

# 15 STEPS TO A NEW COMPUTER SYSTEM

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## The Perfect Software Solution

It does not exist, because each association is unique. While associations have many similarities, they have different staff capabilities, different hardware configurations, and different information that they desire. The only perfect solution would be custom designed software for each association. But that is prohibitively expensive, and just too much work. So what do you do? Work with existing software? Look for new software? There must be something out there. This article will explore how you go about the process of evaluating your computing requirements.

A frequent scenario is that the new manager, bookkeeper, or controller has experience with a particular software product and wants to continue to use that software based on familiarity alone. Some associations use the Quicken program, because board members or managers use it themselves for their personal check writing. While Quicken is a good check writing system and allows you to sort invoices by account, it is not a general ledger system and is not adequate as an association accounting program. Many smaller associations use Quickbooks, which is the next step up. Quickbooks is a full general ledger system, and does have some very powerful sorting capabilities. However, the reporting options are very limited, and it is acceptable only for smaller associations not having complex operations.

As you move into the arena of software developed specifically for homeowners associations, you will discover that there are dozens of software products, with each software product offering different features. The intent of this article is not to recommend any specific software product, but rather to help the association to create a plan for determining what hardware and software configuration they should establish.

Because everybody owns a computer these days, it seems that everyone considers themselves to be a computer expert. However, nothing could be further from the truth. I consider my firm to be more sophisticated than the average computer user simply due to the range of software that we use, and the number of different systems that we encounter in working with our clients. But we rely on three separate third party vendors to provide technology support to the

## 15 Steps to a New Computer System:

- 1) *Properly define objectives and system requirements.*
- 2) *Involve management, users and your outside CPA in the planning process.*
- 3) *Plan for growth.*
- 4) *Properly estimate the cost and benefits of the system.*
- 5) *Investigate alternatives.*
- 6) *Visit existing installations.*
- 7) *Consider expansion capability of the system.*
- 8) *Investigate software limitations.*
- 9) *Evaluate the software properly.*
- 10) *Properly estimate the time and the expense of implementation.*
- 11) *Plan carefully if installing custom developed software.*
- 12) *Selecting the vendor.*
- 13) *Negotiate the contract.*
- 14) *Installing the system properly.*
- 15) *Schedule payments based on performance.*



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firm. The association should rely on an outside consultant for technology expertise.

### Creating the Plan

**1. Properly defining objectives and system requirements.** Any association, regardless of size, should perform this step. This simply involves defining the objectives and requirements, both short and long term, of the data processing requirements of the association. This generally can be divided into two areas, reporting and processing.

- **Reporting.** Association management, including both the board of directors and the management staff should list the reports that they would like to see produced by an automated system. This list should not be limited to those reports that you are used to seeing, but also the reports that you would like to see. Reports currently being produced by the existing accounting and management information system can be used as a starting point for this list. A review of current software vendor literature may provide additional ideas.
- **Processing.** This is where an association can make tremendous gains in productivity. The processing requirements of each software application are different. Some are more efficient than others.

This planning step may not be as thorough as developing a detailed system specification report, but it should help association management develop a tool that can be used as the basis of comparison for the various systems that will be evaluated.

**2. Involve management, users and your outside CPA in the planning process.** Many installations have failed because the end users of reports were not involved to any degree in the systems selection process. Other systems failed because the end users, generally in this case association management, will make the selection based on their criteria, without considering the process that the users of the system will have to contend with. Both of these are integral parts of a successful system installation. Failing to consider either will almost

surely consign the system to failure. Your outside CPA will often have experience with many software systems used by his clients. It would be a major oversight not to take advantage of this experience. The CPA can also guide you on minimum accounting system technical requirements

**3. Planning for Growth.** While the association has a fixed number of members and may have a relatively constant number of vendors, it will still be a mistake not to consider growth as a part of a system. Changing what information is processed, or how information is processed may in fact represent a change that is the equivalent of growth in volume for the system.

**4. Properly Estimating the Cost and Benefits of the System.** It is a natural tendency of people to overestimate the benefits of the system and simultaneously underestimate the cost of the system. Unrealistic expectations, more than anything else, create unhappy computer users. Computer hardware and software vendors both promote their products by selling the benefits of their system, and occasionally they can oversell a system. Developing a detailed plan and budget will help to eliminate this problem. Realistically assessing the benefits to be derived will help guide you in your decisions.

**5. Investigating Alternatives.** This article deals with the assumption that an association will select an in-house computer system because that is the prevalent mode of operation. Another trend that we are noticing in the industry is that smaller associations are investing in onsite management with their own employees, and contracting the data processing and financial reporting functions to third parties, such as management companies or accounting firms that will provide “financial only” services.

The association may want to consider whether this should be an alternative that it should investigate. If so, realize that the association will be at the mercy of whatever software system is used and

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whatever standard reporting options are available from that third party vendor.

Another option that we have seen in other industries is the shared facilities' concept, whereby several entities with similar requirements jointly establish a data operations center that is independent of their own operations. A concern here is that the various users may squabble over the division of expenses of this data operations center.

