PSR Reviews

Client Server Application Design Turns Many IS Organizations into Dinosaurs

Rapid Application Design Eliminates Many From the Arena

Over the last few months a number of interesting new approaches have been taken by several organizations in the design and development of mission critical applications. We have seen traditional approaches ignored and new ways to rapidly develop and implement applications take hold. In one case a client rejected the traditional design and implementation approach recommended by several traditional firms in favor of a rapid design prototype model proposed by us.

Some traditional IS organizations are fighting the move to these designs. It is those organizations that will be over run by the client server revolution.
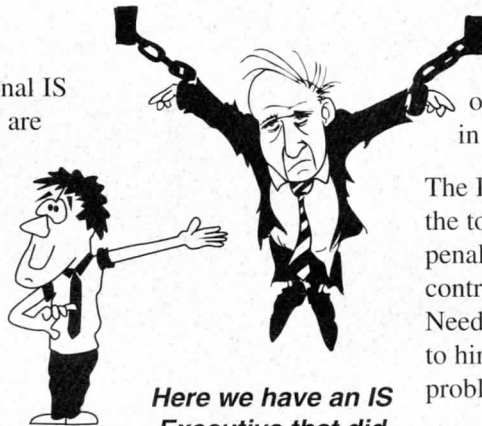
Here we have an IS Executive that did not see the light

A startling revelation in many of these designs is that they excluded any mainframe host. Everything is designed with a true client server environment in mind. A file server is the hub of a network based system with PCs as the workstations of choice. Gone are the days of the character based applications. In addition, the overall capabilities of these systems can be expanded without having to face the traditional step function increases in host processing capacity.

Each of the PC workstations is designed for

IRS Continues to Hunt for Additional Tax Revenue and to Eliminate Contractors in Many Organizations

Exposure to Massive Fines Looms for Many Organizations

The difference between who is an employee and who is a contractor continues to be clouded as firms downsize, and hiring freezes are put in place by various management directives. It is during this time of uncertainty that various governmental bodies are looking for additional sources of revenue. Be it for taxes or worker's compensation.

The IRS continues to hound organizations that use contractors extensively. This will continue to be a real problem that will grow as "right sizing" occurs. In one case a firm had used a subcontractor for a period of over ten months. The payments were well in excess of six figures.

The IRS initially demanded a payment equal to the total amount of tax that was due plus penalties. This was in spite of the fact that the contractor in question had paid his taxes. Needless to say the organization in question had to hire some very good tax experts to fight this problem.

One of the interesting things to come to light in the process was what triggered the IRS activity. The organization had filed a 1099 -- as it was required to do by law.

As a result of the process that firm has instituted a number of changes in the way that it contracts for and uses "non-employees". It is important to understand what constitutes an employee versus a contractor. This will become even more of an issue if the new health insurance plan is passed by Congress.

There are no simple rules. But the table that follows can be used as a preliminary basis for understanding how the IRS distinguishes between employees and contractors. In any

Contents

100% Recycled Paper

Client Server Application Design Turns Many IS organizations into Dinosaurs

maximum efficiency of the "Knowledge Worker". True decision support systems will be in the hands of the people that can most effectively leverage the information -- the front line workers. All of these applications are based on an object oriented design. The hub of the system can use either a RISC or Pentium based processor as the file server thus allowing for system expansion with the addition of new processors. As these applications mature they will be prime examples of how technological innovation can create an environment in which the true potential needs of the business are not limited by technological architecture.

The last time that this was truly the case was when we were involved in the development of the American Hospital Supply System. There will be a number of organizations that will take advantage of these approaches and invent the future.

In our offices we have implemented one such system. We have found that the office of the future requires significant processing power. In addition it will not need anywhere near the staff that was required just a few years ago. The office is equipped with all of the latest technologies and few of the appendages of the past. As we look at other organizations we see this is the trend of all systems. IS organizations that do not adapt will be replaced by those that are responsive to the needs of the business.

