



SPECIALIZED FORM SOFTWARE

INFORMATIONAL ARTICLE

Specialized Forms Software – A Justifiable Added Value

Can you imagine the difficulty you would encounter trying to develop a database with a word-processing software package? How about developing a memo with database software? Or using a document management system to develop a database? Obviously, such undertakings would be ridiculous! We all know we need to match the tool to the task.

Yet, all too often, forms managers are asked, even required, to develop forms using word processing software, document creation software, spreadsheet software, or some other equally onerous tools. Naturally, forms can be created using such tools, but they generally end up being less than they could be, take too long to develop, and create significant user dissatisfaction and workflow errors.

I know. One must use the tool that is available and that generally means general-purpose software that is widely distributed. I understand that “bad breath is better than no breath at all,” but I can’t help but ponder why forms development gets so little respect from the “powers that be” when it comes to acquiring the proper tools we need to do our jobs well. Is it that “they” just don’t get it? Do we fail to communicate our needs? Are forms held in so little regard that management thinks anyone can create them? Why aren’t forms designers free to pick their own software? But that’s another subject – Forms Management is a valuable function for all organizations. I will address that issue in depth in a future article.

All this leads to a lively discussion as to just what is the definition of “forms”. How do they differ from “documents”? What is a “record”? What requirements are defined for forms management, document management, and records management? Why should we care?

As I pondered these definitions and began researching them in the popular press, I became more confused. It seems to me there are no standard definitions that are widely accepted. Software vendors tend to bend the definitions to suit their requirements. The Information Technology community blurs these definitions in the context of various “enterprise” technologies, including “content management”, “knowledge management”, “portals”, “resource planning (ERP)”, “records management” and other terminology. It’s enough to drive us to distraction!

To me, the differences are clear and important because they drive quality and the approach to efficient workflow. Of course, there is considerable blurring around the edges but even this blurring can be defined. I try to keep things as simple as possible. It facilitates good communication. So, let’s try these definitions on for size:

A “document” is a container of information. This is a very broad definition that covers disparate objects, ranging from signs and posters to memos, letters, emails, reports, manuals, direct mail pieces, and forms.

A “form” is a specialized document that has as its primary purpose the collection and/or display of variable data in an organized, structured fashion. Forms can include printed or electronic containers, envelopes, labels, and more – but they have this structured data capture and display of variable data in common. It is the presence of these fields that differentiate forms from other documents.

The Business Forms Management Association has a formal definition of a form:

- The basic business tool (whether printed or electronic) for collecting and transmitting information,
- The catalyst for getting things done,
- The record of what was done.

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This definition covers both the form and the instance of a form (a particular kind of record).

A “record” includes a filled-out form and any other document that defines or supports a specific transaction, action, or defined function within an organization.

With these definitions, it becomes apparent that a form is a form until someone fills it out, and then that instance of the form becomes a record.

Let's step back and see how these terms are defined by Webster. Of course, I am sticking to the definitions that are relevant to this discussion (I ignore the artistic definition of "form", for example, and the word "form" as a verb).

Document. *noun.*

- 1: A writing conveying information.
- 2: A material substance having on it a representation of thoughts by means of some conventional mark or symbol.

Form. *noun.*

- 1: A printed or typed document with blank spaces for insertion of required or requested information.
- 2: An orderly method of arrangement (as in the presentation of ideas): manner of coordinating elements; a particular kind or instance of such arrangement.

Record. *noun.*

- 1: The state or fact of being recorded.
- 2: Something that records:
 - a: Something that recalls or relates to past events.
 - b: An official document that records the acts of a public body or officer.
 - c: An authentic official copy of a document deposited with a legally designated officer.
 - d: The official copy of the papers used in a law case.

These seem to be perfectly good definitions as they are like my definitions above. Defining these terms to suit the product or situation is unnecessary. However, a form doesn't necessarily have to exist as a physical object; it can be in digital format as well.

Now, since documents cover a very wide variety of objects, the software used to create them must possess a wide variety of capabilities. In practice, most document creation tools provide a great deal of capabilities for color, layout, font selection, creativity, and art. All this capability is useful to graphic artists as they design and develop some really cool documents. A lot of this capability is not needed for forms. This software also generally does not handle the requirements for specialized data capture or display, including (but not limited to) MICR, OCR, ICR, OMR, databases, bar codes, security features for secure forms such as checks, and more.

Forms, on the other hand, are not works of art. They do not generally require a lot of graphical elements, many fonts, high color capabilities, and artistic creativity. They do require a lot of specialized objects (rounded corners, pantographs, captions, etc.), accurate spacing, data fields designed for the proper data type, accurate text placement, restrictions, and qualifiers, data masks, user interaction techniques, and more. Many of these specialized requirements are not provided by document design software or are difficult to achieve using tools available within that software. Specialized forms design software provides these capabilities.

The same principles can be identified for document management systems, forms management systems, website development, and records management systems. Each has specialized requirements and capabilities. Attempting "one size fits all" generally creates a great deal of frustration for the users of the systems.

