

Extract from Jim Lee's 'midrange matters' column in iSeries365 and iSeries News UK

COLUMN: Midrange Matters with Jim Lee: Collaboration is key

In the first of his new iSeries365-exclusive 'Midrange Matters' columns, Jim Lee says that it is the IT department's new role to facilitate, not dominate, collaboration in the workplace

Every application vendor from SAP to Sage refers to his 'tools for collaborative computing'. Middleware from IBM and Microsoft is targeted at collaboration; linking computers, linking applications, linking databases, linking people.

The rapidly emerging ethos is the use of infrastructure rather than servers. Individuals neither know nor care which server does what. People simply use the global facility -- the web being the classic example. If you stop and think, it may be that -- at last -- the IT world is going to help people to do what they do naturally. For 50 years we have had serial problems of data control and application strictures. We are moving on from being slaves to the system.

Collaboration. Speaking and listening. Helping. Working toward the same goal. Collaboration has been going on since before man could write, never mind use computers. But what are the underlying accelerators that make collaboration such a hot term today?

In recent years, there has been a shift from using two long-serving infrastructures to the use of IT infrastructure (TCP/IP and the web) to communicate with each other. For most of the twentieth century we had 'one to one' in the form of phone/fax/mail, and 'one to many' in the form of broadcast radio and TV. We are now in an era of 'one to any' with one very important difference which is 'on demand'. We can now share information with instantaneous notification but with receipt and processing at the disposal of the person receiving the notification.



There is no collision course. Instead, there is a blending taking place. Phone and fax are carried across digital networks. TV has moved to digital and, increasingly, is recorded on hard disk and viewed on demand. Information is thus truly shared. The availability of information is not dependent on your whereabouts at a specific time. Reaction, response and update is simpler than ever because the infrastructure provisions routing. Collaboration thus increases. Effectiveness in the use of these, now available, facilities increases exponentially as we learn to define communities and groups and make information available across these groups without depending on individuals to forward or broadcast the information using tools such as email.

We have learned that an email or text message has the advantage that it is not dependent on the immediacy of a voice connection. A message can be dealt with in the available time and priority of the receiver. It gives the receiver some control over interruption of his work processes and allows him to prioritise his reaction or response. Email also delivers threads. As a result, there is less misinterpretation and less misrepresentation amongst addressees. We have been able to reply, forward, save, store follow-up or delete.

These basic functions allow interested parties to be kept informed. The underlying issue is that these basic email functions only allow for distribution. They do not cause it and they do not control it. Most of us in commerce today send and receive many emails in our working day. We distribute all kinds of attachments using email as the carrier. From the perspective of collaboration, rather than communication, person-to-person email has two significant weaknesses. Firstly, we rely on a sender including us as addressees. Secondly, and perhaps to counter the first weakness, we proliferate emails and attachments to the extent that there are sometimes hundreds of copies of an attached document. These copies reside on laptops, desktops, and servers. They take up back up space and time. Nobody knows which copy is the latest. What is the authorised version? Have revisions been made? Commercial and potentially legal chaos can result.

The already available collaborative software addresses these issues. Users of current technology have moved on from attachments and discovered a better facility for collaboration. These users don't attach objects. They send you the link to the



object in a repository. Basically, they send you a URL that makes the document or picture, or whatever, available to you. More than this, the frameworks surrounding the repository understand concepts such as author, owner, subscriber, and revisioning. These frameworks provide for automation of much briefer emails that advise predefined interested parties of new or changed information. This allows you to have the same benefits of an email that you deal with in your own time but when you react to the email, you move into a truly collaborative environment with all related documents to hand.

It is relatively simple to conceive the repository as a building with rooms that contain filing cabinets that contain files. Like pre-computer days, the files contain all sorts of different documents and pictures. Now, the owner can control who enters the building and, when in the building, who can enter a room and, in the room, who can open a cabinet. When we get to the file there is control over who can open it. When we get to the object (document) you decide if it can be read, revised, copied and so on. Then we can tell not only who read it but who did not read it. Subscriptions can be posted by an authorised user to an object. The subscription provides notification to the subscriber of any change in that object. Workflow (another key component of collaborative tool-kits) delivers opportunity to do something about alerting individuals or groups to new revisions. Workflow also provides for escalation on the failure of key personnel to read a critical document within a specified time.

Picture this. An enterprise has over eighty field operatives controlling an expenditure of £180 million. Each operative needs matrix sign-off of expenditure with others. Every 'project' needs central registration of progress and cash release. Imagine the design, development, implementation and education involved for a system for this. Today's reality is that it took ten man days of expert support provided over 20 elapsed days to deliver a web accessible, intuitive to use, customer administered, system using WebSphere middleware and Lotus Quickplace and Workflow.

What is more, the documents (Word and Excel and Project) existed and did not need to be changed or reimplemented. The documents were quite simply filed in the repository. There was little effort applied to conversion of data or change of process.



