

Chapter 2 - Hardware and Software

Application Software Programs

Application software programs have specific uses such as writing, dealing with numbers, organizing large amounts of data, etc. Application software includes word processors, spreadsheets, database managers, graphics, money managers and games. They are generally created using programming language such as BASIC, C++, Delphi and more. The most common application software:

- Word processing programs that are designed to allow the user to create letters, briefs, memos and other written documents. Microsoft Word™ and WordPerfect™ are word processing application programs.
- Spreadsheet programs that are used to manipulate numbers, perform calculations, handle mathematical formulas and organize data. Quattro Pro™, Lotus 123™ and Microsoft Excel™ are spreadsheet programs.
- Database programs are used to organize large quantities of data. They are generally used to compile document indexes, exhibit tracking, case management and more. Database programs include Microsoft Access™, Paradox, and Filemaker Pro™.
- Graphic programs are used for drawing and designing on the computer. Exhibits, charts, graphs, bulleted items and more can be created using graphics programs. Microsoft PowerPoint™, Corel Draw™, Paintbrush™ and Visio™ are some graphic programs.

- Game programs are designed for fun. They include action/adventure, flight simulation, golf and others. Quest™, Golf™, Where in the U.S. is Carmen SanDiego™ are a few game programs.

Other Application Software Considerations.

The primary application software packages - spreadsheets, databases, word processing and graphics programs - are not legal industry specific. Instead they are developed for the mass business and consumer market. Focusing on the mass-market sales these general application packages generate revenues for further sophisticated development of software which is provided for at substantially lower prices than if the software was developed only for the legal industry. However, this does require someone to do some amount of customization to this general software to utilize its features in the practice of law. This has been made easier by the inclusion in some application software programs of software wizards, coaches, or other experts to walk you through setting up databases or word processing legal pleadings. General application software can contain many computer applications in one product. It is difficult to categorize a specific software product as a word processor, a database or a spreadsheet

product because some products have multiple capabilities. For example a word processor generally has a built in outliner which can be used to “outline” your case. However it may not have certain features as “standalone” outlining programs that have the ability to launch into a different program from the outliner to access other case information. Some spreadsheet programs have charting and graphic publishing capabilities. Another product such as Summation Blaze™ has an integrated outliner, full text, database and imaging features. The point is that it is important to determine the extent of different software features a product has and the integration of the product not only within itself but its integration features with other popular software.

Many “all in one” programs do not have the full features that are found in standalone versions of word processing, spreadsheets and so on. However, standalone packages when integrated - such as Microsoft Office™ - are amazingly powerful and can share data effortlessly. As you evaluate software see actual demonstrations of how software integrates with other software to ensure that the software applications “talk” to each other and share information easily.

One of the emerging trends in the software industry is for programmers to obtain a license to use a general application software “engine” such as a database (Microsoft Access™) and design a customized interface for use in the legal industry. This approach is rapidly taking the place of the development of an original database program because a programmer can use as much of the underlying “engine” as he desires and ensure that his customized program is built upon an industry standard that can be used in networks and enterprise computing. As the developmental dollars continue to be invested in these “engines” the customizable interfaces will keep pace with the best of the general application software benefiting the consumer and developer. However, a word of caution, recently the legal industry has seen a number of “comprehensive” litigation support products come to market built on a standard engine such as Microsoft Access. The legal developers of these products try to duplicate their particular method of practicing law onto a computer and then attempt to impose this method upon the buyer of the software. Unfortunately, if one disagrees with their particular lawyering method one cannot customize the software.

It may be more advantageous for a firm to invest in a moderate amount of “programming” to customize the standard software application. For example, a law firm can customize a powerful database to create a sophisticated document assembly system with Microsoft Word or it can create litigation support databases with Microsoft Access™ to control the information in their case. Many of these software packages permit runtime versions to be created and distributed free to co-counsel or other attorneys. Runtime versions do not require investment in the underlying application software.

Integrated Software Suites.

Another important trend is the “integration” of various software applications such as word processing, databases, spreadsheets, and graphics and other programs so that the data entered into one of the programs is easily shared by the other programs. This obviously saves significant time that translates into lower costs. This is accomplished using Dynamic Data Exchange commonly referred to as DDE or Object Linking and Embedding referred to as OLE. For example, once information is entered into a database program then the information should never be reentered for use in other computer applications. The data in the databases should be easily accessed and shared by a word processing document, a spreadsheet or for charting purposes. Also, training on integrated software has been shorter because of the similarity in the command structure in the software programs.

To check out software integrated suites see Microsoft Office Professional™ (www.microsoft.com); Corel Office Professional 9.0™ (WordPerfect) and WordPerfect Law Office (www.corel.com); and Lotus SmartSuite™ (www.lotus.com).

These suites offer many advantages over standalone packages:

- shared utilities such as dictionaries;
- data sharing through OLE and DDE;
- similar command structures such as menus, icons, keystrokes and toolbars;
- access to other applications while working in one application;
- purchasing a suite is cheaper than purchasing separate components;
- shorter learning curve because similar packages;
- software support from one company;
- and installation is easier and integrated.

One of the keys to this integration is the OLE control in Windows programs. OLE enables another program's data, image, chart, or other information to be stored as an “object” in the primary program. The object can execute code or cause another program to execute code. Objects that represent images, graphics, videos, etc. can be stored in the database and when activated, by clicking on the mouse, can launch other applications that store the OBJECT as a computer file. This solves the problem of having to switch from program to program and transfer your present computer files and data to new software. Instead one can embed these files in different software and activate the other software when needed to change or update the information. For example, a docketing and address program should link with your word

processor and court rules program. This will enable one to easily import names to the word processor for a pleading, etc. and also determine what amount of time one has to file the pleading using the court rules.

The goal is that all the case and litigation functions of an enterprise should be integrated into a seamless web. The case functions of time, billing, docketing, document abstracts, and so on should all be available in a seamless web. For example when a case is opened the name and address should only be entered once. Whether the name is used for billing, motions, interrogatories, or a witness list it should never be reentered. The factual information should be available to all the other software applications and law firm functions. Legal Specific Software. There are many software packages that have been developed exclusively for the legal market. For example full text search and retrieval programs such as Summation™ are used to control the data in deposition. Docketing programs such as Amicus Attorney™ provide control over pleading dates and have many other features.

Legal specific software is generally priced higher but has been designed and programmed for the needs of the legal market. These “niche” products can be very robust and provide valuable functionality or can be a bad investment of your money. Since it is easy to license a major engine such as Microsoft Access™ and modify the user screens we have recently seen a number of “new” products. Buyers beware!