

FOCUS

Supporting Institutional Information Services

by Woodrow W. Denham

THE goal of any service or organisation should be to provide the best possible service to its clients.

In this short article, I deal with some of the benefits and problems associated with providing comprehensive, integrated Institutional Information Services (IIS) to large educational and research organisations such as universities, libraries, museums, hospitals and scientific institutes in Bangladesh and elsewhere in the developing world. Within this broad context, I focus primarily on the importance of providing support services to everyone in those organisations.

The potential scope of IIS is enormous. Most conspicuous are computers and their operating systems, peripherals such as printers and scanners, and networks with software and hardware such as servers, modems, hubs and connecting cables. As computer networks and cable TV systems become increasingly integrated, I believe it will become more common for IIS to include fax and TV services, with the PABX equipment, telephones, fax machines, VCRs and wiring that go with them. Together these are the machines, the programmes that control their most basic operations, and the maze of wires and cables upon which information services depend for their very existence.

Next come applications software. Certainly this includes an institution's Administrative Information Services such as accounting, payroll, purchasing and inventory systems. These are the services that maintain the business aspects of institutions. Next come Faculty and Staff Information Services, the human resources systems that handle matters such as staff recruitment, con-

tracts, scheduling, vacations, evaluations and promotions. Then there are Student (or Patient, or Project) Information Services that support the work that makes this institution the kind of institution that it is. In a university, they include student advising, registration, scheduling and transcript systems, as well as the specialised information systems required for classroom teaching and faculty research. And all of these are in addition to basic desktop systems such as word processors, spreadsheets, databases, presentation software and so on that put a great deal of information processing power on each person's desk.

Then there are global information sharing systems including the Internet, international email services, various file transfer capabilities, and many kinds of library information systems which, in conjunction with the Internet and the World Wide Web, provide nearly instantaneous access to vast amounts of information in libraries and other organizations around the world. These are among the most exciting new services becoming available right now, but a few years from now they too will become just another standard feature of what I call Institutional Information Services.

It is one thing to buy some, most or all of the machines catalogued above, but it is another thing to integrate them so they work together properly. Several years ago, it was sufficient to buy the items individually, install them in various offices as stand-alone systems, and walk away from them. They would not communicate with each other, but since nobody expected them to do that, the failure was not really a problem, rather it was a design deficiency that everyone hoped would go

away when the next generation of systems came on the market.

The next generation is here, and there is no good reason to continue to buy systems without paying careful attention to the advantages and problems associated with integrating them. Buying new systems now that cannot communicate effectively with each other is simply a waste of money, and it is even more wasteful to buy systems that can communicate with each other then fail to utilise those features effectively.

So systems integration is a major issue, but it is not the one that I want to address. Rather, I assume that you will get the equipment that your institution needs and install it in such a way that it is properly integrated and fully functional. To this point, you probably will rely on vendors to do much of the work. When the vendors finish their jobs, the systems become yours, and the future success or failure of IIS rests squarely on you. What should you do next?

You MUST provide effective user support services or your investment in hardware, software, networks and systems integration will be wasted.

I sum it up this way: The cost of providing user support services is much higher.

When I refer to user support services, I shift my attention away from the IIS machinery, and instead focus on the PEOPLE who are necessary to make the machinery worthwhile. The following are some major components of effective support services.

OPERATIONS STAFF: You must have a good behind-the-scenes operations staff. IIS for a major institution is highly

complex and cannot run properly at this time without a great deal of human intervention in its operation and maintenance. If IIS is not operated and maintained properly, it will simply die at an early age, and all of your investment will be lost.

TRAINING PROGRAMME: The systems that you buy may be user-friendly, but they emphatically are not so friendly that workers who have other important jobs to do can learn to use them effectively without training. You must have a strong training programme to keep your technical staff fully informed about the systems they must operate and maintain, to train your established employees to get the most out of their systems, and to train new users as they join your organization. Without an effective training programme, people will learn to use maybe ten percent of the features in their systems, and the other ninety percent are lost. Obviously, that is a huge loss.

TRAINERS and LABORATORY SUPPORT STAFF: You must provide effective support for your training laboratories, and that means a great deal more than hiring somebody to turn the lights on and off at each end of the day and keep enough paper in the printer.

