

# Access to information

Having the right information available at the right time is critical to the success of any organisation. But too often organisations simply do not know what information they hold or where it can be found. The time taken to find information can create an additional overhead, increasing costs and adversely affecting the effectiveness of an organisation. For commercial organisations, this reduces their ability to compete against their competitors, whilst non-commercial organisations find their income may not cover all the things they need to do. By improving their management of information, organisations can better utilise resources and increase efficiency.

One of the central themes in the integration of the European Union has been that of transparency; granting citizens a right of access to information and being more open about the activities of governments and public bodies. For example, the United Kingdom has recently implemented a Freedom of Information (FoI) Act 2000. This requires public authorities to consider the release of information on request and this must be done within 20 working days of receipt of this request. Not all information must be released - there are exemptions for some categories of materials, for instance court records - but the organisation must first locate any relevant materials to carry out the tests required to decide if an exemption applies.

Organisations are increasingly bound by a complex set of statutory requirements forcing them to manage information so as to meet the needs of regulatory authorities. A wide range of other legislation may apply pertaining to the protection of personal data based on the requirement of the Data Protection Directive 95/46/EC, such as the Data Protection Act in the United Kingdom.

A key area for compliance legislation is in the area of finance and financial management with the need to retain information for a set period so as to be able to prove that no irregularities occurred. The introduction of the Sarbanes- Oxley Act in the United States requires companies to be able

to demonstrate their compliance by producing documentary evidence (or records) and holding such material for seven years. This includes e-mails sent by staff in support of their business.

## How can organisations meet statutory and non-statutory requirements?

Organisations must take control of their information to satisfy any regulatory compliance requirements that apply to them. The key to success is in seeing this level of information management as an opportunity to deliver business benefit rather than as an overhead. By putting in place policies and procedures to manage information, the organisation will be better able to support its strategic aims by having access to information about itself and how it delivers against these aims.

To start to develop an information management policy, some of the questions you need to ask yourself are:

- What information does our organisation have and where is it?
- How does anyone find this information? What are your methods for searching?
- When was this information received by the organisation and what action was taken on its receipt?
- Have you appointed individuals that are responsible for ensuring compliance and tracking requests for information?
- How are you managing your paper and electronic records?
- Do you have robust backup and disaster recovery solutions to ensure the ability to retrieve vital data?
- Are the people within your organisation aware of their responsibilities in relation to legislation?
- Have you ensured your document retention policy extends to all forms of material generated by the organisation?

The answers you arrive at will help you define the solution to your information solution which is likely to combine technical and non-technical elements. Delivering such solutions is part of Fujitsu's

business and we are working extensively across Central and Local Government in the UK on a large number of projects that are supporting the management and delivery of information to the public as a result of the Freedom of Information Act and other compliance requirements. Here we list a few examples that encompass business consultancy, information architecture through to technical solutions and managed systems:

### **Fujitsu's Electronic Document and Record Management Rapid Deployment**

Electronic Document & Records Management (EDRM) is fast becoming an essential element of an organisation's infrastructure. Developments like the Freedom of Information Act legislation and other regulatory conformity have pushed compliance to the forefront of requirements in both Public Sector and Commercial organisations.

The introduction of EDRM technology has historically been an exercise steeped in extensive consultancy and lengthy justification - much of this time and effort is directed at tailoring the solution to the particular requirements of the organisation and associated processes. Thus, the lifecycle of an EDRM deployment is more likely to be measured in Quarters as opposed to Weeks - a factor that Fujitsu's EDRM Rapid Deployment method addresses.

Understanding the information needs of the organisation and how these can be best served through the technology is part of any such development. Fujitsu can provide expert consulting to deal with the non-technical information issues such as identifying the processes for managing information based on records management standards and developing fileplans.

