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Business and IT Analysis

Bringing System Management to Messaging & Collaboration

Multiple fixed and mobile messaging and collaboration solutions increase the need for consolidated management

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The fast growing interaction between email, collaborative environments and social media usage on both fixed and mobile devices is putting pressure on the corporate management of these activities. Inability to manage this surge may result in inefficiencies, security issues and damage to corporate credibility. General system management tools lack the detailed ability to seamlessly monitor, manage, plan and update core business messaging and collaboration environments, notably Microsoft Exchange and SharePoint environments.

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GSX

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Meeting user expectations

New means of individuals and groups interacting are constantly challenging the way that an organisation communicates and collaborates. Social networking has grown in importance, and the consumerisation of IT has driven up the use of external file-sharing services and cloud information stores on top of the bedrock of corporate email. Users enter corporate sites with their own wireless devices expecting to access email and collaboration services immediately to get their work done. Corporate business continuity policies allow little downtime on corporate communication system.

One pane of glass to manage messaging and collaboration apps	Corporate users are extremely sensitive to delays or message loss, and increasing mobility requirements makes tracking SLA compliance tricky. Gaining control of performance metrics across the company's fixed and mobile collaboration environments is key to successful support of corporate communications.
Real-time view of end user apps performance	The end user is the final arbitrator of application performance, and so the business needs visibility into how end users experience their line of business (LOB) applications. Interested parties include managers, application owners and IT professionals – performance metrics need to be reported to each in a meaningful manner.
Ease-of-use and automation	IT admins must free up work cycles to address the stream of new applications, support their business users' innovative work modes by automating all maintenance of on-going day-to-day chores, and abstract the messaging and collaboration control plane from whatever physical or virtual environment the apps reside in.
Transparent implementation & upgrading	Time is money, and fast deployment, maintenance, upgrading and testing should never degrade corporate effectiveness and user satisfaction. Therefore, implementation and upgrade procedures should also run through a battery of real-user actions to ensure satisfactory end user performance. The essential point is transparency of the upgrade and maintenance in order to ensure business continuity.
Proactive analytics and reporting	Scalability these days is anything but linear: escalating traffic volumes and shifting usage patterns, changing service pricing structures and user perceptions all challenge the adopted service delivery strategy. Performance degradations are generally noticed immediately. Resource planning in messaging and collaboration environments is therefore a very visible face of IT to the business user community it serves. The most important thing in analysis is to have targeted reports for each of the IT services. Each report targets specific usages and user environments. On demand reports must be simple to access and use.

Conclusions

System and application management vendors are attempting to create simpler network and apps management solutions by increasing the breadth of hardware and apps they can manage. In so doing they increase complexity, and the effort required to maintain optimal messaging and collaboration capabilities. Large Microsoft Exchange and SharePoint shops (typically with 10,000 users and upwards) are, by default, using Microsoft's Operation Monitoring tool SCOM. However, optimised management requires fully integrated third party value accelerators on top of SCOM that focus on automating routines, as well as handling configuration and planning issues.

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Introduction

Organisations are layering new forms of interaction on the bedrock of their corporate email (dominated by Microsoft Exchange, IBM Domino, and Google Apps for Business), alongside the internal file sharing systems (notably based around Microsoft SharePoint). Teams, departments and individuals still depend on email for keeping each other appraised of what is happening in projects and tasks; and interactions with suppliers and customers are still predominantly through these mechanisms, even with the growth of social media. The Exchange and SharePoint duo have emerged as the points of reference for many corporate information sources.

The messaging and collaboration environments tie into many other applications and business processes and come with a considerable degree of vendor lock-in, making platform changes a daunting task. If an outright product switch is prohibitively costly, users will look to improve overall process performance with better monitoring and management tools in order to avoid expensive and time consuming one-off investments in more services, and technical experts to fine tune the tools.

Both business and IT managers need to know how employees and teams are using the messaging and collaboration services, as well as what the end user experience is like; usage monitoring must be related to specific projects; and similarly GRC (Governance, Risk and Compliance) activities need better tools than email vaulting and archiving when seeking to identify and assess information flows.