For example, a forms management system must accommodate paper (and other physical substrates) forms, electronic forms, Internet (web) forms, and code-based forms (virtual forms). It must manage editions, versions, status, obsolescence, specifications, use requirements, usage, distribution, revision management, and more. Forms managers begin with an analysis of the workflow and business system that requires the form, perform design analysis to ascertain the proper "form of the form", manage its design, production,

and deployment, monitor inventory and ordering, perform reorder analysis, eliminate duplication, and control costs. Since most businesses are dependent on forms for efficient transaction processing, forms managers serve a critical business function. Most organizations have large numbers of forms, ranging from payroll checks to invoices. Without properly designed and available forms, efficiency suffers significantly.

Many documents, but not nearly all documents, share many of the same characteristics and requirements of forms. Document management systems, however, must also manage a wide range of other documents such as emails, reports, marketing literature, signs, documentation, and much more. They focus on issues such as searching, archiving, retrieving, scanning, indexing, and process management. These systems manage filled-out forms (data capture) and a whole lot of other documents. They are not focused on the requirements for forms development, nor do they perform these tasks very well.

Virtually all the literature I found on document management systems focuses on electronic documents only. When documents exist on paper, the initial focus is on scanning for capture and creating electronic records. DMS is usually EDMS. Paper documents appear to be left to the Records Manager.

Records Management is a vital and increasingly important functional area for most organizations. Designation of official records, retention requirements, legal accessibility, destruction authorizations, storage, and archiving methods, and more are the province of the Records Manager. Initiatives such as HIPAA and the Sarbanes-Oxley Act are focusing more attention on the records management function. This function includes forms – but only after someone fills one out! Prior to execution, a form is just a form and is of no use as a record.

Any forms manager that has been involved with forms for any length of time clearly understands the unique requirements for forms. Frequently, they are required to work with tools developed for other purposes. As a direct result, the quality of forms within many organizations has declined dramatically over the past decade. Browsing on many websites clearly illustrates this point, as many forms are nothing more than poorly functioning data capture screens. Data re-entry is the norm at many organizations as their forms are not connected to databases. The real forms they have deployed are typically “print-on-demand” or “fill-and-print” forms only.

Today, it is estimated that over 80% of all forms are still on paper at some point in their life cycle. This disconnected data drives inefficiency and waste, increases costs, and results in high-order abandonment, among other ills. Many times, forms are reduced to paper because the software used to create them does not support any other workflow. And, when the form best exists as a physical form, the software used for design does not support print production!

What's needed is specialized software, training, and support that provides the forms professional with strong design tools plus the ability to add intelligence to a form, connect the form to existing database(s), generate server-side scripts as necessary, and integrate the solutions with other software systems. The toolset must be open source as much as possible, support modern technologies such as XML, JavaScript, and PDF, and do all this without requiring forms designers to become programmers or systems developers! The same source file must be able to be re-purposed to serve a variety of deployment strategies.

The forms created using this software must be fully extensible in that they must easily integrate with other systems such as document management and records management. The ability to support custom workflow requirements is generally not a strength of forms development software, so seamless integration to workflow software is important.

With the proper software, forms developers should be able to design new forms, import existing form files, redesign as necessary, draw and define fill-able fields, add calculations and logic branches, connect to databases (both input and output), and generate the HTML, JavaScript, and CGI scripts required for standard deployment – all without writing custom code. That is the strength of specialized forms software.

Good forms development software serves as a rapid application development (RAD) environment in that it generates the graphical user interface (GUI) and data collection objects and frees the applications programmer from these routine tasks.

Failure to acquire such specialized software slows down forms development, shifts development work to higher-cost alternatives, places limits upon forms development capabilities (which leads to poorer performing forms), and increases costs. As if this wasn't bad enough, shifting forms design to general-purpose software frequently leads to that most costly of all scenarios – bootleg forms! When bootleg (unofficial) forms proliferate, business systems begin to break down, errors increase, re-keying of data becomes commonplace, and costs escalate. This isn't just an opinion.

Look to the famous Hoover Commission report on paperwork reduction (originally published in 1955 and frequently updated since). This landmark study proved that the processing costs for forms were about 20 times the acquisition costs. It showed that inefficient and confusing forms cost, on average, \$1,000 in lost productivity for every form in the population, per year! That means an organization with 1,000 forms loses \$1 million annually due to poorly designed forms. My experience is that these numbers are probably much higher today.

With the advent of eCommerce, poorly designed forms have been shown to lead directly to higher abandonment rates for online transactions. That's lost revenue!

It's easy and cost-effective to acquire proper forms software. Many vendors have quality products. Various marketing strategies exist, and many have been proven effective. Yet, those companies without a cohesive forms development strategy resist this progress and end up with poorly developed forms and high transaction costs. Forms departments have been downsized and outsourced to the point forms management as a business function is sometimes barely recognizable. However, I am certain that all companies have a forms management program because they all use many forms. If no formal program is planned, one will undoubtedly evolve. This just means costs are spread out, unmanaged, and unaccounted for, resulting in inefficiency throughout the enterprise. It doesn't have to be that way.

Someday, fully integrated software solutions may be invented that effectively combine the requirements for document creation, forms creation, document management, forms management, and records management. Such systems do not exist today, despite the claims of some vendors. Until they do, consider this a plea for access to proper tools. Forms managers are professionals and add significant value. Give us the tools we require to do our jobs right!