**6. Visit Existing Installations.** Through CAI, you can locate associations with similar configurations throughout the country. If you are considering buying software that is in use by another association, make arrangements to visit that association to get some hands on experience. You will want to see how the system operates and talk with the users of the systems, those who process the information as well as those end users who receive the reports from the system. You will also want to evaluate whether or not the hardware being used by the site you visit has similar capabilities to the hardware configuration you either already have or are considering.

**7. Consider Expansion Capability of the System.** Computer hardware is moving forward at a technological pace more rapidly than any of us could probably have imagined. Technology experts estimate that hardware becomes outdated approximately every 18 months, and that time period is expected to decrease, not increase. Whatever system you buy today is obsolete before you buy it because newer systems are already either in development or will be sitting on store shelves tomorrow. And the cost will drop by half within the next six months.

One absolutely unstoppable trend within the last twelve months is the conversion by software vendors to Windows 95 operating system. Many of the old DOS programs have leaped over the Windows 3.1 operating system, which is a 16 Bit operating system, directly to the 32 Bit Windows 95 operating system. This means is that your hardware

requirements must be geared to operate in at least a Windows 95 environment. You would probably need a minimum of a 3 or 4 gigabyte hard drive and a minimum of 32 ( and preferably 48 to 64) megabytes of RAM memory, running on a Pentium 166 or faster processor. You also want to make sure that your hardware contains expansion slots so that you can add peripheral devices that you may not presently be using, such as CD-ROM drives, jukeboxes or servers, and modems, and scanners.

**8. Investigating Software Limitations.** Software is evolving rapidly. Software vendors are abandoning old versions of software in favor of newer versions. If you do not continually upgrade, you may find that you are stuck with an obsolete operating system. You should investigate the programming language of your software to make sure that is compatible with other software products that you are using and that it will meet your future needs. There are several excellent stand-alone DOS software products available that outperform newer Windows products. However, they may be "legacy" software products that are dead end. They may meet your needs today, but may not be adaptable to meet future needs unless they are completely rewritten. One software company that we have worked with is just now starting the conversion of its 20-year-old software to a modern, more flexible language. They anticipate that this could be a 2-year, \$2,000,000 process.

**9. Evaluate the Software Properly.** The key software areas which management should examine in this evaluation include, A) the ability to meet processing and reporting requirements, B) the audit trails and controls, C) the level of systems documentation.

a) **Ability to Meet Processing and Reporting Requirements.** The software should be carefully reviewed to determine if it satisfies reporting and processing objectives and requirements developed earlier. An example of this might be that the accounts receivable system allows the application of a cash receipt to specific assessment

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billings and/or fines and interest charges. In California, the law mandates that payments must be first applied against assessments, and only after all assessments are satisfied then against fines, penalties, and interest.

- b) **Audit Trail and Controls.** You will want to make certain that the system does provide an adequate audit trail of transactions. In a glaring example of a system that doesn't, one of the local management companies bought a new accounting and management system for handling the financial transactions of all its 50+ association clients. While this software featured many nice bells and whistles that the managers loved, one significant feature they overlooked is that they system does not contain a general ledger. Rather, it produces a series of monthly journals. There was no audit trail to determine how account balances were accumulated. This is such a significant and basic weakness in the system, that the system should never have even been considered.
- c) **Level of Systems Documentation.** A lack of good documentation will become obvious to the evaluator at an early stage. Systems and operating documentation are necessary to support the installation of the equipment and software, and to provide assistance in ongoing operations and maintenance of the system. An unfortunate problem that is inherent to the software industry is that the people who write the documentation are generally the same people who write the software or have significant input on the software. Technical writers often have trouble relating to the needs of less sophisticated users. The level of most systems documentation can be illustrated by the following story.

*"An experienced hot air balloonist and his crew were ballooning over Idaho when they were caught on a fierce storm. They were blown by the wind in many different directions. Their compass was damaged by rain, and eventually they raised themselves above the clouds to avoid the worst part of the storm. As they descended the next day going below the clouds, they found themselves over a vast park-like expanse with a number of large buildings. They noticed that people were looking at them from the buildings. As they got closer, they asked, 'Can you please tell us where we are?'. And the people in the building responded, 'you are in a hot air balloon 50 feet off the ground.' With that comment, the balloonist turned to his crew and said, 'Seattle is 25 miles to the west of us, let's go.' His crew asked, 'how could you possibly determine that from his answer?'. The balloonist replied, 'we are obviously in Redmond, Washington now, because only Microsoft engineers would have given us an answer that was such a precise technical response to my question, yet still gave us absolutely no useful information at all.'"*

10. **Properly Estimate the Time and the Expense of Implementation.** Most software applications will not allow access to their programming code. So, if you are changing from one system to another, you may be stuck manually reentering all information into the new system. This means that your conversion cost could be very high and may take a considerable period of time. It is because of this huge investment that you want to make sure that you select the right software to begin with. You will also want to consider whether or not there will be any required customization of the system to fit your needs.