The critical objective was to define the organisation, its people, their relationships and teach and handover the administrative procedure to maintain that. The Workflow component design used position -- not person -- and thus escalates successfully under user administration.

Ten years ago it would have cost more to get through design and quotation than it took, today, to deliver a repository and management processes like the example above. And, the components (licenses) are reusable. Continuing evolution of the use of frameworks for new processes is user driven and user managed. This evolution sees the emergence of new Quickplaces providing secure subset repositories for new purposes. It becomes analogous to putting in new filing cabinets and new files in limitless office space.

What is fundamental is that the whole operation (and many like it) is an automation of what we, as humans, would do anyway. It does not involve restrictions due to technology limitations. All that the user is concerned with is a browser and a connection. Given these resources, he can author and edit all forms of objects. Simple rules then assist in coordination. Copy documents are not distributed. Originals and revisions remain in the central, secure database.

This real-life example is running on iSeries. IBM and the iSeries community should be seriously concerned that the server selection was made without any evaluation by the enterprise's executives. Availability of service and significant security had to be contracted for. These criteria had to be guaranteed. There was no choice, just a decision. Compared to just a few years ago, it felt like nobody cared. What happened to all of the contests of operating systems philosophy, on TCO, on hardware architecture and the USPs for a proposal? The server is entirely transparent to the user. In this case, the executives did not care and the users don't know. To provide a competitive price and contract for guarantees, the iSeries was used because of its reliability, scalability, security and low maintenance. Oh, and it runs right out of the box -- productivity from day one.

People collaborate. When there is no recognised 'system' successful people get on with achieving their goals. When there is a 'system' and it does not work, successful



people win in spite of, and not because of, that system. How many of us empathise with that?

Astonishingly, back office systems continue to introduce strictures even today. Each of us still encounter customer service agents in major corporations advising us 'I cannot do that now', 'I must wait 24 hours for registration', or 'the code that you are providing is not known to the system'. A good customer service agent will take and process your instruction. If you ask that agent how he makes it possible, you generally find him admitting: 'I emailed Tom and Dick and gave Harry a call'. This is working with people; and in spite of the 'system' -- collaboration.

Collaboration is not the same as systems integration. Systems integration is about bridging technical boundaries. Clever human beings don't recognise boundaries. Collaboration amongst humans happens anyway. It is the IT department's new role to facilitate, not dominate, collaboration.

So, how do we humans collaborate? Telephone, SMS/text, email, fax, post or plain old voice in the kitchen, corridor or pub? No. That is how we communicate. To collaborate we need shared and accessible information. The other and really big step from communication to collaboration is having shared and common goals that your people buy into. That is an issue of ethic for a company -- little to do with IT. What IT can do is facilitate the communication capability and information access.

Historically, we in IT have not been good at facilitation. We like rules, procedures, and disciplines. Trust me, you cannot program for idiots because idiots are too ingenious. So in this case, don't try. Deliver the infrastructure. Add the facility of middleware and collaborative application framework. Facilities first, rules last.

Consider what is currently hot in technology support for facilitating the future. Voice over IP (VoIP) means putting voice on the same network as data. After all, voice is data. This means in future not forcing users to use a CRM application to make/receive a telephone call so that that application has a chance of being useful. Today, the infrastructure can see the call take place and keep true and accurate records on, for example, who last called.



Or take mobile/pervasive access. Until relatively recently, the unreliability of mobile communications facilities has been a major issue. Take a look at WebSphere Everyplace Communications Manager (WECM). IBM cottoned quickly to the solution being server side. This middleware will keep the server side alive while you jump gigabit Ethernet to Bluetooth, then to GSM, then GPRS -- whatever. And it addresses VPN issues that arise during all of the related communications/network changes.

If you are not following this and your hair is as grey as mine, this is like the old 5250 problem of the screen going down and the System 36 rejecting it when it came back up because the job connected to that screen was already running and/or not allowing another connect because you are at the wrong device. WECM resolves all of that in spades because mobile comms will, for some time, go up and down like the proverbial. Crucial stuff. WECM accepts the communications unreliability and deals with it.

Look at Quickplace/Sharepoint frameworks and constructs. Many companies are looking for a document management solution when they have a document distribution problem. Stop the distribution. Keep the documents in the repository and distribute the link, not the document.

Security and effectiveness provide the ROI components for investment in collaborative frameworks. Wherever there is a lot of email and attachments there is waste and risk. Not only is there a better way to do it but also significant savings in network, disk, backup time and people time. Security is the trump card.

Because current email processes 'work' there is some resistance to change. Many individuals will resist the 'Big Brother' aspects that become available with repositories. This is another reason for those of us in IT not to push the academics of the concepts and not to go 'rules first'. Stick to basics. It is the way that we would work if there were no computers -- files of documents in cabinets that are in rooms, that are in buildings.

ENDS - 15/09/04