Your trainers and laboratory support staff must maintain equipment, train users in general, understand what students and faculty need to know so they can assist them effectively, and provide feedback to management concerning problems and limitations encountered in operating the labs. Training labs themselves tend to be quite expensive and without adequate support even the finest labs in

the world are certain to be a waste of money.

HELP DESK: Regardless of how good your equipment is, both the equipment and your employees will fail now and then, and users need somebody to call for assistance. I recommend that you provide something like a help desk that receives calls from people with problems, keeps records of them for management purposes, and answers questions on the telephone or sends technicians out to help people in their offices. Without this kind of service, your clients will stop using their machines when they are just learning to do a bit word processing have the latest technology. That is not good.

SERVICE DEPARTMENT: If a technician goes to an office and finds a computer or printer that really has failed, he or she must take it somewhere for repair. Perhaps you have external maintenance contracts, perhaps all of your equipment are covered by warranties now, perhaps you have your own service department with proper tools and trained technicians. However you do it, you must make sure that you can loan replacement machines when mission critical items fail at the worst possible moment, and you must complete the repairs in a timely manner. Otherwise your equipment is useless and your staff cannot do their jobs. Again your investment will be lost.

SOFTWARE SITE LICENSE PROGRAMME: If you use off-the-shelf software from foreign firms such as Microsoft, Lotus or Novell or from local software development firms, you should acquire, manage and distribute that software in accordance with international copyright laws. You should remember that Microsoft will survive quite nicely regardless of whether organisations in Bangladesh abide by copyright laws, but your organisation cannot operate effectively without good support from vendors. Perhaps even more importantly, software developers here in Bangladesh cannot survive economically if the resources they invest in software development are not protected by strictly enforced copyright laws. I recommend establishing a software site license programme to manage the legal and technical aspects of all of your software.

SECURITY SYSTEMS: Information systems require security systems to protect them from fire, theft, floods, lightning, computer viruses and all other natural and human hazards. In part, that means providing adequate physical security so that the hardware and software will not be damaged or lost — such things as doors with strong locks and wide-awake guards, smoke detectors, surge protectors and uninterruptible power supplies. But also it means having adequate antivirus protection to keep out the viruses that can destroy your data without damaging the machines, and backing up your data regularly so that system failures cannot destroy the information stored inside.

TECHNOLOGY OBSOLESCENCE: You must remember that computers get old just like the rest of us, but that they age very quickly. The average life expectancy of a leading edge machine is three or four years. After it gets that old, it no longer has the capacity, speed, or other technical features to do the things that are expected of top-end equipment. So you

must develop policies and procedures for handling technology obsolescence. You cannot just throw away the old ones or use them as paper weights, but also you cannot expect people who have significant computing requirements to continue to use them indefinitely. Politically it may be very difficult to re-allocate these resources every couple of years, but if you fail to do it, the people who began using computers early and now have great needs for IIS end up with oldest and weakest machines, while the people who are just learning to do a bit word processing have the latest technology. That is not good.

PUBLIC INFORMATION PROGRAMME: Finally, the IIS must serve a diverse audience ranging from highly enthusiastic technophiles to people who fear and hate all technology, from people who always support your efforts to people who see your efforts as a waste of resources that they would rather use on their own programmes, from people who feel totally isolated without full-service access to the Internet and want the service immediately to people who are delighted to be isolated and do not want you to mess up their lives. I firmly believe that people have a right to oppose the technical changes that sometimes seem to overwhelm all of us, but I think they should base their opposition on a strong foundation of knowledge rather than on a weak foundation of ignorance. To that end, I think IIS must provide an active public information programme using means such as newsletters, workshops and new product demonstrations to enable its supporters and its opponents to fully understand the alternatives that confront them.

To achieve the goal of providing the best possible services to your clients, attitude is more important than money. The attitude must be that your clients' needs are of central importance and must be accompanied by a commitment to making IIS operations transparent to clients. Early in the 21st century, I expect IIS to become an incredibly versatile public utility like electricity, water, telephone and sewage systems about which most users know almost nothing and do not want to know anything at all. They just expect it to work all the time with no problems. And I think they are right.

