was still no way I could tell what information was stored in that database table.

The second table has information about accounts receivable customers. That fact should be readily apparent from the name used. The only portion of the name for the second table that might not be clear would be the prefix “td_”. That prefix is used consistently in our systems (and others) to designate a type of table called an attached (or linked) table, well understood by most programmers. (*Special note:* the naming standards we use throughout all of our systems are derived directly from the work of Stan Leszynski and Greg Reddick, two prominent and well-known Microsoft database experts who have defined object naming standards used throughout the software industry).

So why is all of this important? When the day comes that you need changes made, for whatever reasons, that require someone to figure out “where stuff is and what it’s called” . . . you do not want to waste their technical skills (and your money) on such tasks. It would be a lot better to have their expertise focused on making the changes you need rather than searching around trying to figure out

where the data and objects are that need to be modified or changed.

Compliance with industry standards is much more than just logos and certifications. Don't hesitate to ask for opinions from software engineers you know and respect. I would encourage you to involve them in your evaluation and selection process. Far too many CFO's and business owners continue to make this mistake. Competent software engineers (hint: look for Microsoft certifications) may not know (or really care about) the difference between debits and credits, but they can sure help you ascertain the degree to which your prospective new accounting system complies with appropriate industry standards.



Since this article was originally published, Microsoft set tough technical software standards for any application to be certified *by Microsoft* for Windows XP or Windows XP Pro. Do not be confused when some software vendors brush off your question. Being "compatible" with Windows XP is *NOT* the same as earning Microsoft's certification for Windows XP. Their testing is very rigorous, and in this day and age of concerns about security, we strongly urge you to only buy software that has been certified by Microsoft for Windows XP.

8. Source Code Not Available

This is one of those issues that is either yes or no. The reason I recommend that you purchase an accounting system that

includes source code is that this action can provide you with improved long-term security over the investment you make. Regardless of how successful your accounting software vendor may be, your best long term interests are served when you either have the source code in your possession, or at least have it held by a third party in escrow in the event your vendor either goes out of business, and/or is acquired by another company. One never knows in this business exactly what technical changes may occur in the future that might obsolete your vendor, your investment, or both. Assume the worst. What if you wind up with a system that is no longer supported? If that should occur, you may likely need one or more programmers to help you.

A directly related problem to avoid is buying a system written in some obscure or out-of-date programming language. For example, no one today would or should buy any software written in the COBOL programming language. Why? Because it is not a language that is used in any modern Windows-based software, and there are very few programmers left who would even know how to use this language. So what is the safest language?

Based upon widely quoted industry sources, Microsoft Visual Basic is the most popular programming language in use in the world today. There are more trained and experienced Visual Basic programmers than any other kind (this includes Microsoft Access-based systems). Most Windows-based systems are written in Visual Basic. I would stay away from lower level languages such as C, C++ and others as there is some uncertainty about how popular these

languages will become over the long haul.

In any case, if the changes required in your particular implementation affect how various transactions are computed and/or processed, including significant revisions on forms (screens) and the “code behind those forms”. . . you will need to acquire the source code to your accounting system.

Ask for a non-exclusive source code license agreement that excludes any and all rights to resell the system. If you can, buy from a vendor who will provide a source code agreement for your organization.

Note: Since this article was originally published, there has been a major trend in the software industry to “open source” systems. We expect this trend to further accelerate as time goes by. Even Microsoft is releasing key elements of their “internal” code to selected 3rd parties.

9. Ineffective User Training & Support

Support starts and ends with effective training. And the old cliché still applies. “If the student hasn’t learned, the teacher hasn’t taught”. So how do you tell if your prospective new accounting software vendor provides effective training? Easy. Just ask to see the course materials, interview the instructor(s) and call a random sample of students who have recently completed the vendor’s training class.