### **An approach based on experience**

It's simple - experience counts. With over five years experience in delivering enterprise EDRM solutions to a variety of organisations and with over 100 dedicated EDRM staff, Fujitsu is well qualified to deliver against its EDRM Rapid Deployment method. The EDRM Rapid Deployment method utilises UK National Archives approved products and has the latest Office®, collaboration and integration technologies from Microsoft. It provides customers with full EDRM functionality, based on a packaged architecture and standardised builds.

### **Draw the line. And move on.**

Perform this analysis on a continuous basis and the value of the 'novel' - 20% - side of the line grows exponentially. The more activity you shift into the realm of repeatable, measured, transparent processes, the more resources you free up to invent new differentiators. Or take new markets. Or deepen your customer relationships. You create space for everything that really matters. What used to take a miracle becomes a matter of routine. And you start paying bread-and-butter prices for bread-and-butter activities. It doesn't mean you can't have bespoke systems - of course you can - but they only need to be bespoke in 20% of your business, where it matters. The rest is just commodity.

Once you have identified the 'standard 80%' and committed to managing it as a core resource of the business, you can work on further optimisation. Ideally, you not only want to remove duplication when you commission technology, you also want your technology base to offer better serviceability and lower operating costs over a long lifetime. Cars have become cheaper to buy but also more reliable and robust through industrialisation, with advanced management systems and self-diagnostics increasingly built-in. The equivalent in IT is the system designed for light-touch support, so that operating costs - and therefore lifetime ownership costs - tumble.

In Japan, industrialisation is well established. Japanese businesses have been benefiting from industrialised components for some time, paying less for their infrastructures, having them deployed faster, and getting better performance from them.

*Business is tough enough as it is. Why make life any harder? Draw a line around the functionality that's keeping the lights on, standardise it, and forget about it. You've got better things to do.*

### THE WATERSIDE MEDICAL CENTRE

We can use these developments positively to transform the way the healthcare sector deals with patients. One example is the Waterside Medical Centre in Portsmouth.

At the Waterside, patients can choose to be seen on a “walk-in” basis. Rather than being seen by a Gp or nurse in a consulting room, with the professional turning away to use a deskbound PC or leaving the room to consult other sources, the staff move around the patients. Using handheld tablet PCs or laptops, doctors and nurses can engage with patients with complete concentration, knowing that all the information they need is at hand. The secure wireless network at the centre ensures that patient information meets patient at the time and place of need. According to Dr Matthew Davis, “A consultation is best when it’s a continuous, uninterrupted flow of information. I can hear what they’re saying, I can explain what’s happening, and I can get on and treat them.”

Productivity in the walk-in clinic has risen sharply, with more than 80 patients being seen in a typical day.

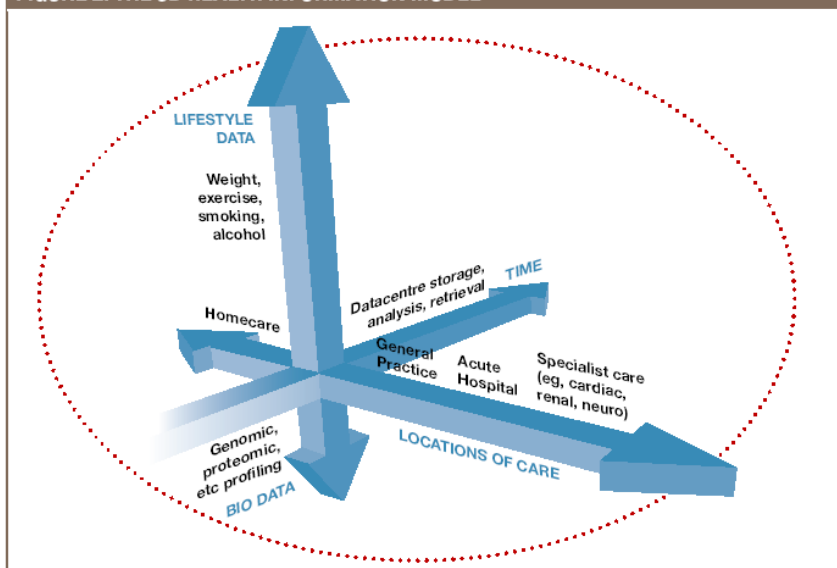
Patients say that they like being able to see all their information on the doctor’s device: it’s much easier for patients and professionals to work together and for patients to retain a sense of personal ownership of their care. The centre’s approach facilitates the team-based approach to care by enabling its staff to work around the needs of patients. It also responds to people’s lifestyles by making the walk-in option a normal means of access. And it’s exploiting IT to create a responsive information environment that works reliably in the background to put patient needs first.