However, a more user-friendly and business-outcome related approach is needed to manage the information held within email and collaboration stores and put the organisation back in control of its messaging and intellectual property assets. Also, of course, in order to do more with less, there is a driving need to automate routine tasks so as to free up more development resources.

> The typical IT manager describing the IT challenge:
> *"Our organisation is geographically dispersed and we use many common web-based applications to run critical aspects of our business. The constant availability and performance of these applications has a direct impact on our bottom line. We want to be proactive in securing the performance and availability of these applications and not wait until help desk gets a call from an end user."*

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Business aspects of comms & collaboration

It is widely reported that 70% or more of an organisation's IT budget is spent on "keeping the lights on". Not only the everyday maintenance of back-ups, patches and upgrades, along with help desk issues, but also rectifying errors and re-establishing degraded services take up a large proportion of the IT budget. Tools that can automate everyday tasks and reduce errors can have a massive impact on this.

By using suitable tools:

- Heavy users of email can be identified, and IT can optimise their communication routines (e.g. switching traffic to IM and VoIP communication), and provide better overall capacity planning. This reduces calls to the help desk when capacity is constrained, and reduces the traffic on the email architecture.
- Many performance issues can be identified and dealt with automatically – before users become aware of them. Best practice can be identified and automatically applied to users who may accidently stray outside accepted policy.
- Activity can be reported, so that a full audit trail can be provided for internal and external GRC relating to: new employees, changes to role or responsibility, and business leavers, all of which can be more easily dealt with through greater process automation.
- Integration into other enterprise systems can be carried out faster and with less need to maintain a consistent platform. Similarly, new application versions can be installed more easily.

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Managing with IT operations solutions

An option close at hand is to rely on the existing IT operations process software – in the APM (Applications Performance Monitoring) category. With APM global revenues surpassing $2 billion in 2012, representing close to 10% growth over 2011, this is a fast growth market.

The main players in that field are Microsoft's System Center Operations Manager (SCOM), CA Technologies, BMC Patrol, HP OpenView and IBM Tivoli. In the enterprise, APM is handled by the network team, and is used to manage the performance and availability of the entire corporate infrastructure. However, this forces the messaging and collaboration admins to be dangerously dependant on network teams that are not focused on the messaging and collaboration performance goals.

Even basic issues such as 'pending mail' may not show up, and adapting general network management tools to show the important messaging and collaboration performance data, and at the same time filtering out the noise, requires more scripting and updating. Besides being a time sink, admins risk being blind to the actual end user experience as it is only loosely correlated with network managers' performance assessments.

Rather than relying solely on a general APM approach, most large IT shops deploy Microsoft's SCOM (or Systems Center 2012) for their Exchange and SharePoint apps – but this raises other challenges for the IT administrators.

Managing with SCOM

Microsoft provides a powerful set of System Center tools for managing various aspects of a data centre. SCOM, the Microsoft System Center Operations Manager tool, collects and aggregates data on application configuration and performance but leaves much to be desired in the granularity and usefulness of the information it provides relating to Exchange and SharePoint performance.

Quocirca discussions with end users indicate that corporate IT is finding SCOM somewhat over-complex when managing their Exchange and SharePoint environments. The challenges mainly relate to:

- Alerts
- Reporting
- High level of expertise
- Maintenance and fine tuning the system

Typically, SCOM generates, by default, numerous alerts across many systems and applications and requires much script writing and rewriting to work, especially when software upgrades are introduced. Using the tool to its best advantage usually also involves a long and steep learning curve for the responsible IT staff.

The Microsoft strategy is to position SCOM as the central management layer of the messaging platforms. IT can leverage SCOM with additional Management Pack 'add-ons', either developed by Microsoft or by third party vendors. Microsoft believes that by increasing the capabilities of the SCOM toolbox to encompass all its platforms, Microsoft will eventually create a more unified and simplified management environment. Seen from inside the Microsoft universe, this makes a lot of sense. Viewed from a corporate user perspective with other operating systems and messaging and collaboration apps, the complexity becomes a burden.