The implementation of a system can be laid out over a time line, which will show you exactly how long it takes to properly install and fully implement the system. (See Table 1)

11. **Plan Carefully if Installing Custom Developed Software.** Custom developed software may be required in certain specific instances. But this alternative presents several additional potential pitfalls over off-the-shelf systems. The computer user should make sure that they are not reinventing the wheel by developing software for a particular

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application. However, if it appears that an existing package would have to be over-modified, or that no package exists, then custom software may be the only alternative.

The users should also be aware that the likelihood of “bugs” in a custom program is much higher than with off-the-shelf software. Most associations do not have their own programming staff, so future maintenance of custom software could be a significant and expensive problem. Therefore management should also be certain that adequate documentation is developed as the programs are written.

- 12. Selecting the Vendor.** Most of us are not computer experts. We are computer users. We know what information we want and we know how it should be processed, but we are not experts. We are probably also not experts in selecting a vendor for a computer installation. This should be approached in the same manner as any other complex tasks which requires bidding. In other words, develop specifications, put the specifications out for bid, review the proposals received, invite vendors in for demonstration of software, interview potential finalists, and, finally, make the selection. Since this will generally be an ongoing relationship, you will also want to consider support. The table below outlines some basic vendor evaluation criteria.

### EXPERIENCE

- 1) Knowledge of Industry
- 2) Number of Installations
- 3) Reference Quality
- 4) Financial Stability
- 5) Application Experience
- 6) Length of Time in Computer Business
- 7) Software Performance

### SUPPORT

- 1) Staff Size & Support Designation
- 2) Local Support Service
- 3) Delivery of Products
- 4) Training in Education
- 5) Ability to Program or Modify
- 6) Installation Support
- 7) Ongoing Support
- 8) Costs
- 9) Product Warranty

Most vendors in this industry have industry-oriented sales literature, specifically developed applications software, installation experience, technical support capability, and user references. You should use this information they have available in comparison to

the criteria set forth in the above table.

- 13. Negotiating the Contract.** Writing unattainable conditions into a contract only assures failure of the contract. Don't let your ego at negotiating get in the road of achieving your objective. Also, make sure that you document all agreements that are made. Verbal commitments and agreements are often made during this process. However, those are not effective and can too often be misinterpreted. If you reach a verbal agreement, document it in writing so that there is a record of what the agreement was. This documentation should include:

- 1) Specific itemization of any hardware and software products to be delivered.
- 2) Specific itemization of both association and software provider obligations and responsibilities.
- 3) Fixed costs or fixed acylation for the term of usage.
- 4) Define acceptance testing of hardware and software.
- 5) Guarantees of vendor performance.
- 6) Conditions for exit or release from the contract.

- 14. Installing the System Properly.** While many of the new software systems are sold as “plug and play” type systems, this just isn't true. A larger association using either a Novell or Windows NT network will require a much higher level of knowledge to install a system. Many people experience tremendous frustration because they attempt to “poor boy” the job themselves and end up improperly installing the system.

A key consideration here is providing adequate training on new software for all users of the product. Recent surveys indicate that both software and hardware costs have fallen dramatically in recent years. Training costs, however, have increased both in total and as a percentage of the total installation cost. As little as 15 years ago, the training portion of a technology budget would have been no more than 30%. Today it is more likely to be 70%-75% of the total cost of the system and implementation.

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Almost all associations fail to build this into their technology budget.

**15. Scheduled Payments Based on Performance.** The association doesn't want to be left "holding the bag." If you were sold a product that will not perform as represented, should you pay for it? The conversion, training, and implementation costs are generally higher than the hardware or software costs. You are investing far more into this process

than the software vendor. You are the one who needs performance. Payments should be scheduled so that final payment is only made upon full acceptance of the system by the association. And if the system is not accepted because it does not perform as specified, then that payment should be withheld. You will probably then find yourself in a renegotiation process with the software vendor.

**Conclusion**

The above planning process should be helpful to the association in avoiding the more common pitfall that occurs in a computer selection in the installation process. You should be continually watching developments within the industry to see what options are available to you. You never know. The next vendor out there may have exactly the correct software solution for you.

**TABLE 1**

MONTH	MAY				JUNE				JULY					AUGUST				SEPT	
WEEK BEGINNING	8	15	22	29	5	12	19	26	3	10	17	24	31	7	14	21	28	4	11
Develop plan and budget	X	X	X																
Obtain approval of plan and budget				X	X														
Solicit hardware/software bids					X	X													
Select vendors and place orders					X	X													
Shipping time on orders							X	X	X	X									
Install network cabling									X	X									
Install file server											X								
Instlal network computers										X	X	X							
Configure notebook computers										X	X	X							
Conduct user training													X	X	X	X	X		
- Network/Windows trianing													X	X					
- MS Office training														X	X				
- Internet/E-Mail training															X				
- Accounting Program training																X	X		
- Data Management Program training																X	X		
- Security system training																X	X		
Full System Review																			X

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