We have learned that the most effective training is “doing”. That is why our classes are heavily oriented towards hands-on workshops where each individual student is expected to complete exercises during the class that are focused on applying “how-to-do-it-right” instructions, tips and tricks provided by an experienced and knowledgeable instructor. Here is a sample of an actual classroom exercise contained in the *Office Integration* portion of our training program:

Student Exercise

Module: Office Integration – *How To Use Common Microsoft Office Tools to Provide Management Information*

Instructions: After completing each of the actions below, please check the box indicated to confirm that you have satisfactorily completed the tasks required. Please ask for individual help on any action you do not understand fully.

Required Tasks:

- 1. Open and view the Aged Accounts Payable report in your system, then export it to Microsoft Word, and then highlight the number of ways the report can be further mailed, routed, and/or saved as an html document. Close your system after doing this.
- 2. Open Microsoft Access 97 and create a blank new database called MIS.mdb.
- 3. Link this new database to MTXSamp8.mdb and select the following tables: td_APSuppliers, td_APInvoiceHeader, td_SYSCityNames, td_SYSPeoplePlacesThings, td_SYSStatePostalCode. Discuss the advantages of creating a separate database linked to the MTX Accounting database for management information.
- 4. Design and save a new Access query that creates a single make table from three of the above td_SYS_____ tables by linking the three tables together via their primary and foreign keys. Save the query as q_Contacts and the new table as td_Contacts. Verify that each is in the MIS.mdb, then close that database and minimize Access. Discuss the advantages of normalizing data through use of a relational database.

As a general observation, after conducting portions of our formal classroom training sessions myself, I believe we have a tendency to assume that our students know

more about PC's and Windows applications than we should. As a result, they often need some low-key, non-threatening/non-embarrassing tips and tricks just to get started comfortably. (And for fellow CEO's in the software business – there is absolutely nothing better for you and I to do than to get *direct* good and bad feedback about our products from our brand spanking new customers. WOW! Really eye-opening).

Another comment about training. Effective instructors are hard to find. It is rare indeed to find that unique combination of knowledge, skills and experience in an individual who also has the kind of personality and communication skills that will *positively motivate* the new user of accounting system to learn new stuff. Students like to be reminded (in subtle ways) how smart their organization was to pick the system they are learning . . .

It has been said that there is nothing more boring than selling an accounting system to an accountant. Yes, accounting can be pretty dry stuff. Effective training requires solid product knowledge. No argument with that. But be careful. The instructor better darn well also have an attractive and out-going personality to help make sure the training experience is as interesting and rewarding as possible.

As for support, one of the biggest myths in the software business is the issue of “bugs”. “Bug-free” software simply does not exist—certainly not with systems as complex as accounting. Therefore, the #1 issue with *Help* is to first make sure we have put an *ounce of prevention* into the process (a la the above examples) and then back that up with the #1 issue in support – namely to be as consistently responsive as we possibly can be. Make sure your vendor is responsive.

As is well known throughout the software industry, most users do not, in fact, read manuals and documentation before they call

for help. That may likely never change. But what is changing is the way they can learn to *solve their own problems* via key-word searches of internet-based technical support knowledge bases. In our business plans, as our capabilities in this area mature, we will likely offer free access to our own technical support knowledge base for our customers who are already enrolled in an authorized annual support plan. I would suggest you look for something similar.

Finally, a comment about you. Are you ready to make a sincere commitment and effort to learn how to use and support a new accounting system? Occasionally we still run into cases where a customer has a somehow, someway, gained the impression that all they have to do to get their new system to work for them is to turn it on. Well, needless to say, that is terribly naïve. There must be an appropriate level of commitment by you and your organization to make your new system work right for you. Your vendor can help you in many ways, but please do not throw people into your vendor's training program who were not actively involved in deciding to buy your new accounting system. There is nothing more de-motivating on our side of the table than to see individuals in our startup training classes who feel that their “bosses” have crammed a new system down their throats. I can guarantee you that your investment will not be optimized with a start like that. Attitudes have to be right!

Since this article was published, almost all or our training is conducted in a highly personalized manner via the Internet, where our instructor and his/her student are “live” in an interactive one-on-one session. This has proven to be the most cost-effective way to train. When you are provided a web demo by *eTEK* you will see exactly how easy and

productive training over the Internet has become.