The same kind of thinking is taking hold in secondary care and acute services.

### AN INFORMATION MODEL FOR GREATER CONNECTIVITY

While connectivity initiatives are gathering pace, there’s still a long way to go. For example, if every consultant’s outpatient clinic had automatic read-only access to GPs’ records then they would save between 30 per cent and 50 per cent of their time. These are the estimates that consultants give us, based on their experience. Simple access of this kind would radically improve throughput. As an investment in healthcare capacity, this facility compares more than favourably with initiatives in recruitment, training or flexible hours.

FIGURE 2. THE 3D HEALTH INFORMATION MODEL



We advocate an approach that we call the 3D Health Information Model (3DHIM). This is a basic ground-plan for the development, procurement and tool for making decisions – and demonstrating the rationality of those decisions. It’s not a template for any type of system, nor is it a set of rules about how systems should work or work together. It simply specifies how IT initiatives contribute to the business goals of the health system and ensures that every investment can be assessed for its relevance to patient and provider needs. The horizontal axis of the model represents locations of care. These are the places where patient and health system meet, either physically or virtually. The spectrum runs from the home, through primary care and secondary care into specialist care. The entry and delivery points of care are expanding all the time, and it’s important that our systems recognise the different requirements of each point while making information available across all of them. This is also the dimension where the foreground attributes of technology are most apparent; because it’s here that we’re considering devices, access routes and usability options. The vertical axis represents a range of patient data. This is the domain of ‘patient records’ as we have come to understand them and encompasses the full medical history of the individual. But this dimension also incorporates data from investigations and, increasingly, relevant genomic information.

*Any model runs the risk of looking like a solution rather than a tool. The 3D-HIM is not a point solution but a readily usable way of articulating information flows, IT requirements and process redesign. It's a means of debating priorities and directing investment, and a framework for planning confident, stepwise, targeted change.*

As the number of investigatory techniques continues to expand, the range of attributes covered by this dimension will grow, particularly as the costs of various kinds of imaging fall. Similarly, the availability and utility of genomic data will grow in line with increasing clinical knowledge. Information about the patient's lifestyle choices – such as smoking or alcohol use – is also represented here. The third axis represents time. All the information in the model can be expressed in terms of a timeline following the individual from birth to death. Using this model, any individual record will tell the patient and his or her carer how he or she was cared for during a particular event at a specific time and place. Continuity of care across different locations of care is easily audited, as is the evolution of a treatment plan over time. Every salient piece of information has a home in this model and is available to every process that needs to take it into account.