With in-depth knowledge of SQL, admins can generate multiple performance reports using Report Builder, but most users find it is a nightmare to create the reports they specifically need. Admins must use Report Builder as it is, in order to extract the data they need and generate reports. Creating a customised report or making changes to an

existing one takes much time and effort, with many users avoiding such tasks all together – preferring to continue to work with little real visibility of what is truly happening within their communication and collaboration environment.

Once scripts have been developed, they must be maintained, adding further expense and requiring expert skills. Typically, if the SQL database changes in one way or another, scripts have to be rewritten as well. Lacking SCOM and the Management Pack expertise, email admins or the network and operating system teams either make do with less or, when hard pressed, hire in expensive Microsoft consultants. In both cases, it is very challenging for them to really understand and use SCOM to monitor and report on applications afterwards. Similarly, maintaining the scripts and the configuration of the product is complicated whenever anything in the environment changes (version of the Management Pack, version of Exchange, version of SCOM, etc.).

At a more detailed level, test views in the Operations Console are populated only if administrators enable the event collection rules for each specific test, and admins also have to customise each management pack. This time-consuming complex fine-tune can easily causes delays.

Exchange and SharePoint Management challenges

One pane of glass to manage messaging and collaboration apps

The term 'quick and easy' is not what comes first to mind when talking to IT collaboration administrators using SCOM. Managing a variety of diverse and shifting corporate messaging environments is a complex and time consuming IT task. Corporate users are extremely sensitive to delays or message loss, and increasing mobility requirements makes tracking service level agreement (SLA) compliance tricky. Gaining control of performance metrics across the company's fixed and mobile collaboration environments is, however, key to the successful support of corporate communications.

SharePoint and Exchange teams need to merge more and more, because Microsoft is integrating its messaging and collaboration suites. Similarly, other major messaging and collaboration solution vendors are also moving to unify their application environments. However, many corporate IT departments still retain separate administrative and management teams for each application, and realignment is taking a long time. Management software therefore needs to be role-based to provide the relevant information to each team, and to support them on the transition path to the integration of tools and the Exchange and SharePoint environments.

Real-time view of end user apps performance

The end user is the final judge of application performance, and the enterprise needs visibility into how end users experience their LOB applications. Interested parties include managers, application owners, and IT professionals. They all need to monitor the availability and performance of business-critical applications and to view the reported data on a single web-based interface. Automated routines must identify any shortfalls between service goals and actual performance, allowing IT to quickly become aware of problems.

With SCOM, time is needed to make a good conversion of the SLAs to the SLOs (Service Level Objectives) in SCOM's Service Level Dashboard. Typically, this can be availability and performance for an application, a group or other class of objects in SCOM.

Contracted messaging and storage capabilities need to be documented and aligned with user needs, so any test procedure should also run through a battery of real-user actions, notably:

- Testing delivery queues in hubs and data centres to ensure that the Largest Delivery Queue Length to a given Microsoft Exchange Hub Transport server or Edge Transport server does not impede the server's ability to establish an simple mail transfer protocol (SMTP) session to other Hub Transport or Edge Transport servers
- Testing alert escalation services to monitor system health with an escalation ticket system to deal with and resolve critical system states
- Checking disk space and maintenance window (making sure this is not included in the SLA measure).

Ease-of-use and automation

Adapting to new apps, updating and shifting messaging and collaboration platforms is an on-going process. At the corporate level, however, changing the company's core communications platform is no light matter and entails much preplanning, vendor involvement, controlled testing and rollouts. This is followed by a period of heightened customer support activities putting additional strain on already strained skilled resources.

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Being able to easily migrate the messaging and collaboration management platform is a significant plus in this process. It gives the IT department more time to work closely with the users in the transition process, and share on-going performance metrics with them in ways they are used to seeing such data. It also ensures that existing skills are not lost: the skills that the admins and other technical staff have built up on one platform can be more easily migrated and transferred to deal with the new platform.

IT departments know that their users will not read the manual and will expect a seamless transition to something better or, at most, attend a short training course to get into the new environment. In this short transition window, the ability to demonstrate performance to the users in ways they are comfortable and well acquainted with is a huge plus.