10. Paying Too Much

Let me encourage you to shop very carefully for your next accounting system. Be sure to put a price tag on all of those built-in reports and special features *you did not know you needed until you saw them demonstrated*. When in doubt keep things pretty basic.

Based upon a Buyer's Guide of Accounting and Finance Software published by Softworld for Accounting and Finance, the table below provides a summary of the number of *complete accounting systems* available by price range:

<i>Price Range</i>	<i># Different Systems</i>
< \$5K	3
\$5K - \$40K	27
\$40K - \$100K	25
\$100K - \$250K	16
> \$250K	12

As you can readily see, if we define the lower middle market as those organizations most likely to buy a complete system priced anywhere from \$5K to \$40K, there are well over two dozen systems to choose from. As a frame of reference, our complete 25-user SQL Served-based systems start below \$25K. They compare very favorably to systems costing twice as much (and for smaller organizations, our complete single-user system is priced below \$5K).

Only you can decide what your budget can best afford. Our advice is to shop around carefully before you decide, and above all else, make sure your vendor provides you

with a live test-drive demo before you decide to buy a new system. Buying systems based on glossy ads and marketing materials is very risky. Buying accounting software is not an easy task. A close friend once commented that buying a new system is comparable to buying an airplane. No one buys an airplane without "flying" it first. I sincerely urge you to "fly before you buy!" Allow your prospective software vendor to give you an escorted "test-drive". And don't pay too much.

Conclusion

I have been asked why this "Top Ten" list does not contain issues that are focused on professional, accrual-based accounting issues of interest to accountants. Here's why.

No accounting software company will succeed if their systems do not process and report accounting transactions correctly. That is a given. Determining whether a system posts detailed debits and credits to the trial balance and then updates the general ledger in a properly controlled and auditable manner, does not really drive today's concerns about selecting an accounting system. Any experienced accountant can quickly tell if the accounting is done properly. But not all accountants necessarily have the perspective that an operating manager has.

It is therefore crucial that you examine accounting systems not just from an accountant's point of view, but rather from an "operating managers" point of view as well. After all, these are the *real clients* of every system we sell . . . because they are ultimately the most important constituency CPA's, accountants, controllers and CFO's must serve.

“Give me the information I need to manage our business better than our competitors. Give it to me in a timely and accurate manner, and in a form I can use.”

###

The above statement from an early mentor, and now close business associate, says it all. It reflects what our customers want from their accounting system - especially with the ability now to collaborate and share information worldwide via web-based capabilities. *Please accept the fact that the Internet has changed forever how information should be exchanged, shared and used! For all kinds of systems!*



Al Blair is the president and CEO of eTEK International, Inc. He is a Microsoft Certified Professional with over 20 years of experience in information technology for large-scale business and government organizations, as well as commercial-grade independent software development firms using Microsoft Office and Microsoft BackOffice technology. He has also taught and consulted in certified client/server rapid application development methodologies.

We exist to help those who are charged with meeting the information needs of key operating managers – the people who are actually *doing* the selling, manufacturing, shipping, and servicing of a business . . . or *running* our cities, towns and non-profit organizations . . . or *managing* professional construction businesses and services. We strongly believe that the “doers” in your organization deserve “a say” in the new system you may be about to buy.

As should be clear by now, we view an accounting system a little bit differently than others. Systems do not plan, organize and control. People do. And more than likely these people are led by “operating managers”, not staff personnel and support organizations. In conclusion, we believe the ultimate test of an accounting system is how well it provides *management information to managers* – not just accounting data to accountants.

I sincerely hope this brief report on *Top Ten Mistakes* helps you make sure your next accounting system has the “open-endedness” and flexibility you need. We certainly do not have all of the answers. No one does. But if you have found at least one idea in this report that will help you make a better-informed buying decision, then our primary objective for this report has been met.

For more information about eTEK International and their products and services please call 800-888-6894 or visit <http://www.etek.net>