

ITAnalysis - IT in lifesaving environments

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Virtually every form of endeavour is dependent on access to information and communication in order to provide controls and support for the processes that it entails

While much of this can be accomplished by face-to-face interaction between people or using paper based records, the volumes of information involved and the need to communicate instantly at a distance with increasing numbers of people means that technology is playing role in most processes. Mobile technology in particular can be of great benefit.

However in many environments it is still paper based processes that dominate. Quocirca recently interviewed 150 healthcare professionals and 28% thought paper based processes were so widespread in their workplace that it was a "pen pusher's paradise". This should not be a surprise as there are many critical processes and decisions that have to be made which have far reaching consequences, both medically and financially.

Recording the stages of the process to ensure that the right procedures have been followed and who was involved are vital not only for doing what is best for those in care, but also offering the right support and protection to those providing the care, demonstrating compliance with pre-determined procedures in the event of a problem.

There is relentless pressure for increased productivity in healthcare as in other industries and consequently the need to automate processes increases. Information captured needs to be verified and shared more readily, and may involve more people in many locations. This means form filling, ticking checklists and getting confirmation signatures, and according to Quocirca's research, security, speed and accuracy of input are the most important factors.

An IT solution based on mobile devices should be able to meet those requirements, but with a wide diversity of technologies and products available,

choosing the right elements is a challenge. Despite its widespread use by both commercial organisations and consumers, information technology is relatively fragile; mobile devices break, software crashes and networks connections are lost. In time and life critical environments, these failures can have a profound impact.

There are many reasons why mobile devices might fail, but lack of care or attention by those using them plays a big part. This is rarely a deliberate on the part of the user and in healthcare often stems from the challenges of the environment workers operate in, where patients are the primary focus for care, not computer hardware.

While few health roles have a need for truly ruggedised technology, improvements in hardware design, sound policies and frequent employee communication have minimised the risk of devices failing. Similarly, the problems associated with software failures can be addressed by choosing simpler and more dedicated or specialised technology. This has the added benefit of users seeing the device as a useful tool for a frontline job, rather than an indication of status only bestowed on managers, or an object of management control.

However, it is still important to look at the specific needs of those who might directly benefit most from the use of mobile IT. Thorough training and ongoing support is necessary to assist all workers transitioning from a paper-based system to mobile technology. It also requires upfront consultation to ensure that automated processes work, and that they will be accepted by staff and any representative trade bodies. In addition to training in basic functionality, there is also a need for ongoing coaching to ensure the new system continues to deliver benefits and does not introduce new complexity or interfere with the primary tasks.

The more complex or intrusive the technology, the more training will be required and the

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greater the total cost. In the most challenging health environments, like intensive care or emergency response, where workers have many other critical considerations, the last thing they need is to be taking time to learn how to best use the tools at their disposal. It has to become second nature, but all too often training is focused on the technology rather than its use, and is too brief.

The traditional paper-based processes that surround healthcare professionals provide useful controls and guidance but have fallibilities as well as inefficiencies. They are error prone, labour intensive and make it difficult to distribute or process information in a timely fashion.

Automating these processes makes sense, and many different mobile technologies, not only the established laptop and PDA, but lightweight simple to use technologies for example Digital Pen and Paper, allow information to be captured, processed and used at the point of need.

The challenge in roles where information processing only plays a secondary part is that much of what IT solutions offer is complex and intrusive. It needs to be kept simple and specific to the task in hand – this is a thought process that not only healthcare, but any industry could benefit from. The research referred to in this article is discussed in Quocirca's report "Light touch, firm impression", which is freely available for download [here](#).

About Quocirca

Quocirca is a primary research and analysis company specialising in the business impact of information technology and communications (ITC). With world-wide, native language reach, Quocirca provides in-depth insights into the views of buyers and influencers in large, mid-sized and small organisations. Its analyst team is made up of real-world practitioners with first hand experience of ITC delivery who continuously research and track the industry and its real usage in the markets.

Through researching perceptions, Quocirca uncovers the real hurdles to technology adoption – the personal and political aspects of an organisation's environment and the pressures of the need for demonstrable business value in any implementation. This capability to uncover and report back on the end-user perceptions in the market enables Quocirca to advise on the realities of technology adoption, not the promises.

Quocirca research is always pragmatic, business orientated and conducted in the context of the bigger picture. ITC has the ability to transform businesses and the processes that drive them, but often fails to do so. Quocirca's mission is to help organisations improve their success rate in process enablement through better levels of understanding and the adoption of the correct technologies at the correct time.

Quocirca has a pro-active primary research programme, regularly surveying users, purchasers and resellers of ITC products and services on emerging, evolving and maturing technologies. Over time, Quocirca has built a picture of long term investment trends, providing invaluable information for the whole of the ITC community.

Quocirca works with global and local providers of ITC products and services to help them deliver on the promise that ITC holds for business. Quocirca's clients include Oracle, Microsoft, IBM, O2, T-Mobile, HP, Xerox, EMC, Symantec and Cisco, along with other large and medium sized vendors, service providers and more specialist firms.

Details of Quocirca's work and the services it offers can be found at <http://www.quocirca.com>