Similarly, on the IT staff side, a shift to a new messaging and collaboration platform will often require new skills and possibly a round of new hires and departures, which temporarily disrupts business processes in the IT department. The ability to minimise such disruptions and primarily hire new staff to enhance service delivery is a big benefit – as is of course the money saved.

Transparent implementation and upgrading

In any software change situation, the highest priority is to ensure transparency and a seamless transition process. In messaging and collaboration environments, the server-side upgrades should be fast and avoid new code being added. Upgrades should be invisible to the user population by avoiding the need to install new agent software or require the user to change any configurations manually. Changing legacy messaging and collaboration implementations often involves complex interoperability and configuration testing (POP3, IMAP4, VPN, Active Sync, etc.). In newer systems, where the focus is on RPC/HTTP and OWA (Outlook Web Access, which provides browser-based connectivity to any Exchange or SharePoint account), upgrades should be automated to specified performance thresholds set by the IT admin. The procedure should also run through a battery of real-user actions, focusing on the time it takes to complete different tasks, to ensure a satisfactory end user experience.

Organisations that decide to migrate from one messaging and collaboration platform to another may also look for management and monitoring solutions that span both their existing and future platforms. Greater flexibility is provided by management solutions that are not bound to a specific messaging and collaboration environment.

Proactive analytics with on-demand and targeted reporting

With fast-paced technology developments and changing user behaviour, the ability to service an increasingly mobile workforce, conduct efficient resource planning and respond quickly to changing market conditions are premium qualities for any IT department.

Resource planning in messaging and collaboration environments affects the whole organisation, as performance glitches are generally noticed immediately. This is therefore a very visible face of IT to the business user community it serves. Change management and day-to-day coordination of the involved delivery teams is an on-going task for IT managers. To get the job done, they need planning tools that can map out the consequences of changing usage volumes and shifts between different messaging and collaboration platforms. They also need the capability to map out the consequences of observed trends in the user base and align them with overarching company goals.

Before implementation, the IT admin may also want to generate different scenarios based on trending statistics over different time periods with end-to-end service. These performance scenarios may involve different SLA levels based on specific mail routing configurations and high availability requirements. The end user tests should focus on the time it takes to complete different tasks. If the messaging and collaboration environments also service external users and partners, it may also be necessary to share relevant aspects of these scenarios with them.

Scalability these days is anything but linear: traffic volumes and usage patterns, service pricing structures and user perceptions all contribute to the preferred service scaling strategy. IT needs to run several different scenarios and then involve management in choosing the right one.

Steps to improve Exchange and SharePoint management

As we have noted, changing corporate mail and collaboration platforms represents a significant time and resource investment. For resource-constrained admins, improving the management of existing apps may present a faster route to improved performance and greater user satisfaction. To facilitate such an investment, IT admins must:

- **Understand what the business requires:** Can it meet its GRC requirements? Does the existing communication and collaboration platform support its internal and external process needs? What is lack of visibility of performance and usage costing the business in hard terms? Is information being shared effectively where it needs to be shared?

- **Listen to your users:** What are their pain points? What are they looking for in future? Are they getting the support they expect from IT? Is IT meeting its management performance expectations with the resources available?

- **Map the existing messaging and collaboration environment:** Does it address users' demands for mobility and social networking and C-level security and compliance concerns?

- **Analyse the time used by the messaging and collaboration teams:** How much time is taken up in maintenance and performance management? How many calls is the customer support desk handling? How much time are IT admins spending on day-to-day maintenance chores?

- **Look at the IT organisation:** Is it optimal for handling corporate messaging and collaboration needs? Can disparate teams be integrated to ensure common goals and maximise productivity? How hard is it to update the platform; how much time and effort is spent on tasks that could be simply automated? Does it align with the direction that the apps (e.g. Exchange and SharePoint) are evolving in?

- **Analysing budget allocations:** Can IT make a case for better management tools with a return on investment within the present budget that will allow a shift of efforts from routine maintenance to developing new solutions?