How can you use your own limited resources to improve the quality of your services? Obviously my answer is to work on your organisation's goals and attitudes, and develop the support services that are required to get the most out of what you own now. Ironically, Bangladesh may be fortunate in having only a limited amount of money to spend on systems, for that situation can provide an incentive to do your best with what you have. If I am right in thinking that information technology tends to be seriously underutilised for the reasons outlined above, you may be able to get a great deal of additional service out of what you already own without buying a lot of new machinery. The alternative is to spend a fortune on the latest equipment and discover that it contains no built-in magic either, and that it fails just as the older generation did if it does not have proper support.

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Dhaka Day by Day

Banners Galore in City Streets

by A S M Nurunnabi



With the approach of the academic year for schools, we observe a marked change in the city's landscape. Banners advertising admissions to private schools with English medium instruction are found aplenty.

The profusion is particularly noticeable in some select areas of the city. Such English medium schools imparting education from Play Group to 'A' level are in no way an economically easy proposition for the parents of the children attracted by such advertisements. Yet the large number of banners advertising such schools on city streets seems to convey the impression that whatever be the qualitative nature of such schools, they are an indicator of a thriving business.

The banners are not limited to English medium schools alone. They cover a wide range of subjects, notably training in different computer courses, with competitive offers of concession charges, training in different technical trades, competitive claims of excellence by different coaching centres for admission to different courses of study at universities, medical and engineering colleges and other technical centres, etc. Display of banners announcing reduction sales of consumer items at some shopping establishments etc is endemic throughout the year, but at times of big festivals, they take an euphoric form. The prospective buyers are bewildered by such publicity campaign and are unable to decide whether they are actually any reduction in prices or they are merely eyewash.

The banners are found to be of variegated forms. Most of them are strung across the thoroughfares. Some are placed vertically against some supports, while others are featured on hard boards by agencies seeking publicity. They are also of different sizes and colours — red, yellow, green, violet, etc. The predominant colour is, however, red. It is noticed that since big banners are liable to be torn down by strong winds, they are kept steady by making perforations therein at suitable spaces to let the winds pass through. This is also a precaution.

From the people engaged in banner painting business, it is understood that the peak season for this business comes when there are any upcoming election to any public or local body or when there is a spate of picnic parties which cover their houses fronts with big-size banners. Banners are also widely used on occasions of religious gatherings. The lean period for this business is said to be the rainy season for obvious reason.

The banners constitute a characteristic aspect to the city landscape. Though they somewhat clutter the lower airspace, their function as an eye-catching medium of publicity cannot be under estimated.

They are associated with many aspects of our urban culture and as such a rising trend is inevitable on account of their growing uses for various purposes.

Authoritarian 'Birds of a Feather' Nestle Closer

Nigeria's military government is looking to China for help with infrastructure projects and economic planning. But, reports Charles Akin Ogunrinde of Gemini News from Lagos, some domestic critics see the two unelected regimes as unsuitable partners for development.

NIGERIA, whose military government is isolated by the Commonwealth, the European Union and the United States, is expanding its links with China.

Beijing is overhauling Nigeria's erratic Adamawa thermal power station and has begun a \$230 million upgrading of the country's rusty rail network.

Chinese engineers went to work on the railway with such vigour that they say the six-month first phase was completed in only eight weeks.

Beijing will also undertake the dredging of Nigeria's first export processing zone in the eastern city of Calabar and is negotiating for the construction of a sports stadium in the new capital, Abuja.

Nigerian ministers of foreign affairs, industries and sport have paid official visits to China, as has the head of the nation's economic planning committee.

Chinese Ambassador Lu Fengding confirms that memoranda of understanding have

been signed for cooperation in petroleum, housing, agriculture and education.

The two countries have

come to a stage from which we

should proceed to work harder

for the perfect relationship/

says Lu. "We have a lot in common, but very little to disagree on."

Nigeria has even drawn up

its own version of Beijing's "Vision 2010", a plan to establish an "ideal socialist market economy" and to triple China's gross national product.

The recently-announced Nigerian plan, however, has

less specific goals.

Military ruler General Sani Abacha says the plan aims to build "a nation that will be technologically advanced, economically strong, politically stable and socially harmonious in the 21st century and beyond."

The vision contrasts with

the country's current state of

decay. Education, health, water

supply and other services are

facing collapse because of fi-

nancial neglect: unemployment and inflation are at a peak; in-

ustrial production is stifled by

depressed demand; the inci-

dence of violent crime outstrips

the capacity of the ill-equipped

police.

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Ernest Shonekan: Chairman of Nigeria's Vision 2010 committee

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