Systems will be comprised of a number of standard features such as OCR scanning and electronic data exchange with both customers and suppliers.
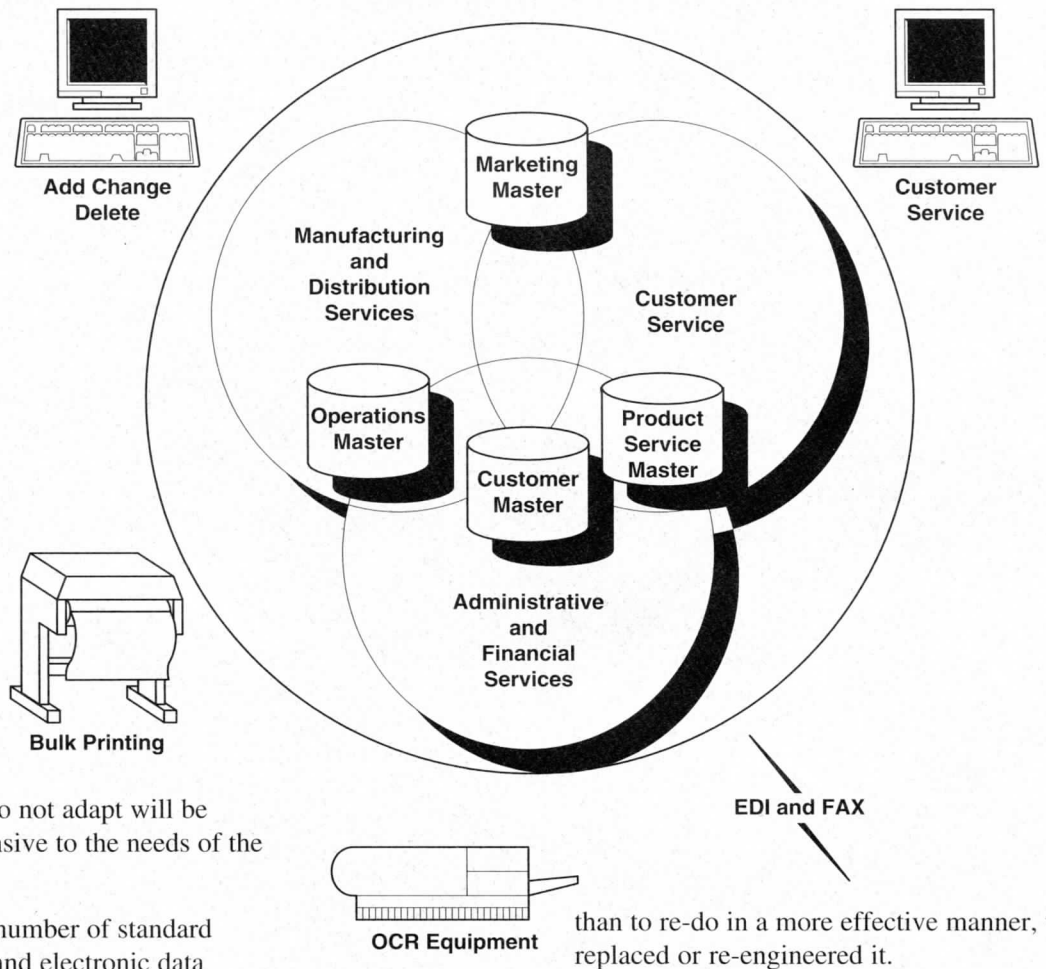
This is not a dream. It is a reality and companies are beginning to implement these types of systems now. The issue they face is the limited number of professionals that are able to have this vision. Instead of worrying about the domain of Information Systems, professionals need to learn how to implement systems quickly and cost effectively with these new technologies.

In our case we have been working on this concept with a

number of clients and finally decided to implement this solution in our offices when we saw how easy it was to give us this competitive edge. We were able to revamp all of our operational, manangement and financial systems in less than six weeks using some rather advanced tools and re-engineering concepts.

We found that object oriented programming is foreign to many COBOL CICS programmmers and had to find staff that could provide the coding capability without the overhead of traditional mainframe systems.

We started with one idea - no technology should limit the way that we do business. Once a technology became more of hinderance than a value it was eliminated or replaced. All technology was viewed as a "sunk cost". That is, since we already paid for it, if it was going to cost more to maintain

Add Change Delete

Bulk Printing

OCR Equipment

Marketing Master

Manufacturing and Distribution Services

Customer Service

Operations Master

Customer Master

Product Service Master

Administrative and Financial Services

Customer Service

EDI and FAX

than to re-do in a more effective manner, we replaced or re-engineered it.

The value that we have received is that our systems are significantly more advanced than most of our clients. Given that our typical client has an IS staff of over 250 professionals that is lot to say.

In the near term we will continue to experiment with technology. In the long term we will focus on the needs of our clients and help their staffs to implement similar systems. The challenge they will face will be what will they do with the legacy systems that no longer have any real value added.