On this basis, IT can draw up a prioritised list of management platform requirements for an RFI (Request for Information) process, and engage with potential providers. Focus on the vendors with customers and case studies resembling one's own organisation, and vendors who are willing to model specific needs with their tools.

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Conclusions

Powerful generalist system management tools like HP OpenView, and packaged Microsoft applications such as SCOM, enable companies to improve availability and performance of mission-critical applications while reducing overall cost of ownership. However, these tools represent 'simplification through complication' – the belief that by creating a single management tool for a wide range of software and hardware, they can ultimately simplify the management environment.

The downside to this strategy is that the intermediate stage requires high levels of expertise and customisation. It forces users to undertake complex developments and acquire complementary tools in order to accelerate their system management projects. Microsoft's 'grand unification' drive also has significant organisational implications for the different teams involved in service delivery. SCOM evolution is forcing customers to integrate Exchange, SharePoint and network teams, but additional management software is needed to support the migration process.

Alternatively, IT departments may adopt a multi-vendor strategy to improve their ROI for Application Performance Monitoring. A variety of technologies exist for the instrumentation of custom developed applications, but their capabilities do not extend very far into proprietary messaging and collaboration platforms.

For large Exchange and SharePoint environments, IT departments need dedicated management tools that integrate fully with, and layer on top of, SCOM as value accelerators, to provide the automation and seamless management of their fixed and mobile messaging and collaboration environments, as well as extending and accelerating the overall performance of their system management investments.

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Raiffeisen Informatik Case Study

Raiffeisen Informatik is part of the Raiffeisen Banking Group, the largest IT provider in Austria. Its services include IT operations, outsourcing, client management, security, and license management. It has annual revenues of around 1.3 billion euros, and 2,800 employees in over 120 locations in 29 countries.

Business issue

The company needed a proactive monitoring software solution to manage an infrastructure with up to 70 servers hosting collaboration and messaging applications. Selection criteria included: ease-of-use, high level of automation, fast deployment and upgrading, and scalability.

Solution chosen

Raiffeisen Informatik examined three market-leading monitoring alternatives. After extensive testing, they chose GSX Solutions tools for the following reasons:

- **Rapid deployment:** GSX Monitor deploys in only 5 minutes, vs. 2 days to configure the old solution.
- **Increased security:** GSX Monitor's agentless installation without the need for additional code mitigates the risk of intrusion and system downtime.
- **Lower total cost of qwnership (TCO):** GSX Monitor's out-of-the-box solution with preconfigured setup boosts IT department productivity and cuts installation, maintenance, and upgrade costs.
- **Easy to customise:** It is simple to customise task configuration.
- **Scalability:** Only a small team is required to deploy GSX Monitor over a complex infrastructure, thanks to the pre-configured setup panel. System infrastructure can be seamlessly expanded through remote, non-intrusive communication. The legacy monitoring tool required manual intervention to both install and configure each newly targeted machine.
- **Flexibility:** Thanks to the Java Console, the IT team can access servers and service availability from home over a VPN connection.
- **Mobile access:** Mobile workers can stay connected to IT resources and control server availability from a BlackBerry or other mobile device.

Business benefits

GSX Monitor & Analyzer streamlines communications server monitoring, lowers TCO, and resolves security concerns at Raiffeisen Informatik:

"GSX Monitor is an impressive and powerful tool which enabled us to drastically reduce our monitoring setup and configuration time. We now have ready access to all the key metrics of our servers, and the services delivered to end users." -- Anthony-Georg Heijkoop, Raiffeisen Informatik.

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Atos SE Case Study

Atos SE (Societas Europaea) is an international information technology services company with annual revenues of 8.8 billion euros and 76,400 employees in 47 countries. Atos provides hi-tech transactional, consulting and technology services to clients in a diversity of industries, including manufacturing, retail, government, health, transportation, financial services, telecommunications, media, energy and utilities.