### **BEYOND THE THIRD DIMENSION**

The 3D Health Information Model is a key tool for moving the sector forward but it can also be expanded to serve wider societal needs. In the first place, organisations that interact with the healthcare sector could be included in the model. So, for example social services could be triggered to carry out an assessment of the need for help of a non-therapeutic nature – such as meals on wheels. The increased attention being paid to connectivity between healthcare, education and social services in the care of individuals is also relevant here. From the point of view of public policy, the growth of databases organised around the 3D-HIM principle will provide insights into social trends, performance variations in the system and the emergence of effective new therapies. This kind of accurate planning information does not exist at present and so, today, future services have to be decided on a combination of forecast needs, professional opinion and citizen pressure. The 3D-HIM will make real information about real outcomes in real cases available on a truly comparable basis, exposing, for example, which channels generate the speediest and most effective resolutions of patient needs. Supermarkets have been able to abandon theorising about what might sell if it's piled high enough at a cheap enough price, turning instead to gleaning insights into what customers want and making those goods and services available to them just in time. This is the kind of lesson that the healthcare profession can take from commercial practice. It's not about trying to standardise patient care, or 'dumbing down' professional practice: it's simply about matching skills and resources to real needs. If this principle is grasped at the strategic level then, as a community, we will be able to transcend the seemingly depressing economics of healthcare, improving performance without piling on new infrastructure. Imagine, for example, an analysis of 3D-HIM information that exposes which channels, therapies or advice have the biggest impact in limiting the development of type II diabetes. Such a discovery would almost make blanket screening programmes redundant, saving enormous amounts of time and money – and improving patient care.

The key to the really meaningful future enhancements in healthcare may not lie in molecules, or surgical techniques, or lifestyle modification advice, but in the objective analysis of the combinations of activity which produce the best outcomes in practice. Healthcare management will then become truly scientific, economically transparent, and politically accountable.

### **COMMUNICATING THE MODEL**

Any model runs the risk of looking like a solution rather than a tool. The 3D-HIM is not a point solution but a readily usable way of articulating information flows, IT requirements and process redesign. It's a means of debating priorities and directing investment, and a framework for planning confident, stepwise, targeted change. If it is adopted by the healthcare sector, it will provide for the first time a solid management connection between the contribution of IT and health outcomes. Above all, the model is a neutral and objective platform for facilitating discussion that keeps healthcare professionals in control of the development agenda. The IT industry produces great products and services: but it shouldn't be put in charge of healthcare. The collaborating disciplines that make up modern healthcare, jointly focused on the welfare of the individual patient, are best placed to decide how and where money is spent on developing the system of care. The 3D-HIM puts the healthcare community firmly in charge. There's no room in it for technical obfuscation, or inflated claims. It's also a model that IT suppliers can work with, applying their strengths without having to conform to a rigid, low-level architecture but denying them the opportunity to force self-interested proprietary products into the market. The model can make a difference – right now. It provides an excellent basis for assessing the contribution of existing systems or planned initiatives. It creates a context in which different interest groups can discuss their goals and negotiate their collaborative activities. It also provides a baseline against which supplier claims can be challenged or verified. But perhaps most importantly, the 3D-HIM provides a lens through which anyone involved in healthcare can re-imagine the system working around the patient. The patient becomes the focus of the system's concern rather than a burden on the system. People are no longer seen as packages of symptoms being shunted around a complex factory or supplicants who must be crudely graded as to need so that budgets are not blown. Instead, the healthcare system becomes a flexible care environment that reconfigures itself in real time according to the needs presented to it by patients. Once this perspective is enabled, it becomes less easy to implement systems or design processes that meet institutional needs without also meeting patient needs. Patient-centred thinking becomes the default behaviour in information systems – just as it has always been in the caring professions.

# Whose **OPINION**?

DR. LESTER RUSSELL



Lester is our chief medical officer, responsible for all clinical matters relating to our work with the nHs and the wider health economy. He graduated from Southampton university Medical school in 1983 and worked in a variety of hospital specialities until 1990, when he became a partner in general practice. He was awarded an MBA in 1997 and left full-time general practice in 2001 to pursue a broader business career, including a post as medical advisor to nHs Direct, expert witness in personal injury claims and medical advisor in clinical negligence cases. He also originated and co-founded a medical consultation website, e-gp.com, which provided advice and information online. Lester remains a practising Gp, working part-time in a busy south-coast general practice.

## YOUR OPINION

Email us [Marketing@nl.fujitsu.com](mailto:Marketing@nl.fujitsu.com) or visit [nl.fujitsu.com](http://nl.fujitsu.com)