



## TOWARD A NEW IT STRATEGY *by Michael Hugos*

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For the last 30 years, strategies for using IT mostly consisted of making multi-million dollar investments in whole new collections of hardware and software. Massive new systems were installed using expensive software packages or built from scratch. Overall, the success rate and ROI of these endeavors has been modest to put it politely. These strategies have run their course. They are no longer a viable way to respond to the demands of business today.

The real-time, global economy we now live in is a constantly changing world. Companies have tried to find answers to complex and fluid problems by installing standard application packages (ERP, CRM, SCM, etc.). Yet this practice will only go so far. Companies using this approach run the risk of locking themselves into rigid, commodity IT systems that are also available to their competitors. Big software vendors then control the pace of systems change instead of the evolving demands of a company's own business situation.

The time is ripe for a strategy whose aim is to combine people and computers into systems where the strengths of each are brought to bear. In a high-change, fast-paced world it is best to use simple, robust technology to automate well-defined sequences of standardized business procedures and rely on people to handle the exceptions to these standard procedures. This can be summed up as,

*“Automate the rote and repetitious work, free up people to do the creative stuff.”*

By automating the mass of rote, routine and repetitious work, companies get great cost efficiencies. By empowering people to handle all the non-routine stuff (i.e. everything else), they become very responsive to unique customer needs. It is this blend of efficiency and responsiveness that enables a company to outperform its competition. There are four main points to understand about this strategy:

1. Quickly build systems that are good - not perfect
2. Let computers do the routine work
3. Focus people on handling the exceptions
4. Continuously adjust systems and processes based on experience

### **Quickly Build Systems that are Good - Not Perfect**

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There is an on-going debate in many companies that hinges on the answer to the question, “Should we build it fast or build it good?” In this time of rapid change in technology and in business, the answer is to build it fast. That means to build it so that it is “good enough”. Build computer systems that get the job done and resist the temptation to over-engineer them or give them features to deal with every conceivable possibility no matter how rarely they may happen.

Companies need to maximize use of existing systems and add new IT products and systems in a very pragmatic way. What is needed is a continuous, incremental approach where new computer systems are created from components of older systems. And where the pace of systems development can keep up with the pace of business change.

This means developing new systems by leveraging the capabilities and features of existing systems. It is done by building links to pass data between existing systems and new systems. Most of the work can then be focused on providing new functionality that compliments and builds upon what already exists. A unified user interface (often using portals and dashboards) blends together the new and the existing functionality into a single system.

Consider this, there exists a collection of simple IT components or building blocks such as web pages, spreadsheets, e-mail, and Internet data transfer methods that can be combined with small chunks of program code and used with parts of existing computer systems to create whole new systems. The services oriented architecture (SOA) approach to designing new systems uses this approach.

*Most companies do not need to be anywhere close to the leading edge in their use of technology. It is far more important to use relatively simple technology in an excellent manner. Excellence of use is what produces the results businesses want, not the technology itself.*

### **Let Computers do the Routine Work**

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Use computers to do what they do best. Let them handle the day-in, day-out, repetitious processing of routine data related to basic transactions such as purchase orders, invoices, account balances, order status, address changes, etc. Wherever there are people doing routine data entry or repetitious work of any sort, this is an opportunity to automate. Computers do this sort of work much better, faster and cheaper.

So many computer systems are unnecessarily complex and expensive because they attempt to handle every possible situation that could arise. Instead, focus computer systems on just processing the great majority of routine transactions that follow relatively simple rules. Automate the handling of only a small set of well-defined errors. Build high-volume and technically simple systems to support these routine transactions.

*By doing this, companies avoid the costs, the risks, and the delays inherent in building complex computer systems. IT complexity is not only expensive and risky, but once it is in place it is hard to change so computer systems and the business processes they support become rigid. Companies lose the flexibility they need to evolve as their markets change.*

### **Focus People on Handling the Exceptions**

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The reason that companies can build simple computer systems is because they can use people to handle all of the complexity that these systems cannot handle. If the status of any transaction is such that it does not conform to a basic set of rules contained in a standard processing system, then, by definition, that transaction is an exception. All the processing system needs to do in that case is trap the data related to the transaction and alert an appropriate person to handle this exception. The person will take over from there and the computer system can return to processing the vast bulk of routine transactions that drive the business.

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People who handle exceptions will either correct the data so that it fits back into a standard process or they will take care of those transactions themselves from start to finish. They will have time to do this because they won't be bogged down and worn out doing the routine stuff.

Since exception handling is non-routine, it is interesting. It involves thinking, communicating with others, and problem solving. People like doing this kind of work. It's fun. The human brain has been evolving for the last 200,000 years or so to do just this. And because the work is fun and interesting, people will do a good job of it and they will learn and continue to get better at it.

*Effective exception handling is what creates value in the real-time world. As products and services become commodities, companies must standardize and automate their production to keep costs down. Once this is done, it is only in exceptions to the standard commodity transactions that companies will find new revenue and profit opportunities.*

### Continually Adjust Systems and Processes Based on Experience

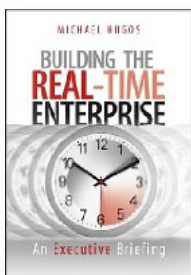
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An exception to a standard business process is due to either an error in the data related to the transaction, or to a new type of transaction that the standard process is not equipped to handle. Regardless of the cause of the exception, there is a profit opportunity to be had if an organization can respond effectively.

If the exception is because of an error in the data, then people need to get involved in finding and eliminating the root cause of the error. Every time a root cause can be removed, it makes the process more efficient and thus more profitable.

If a new type of transaction is what caused the exception then people need to find out what generated it. A new type of transaction is usually indicative of a development or a change that could be a new opportunity or a new threat. There is money to be made by responding effectively to new opportunities and there is money to be saved by responding effectively to new threats.

*The systems infrastructure of a company in the real-time world is continuously evolving. As people discover and eliminate root causes of transaction errors, transaction systems change accordingly. As people discover new opportunities and threats they build new computer systems and procedures to deal with them. Those new systems that perform well are then added to the company's set of standard systems and procedures. In this way, old systems are gradually replaced with newer ones over time.*



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Michael Hugos is a practicing executive with 20+ years experience in applying technology, people and operating procedures to capitalize on business opportunities. This article is excerpted from his book, *Building The Real-Time Enterprise: An Executive Briefing*, published by John Wiley & Sons, 2005.

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