IRS Continues to Hunt for Additional Tax Revenue and to Eliminate Contractors in Many Organizations

case this is only a guideline and you should consult with appropriate individuals in your own firm to better understand your organization's posture on this very key issue.◄═⬦►

| Employee	Gray Area	Contractor
Company can say when, where and how the work is done by the individual	Need to support on-going systems causes company to sub-contract maintenance work out to free up staff for development work.	Contractor controls the hours of work, location work is performed at and how the job is done
Company trains the individual	Contractor bills for the time spent in a training class	Individual trains self on own time
Company's business is driven by area supported by individual in its normal day to day operations	Contractor is responsible for supporting core business systems	Contractor cannot impact the operations of the company
Relationship is long term in nature	Relationship duration exceeds or is equal to length of average employee relationships	Relationship is short term in fact
Wages paid by the hour, week or month	Contractors time sheet is required to be submitted along with invoices	Payment is based on deliverables - Contractor can suffer a loss
Individual must devote substantially full time to the company	Contractor works 40 hours in less than five days while working for others	Contractor works for multiple clients or less than 40 hours per week
Company supplies work space and tools to work in the office	Company supplies software so contractor can work out of office	Contractor works in own office with own tools to complete the task
No proposal and no contract	Open ended contract and proposal	Signed contract and proposal for scope of work with specified deliverables, due dates and costs

---

Competitive Benchmark and Restructuring Service

Features

- Best Practices Comparison
- Span of Control Analysis
- Bottom-up Implementation
- Top-down Direction Setting
- Focused Position Descriptions
- Job Evaluation Questionnaire
- Qualification Leveling Matrix

Benefits

- Competitive Cost Effective Structure
- Self Directed Work Teams
- Improved Business Goal Alignment
- Increased Cross Discipline Performance
- Total Performance Ownership
- Greater User Satisfaction
- Reduced Islands of Technology
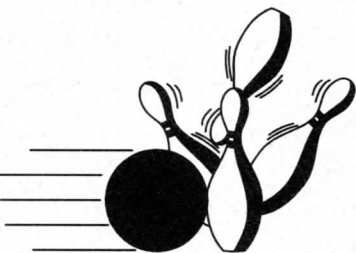
Forecast of the National Information Systems Market

Demand is increasing for experienced client server and object oriented professionals

by M. Victor Janulaitis

In the last few months there has been a resurgence in demand for client server applications that are object based. At the same time there has been an increased demand for many mission critical applications to be developed in very short cycle times.

No longer is it acceptable to say that it will take twelve to eighteen months to implement a new or replacement application. The only solution is something that was unheard of a few years ago -- six to eight week development cycles for mission critical applications.

In the short term there are only a few tools that are readily available to help in this. It is in those areas that the greatest demand has been seen. Included are skills in tools like Powersoft's PowerBuilder and PowerViewer, Blue Sky's tools and Microsoft's Visual Basic. As this demand increases and more tools become available look for the movement of more of the design and implementation effort to get closer to the user.

At the same time this is continuing we have seen a number of "right sizing" rules begin to appear in many organizations. The current "best practices" say that the span of control in most Informations Systems organizations is now between seven to eleven staff members to each supervisor / manager. This, on top of a limit in the number of organizational layers to four for organizations with up to 1,300 staff, is continuing to eliminate middle management layers. By the end of this decade the number of now technologically-based companies of 1,000 plus Information Systems organizations will be limited to a few dozen. Most groups will be dispersed and reporting to operational groups.

This is beginning to raise some very interesting issues as to where all of the development will take place and where all of the trained staff will come from. As we look at the population of people available, we do not see a large supply of individuals that are tooled to meet the needs of this new environment. This is something that will have to be addressed by management of all types in the next few years. Add to this the adventures of the boys in Washington and the "electronic highway" of the future. How is this going to be accomplished? This will be the one area where individuals and corporations with enough insight into how business needs to be conducted can make a killing.

One company that has an interesting tool is DEC. With its alpha processor it has a desk top computer 150MHz (100 mips) that has so much power that DEC had to slow its processor speed by .1% to fall under the federal governments guidelines for a super computer. In that way they can still export it without special licenses.

For $10,000 a work station, a desktop can now have the processing power of a $3MM computer of less than five years ago. The question for DEC is how are they going to leverage this great piece of technology? We have seen some cases where several servers were eliminated with just one alpha. If this catches on then this could be an elimination of multiple processors and consolidation in user organizations. "Right Sizing" in user organizations will be possible. This is one area where Information Systems professionals will be able to drive the technology faster than the vendor can understand it.

All in all, prospects are looking good. The only concern is the impact of any new tax legislation. ◄PSR►

Vic

Location	Prospects Short Term	Prospects Long Term
Northeast	Fair	Fair
Mid-Atlantic	Fair	Fair
Southeast	Very Good	Very Good
South	Good	Good
Midwest	Very Good	Excellent to Very Good
Southwest	Very Good	Very Good
West	Good	Fair to Good
Pacific Northwest	Fair	Fair to Poor
Best Location	Southwest	Midwest