

A Forms Perspective

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Don't computerise a bad system and expect things to automatically improve

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Over 35 years ago

The first computer system I ever worked on started out as a disaster. The developers had put all their effort into the computer system logic and programming, and in those distant times with programming in machine language and data entry by manually punched cards, errors were expensive to correct. But the developers overlooked the most important factor in their system—the people. But that was not the only computer disaster. As the years wore on, I experienced failure after failure as computer 'professionals' continued to put the machine ahead of people. As unbelievable as it may sound to many modern IT people, I've seen more system failures than successes in a wide range of organisations, both private and government, and the same problem continues as I write.

Am I knocking computers and modern technology and IT people in general? NO! I think modern technology is wonderful and I love what we can do today compared to what was available even five years ago. But there's both GOOD and BAD practice, and unfortunately, my experience over 35 years has been that there's a lot more bad practice than there is good.

In 1976, British author and IT lecturer Keith London, described computer systems in his book *The People Side of Systems*.

*“Programmers often see an organisation in black and white: the nuts and bolts of document flow, clearly defined file data element characteristics, precise logical program branches, rigid computer operations schedules. The very nature of the computer itself requires that a program be specified in precise, formal terms. He is, in his everyday work, seeing only the formalized tip of an iceberg. If such a programmer becomes a systems analyst, he would now investigate and analyse. If he were to maintain his mechanistic perception of a system, his work would be doomed to failure. For he would still see only the tip of the iceberg of the formal procedures and data. The bulk of the iceberg in systems terms is **the people, their jobs and their attitudes.**”*

Today!

Even now, over 25 years after Keith London wrote, analysts and system developers still make the same mistakes, failing to consider the people and the way they work with the business system. I wish this was an isolated case, but long and continuing experience has proven otherwise.

An important lesson

When I was being introduced to business systems, I learned a very important lesson—FIX THE BUSINESS PROCESSES FIRST and then add the computer. Michael Hammer and James Champy, in their book *Reengineering the Corporation*, give the example of IBM Credit who *“in trying to automate its operations...managed only to immortalize a bad process by committing it to computer software, making it even more difficult to alter in the future.”* You’ll find more about reengineering business forms in a longer paper on our web site.

If you computerise a bad system, all you do is make the problems occur faster.

My first involvement in GOOD computer input form design was in 1979 when I was asked to work with one of our state police departments. Their approach was radically different to what I had previously encountered. Instead of being given an input layout prepared by a programmer and told to get on with the design, I was handed a copy of the draft specifications. The result was that I was able to point out where some of the input requirements were going to cause problems for the users. This led to the development of a new data entry concept for the project followed by the design of the draft forms and procedures before the real programming took place. Once the designs were worked out and checked with potential users, the programming commenced and the system was implemented very smoothly. I’m told that those forms are still in operation today.

The future

As we head into the 21st Century we need to remember these lessons as more and more of our forms become electronic. If many software developers had their way, paper forms wouldn't exist. Even from administrators, there's an ongoing push to place ALL forms on the Internet, especially from government, but with no thought about whether that's the best way to go; no thought about the limitations of current Internet technology or even whether people are prepared to use forms that way. We're getting an increasing number of reports from government sources that many members of the public are objecting to electronic forms. I'm not suggesting that electronic forms are bad—after all, our company sells electronic forms software—but I am suggesting that we need to use them wisely. We need to put people first, and that includes internal staff as well as the public. We need an holistic approach, taking all factors into consideration—human psychological needs, user literacy, ergonomics, efficiency and corporate productivity, work flow (both paper and electronic), reliability of captured data, information accessibility, and much more.

Many managers throw technology at their problems like a person giving aspirin to someone with a brain tumour. To solve business problems you need to know what the REAL problem is and then find the CAUSE. Then, maybe—just MAYBE—technology might help to provide an optimum solution.

For more information

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