The challenge of migrating for a major European bank

Atos faced the challenge of migrating the old messaging system for a major bank – the central institution for more than 900 cooperative banks and 12,000 branch offices – to a new one created by Atos. Atos hosts the bank's 12 messaging severs, and provides remote services for 5,200 users. Since the bank's financial information is tightly integrated with its messaging system, it was crucial to monitor the messaging systems during the migration to ensure that there was no data loss.

High availability was central to the decision-making process, so Atos had to have a tool in place to check server and mailbox replication and make sure that the service was delivered without interruption. Since the built-in tools offered only partial monitoring to assure a smooth migration, it was critical to have a third-party tool to closely monitor data replication and assure compliance with a strong Service Level Agreement (SLA).

Atos and the bank had to monitor both mail routing flows (the direction routing takes through the environment), server up time and accessibility. The administrators had to have advance notice of emerging mail issues so that they could be resolved before they got a call from a user or, worse, a company executive.

Value proposition of the chosen solution

After reviewing various options, Atos chose GSX Monitor & Analyzer to help manage the messaging migration. The signed contract includes a strong SLA that defines various expectations including server up time, server down time, and mail routing queues. These strict SLAs were essential for the bank, as real time information is critical to making strategic market decisions.

Another key reason for selecting GSX was its ability to compare the performance metrics given by the service providers to ensure high application availability and service levels.

Business benefits

GSX Monitor addressed migration issues for both Atos and the bank. They found that they could easily configure probes to flow through their mail system to monitor SLA times and retry intervals.

GSX was also able to meet the requirements of any department, team, or mail server with granular SLA configurations. The alerts from the probes were sent to various addresses and groups, which were able to immediately see probe statistics based on SLAs and generate mail flow and routing reports.

Today, GSX Monitor & Analyzer satisfies all of the mail flow reporting needs in a single monitoring tool with flexibility across all the servers. In addition to the daily reports on mail routing and servers, Atos is implementing trend reports and forecasting.

"We are pleased with our choice of GSX Monitor & Analyzer for this critical migration project," said Uwe Warwel, System Engineer at the Atos Collaboration Competence Center. ***"It proved to be a powerful tool that fully met our stringent performance requirements"***.

About GSX Solutions

GSX Solutions is the global leader in proactive, consolidated monitoring, analysis, and management of enterprise collaboration and messaging environments. GSX Solutions develops and markets enterprise Information Technology (IT) infrastructure management software to IT professionals at organisations of all sizes. The company provides IT departments with agentless monitoring and analytic solutions. These tools simplify work processes and solve problems faced every day by professionals who manage messaging and collaboration infrastructures such as Microsoft Exchange™, Microsoft SharePoint™, IBM Notes™, Sametime™, Quickr™, Traveler™, and BlackBerry Enterprise Servers™.

GSX Solutions is the pioneer in providing IT professionals with agentless monitoring solutions using only a small workload on the server itself. Their product line-up includes monitoring and analytics capabilities for messaging, collaboration and mobile environments. These tools are designed specifically for email administrators and IT managers to manage their mission critical collaborative applications. This solution is, as well, designed for System Integrators, managed service providers and hosters in order to support major IT projects for customers, such as migration, remote assistance and collaboration.

GSX Solutions is a Microsoft Systems Center Alliance Partner, a Microsoft Silver Partner, a BlackBerry Alliance Elite Partner, and provides automated server maintenance for Domino and Windows-based servers.

Monitoring millions of mailboxes for over 600 global enterprises, GSX is headquartered in Geneva, with R&D in Nice, France, and offices in the US, UK and China.

For more product information and partner opportunities, please visit http://www.gsx.com

REPORT NOTE:
This report has been written independently by Quocirca Ltd to provide an overview of the issues facing organisations seeking to maximise the effectiveness of today's dynamic workforce.

The report draws on Quocirca's extensive knowledge of the technology and business arenas, and provides advice on the approach that organisations should take to create a more effective and efficient environment for future growth.

About Quocirca

Quocirca is a primary research and analysis company specialising in the business impact of information technology and communications (ITC). With worldwide, 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 provide advice 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, IBM, CA, O2, T-Mobile, HP, Xerox, Ricoh and Symantec, 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

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