

Beyond the Bit Pipe

The Mobile Operator's Responsibility to its Corporate Customers

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RESEARCH NOTE:

The primary research data upon which this report is based was derived from an independent study conducted by Quocirca and sponsored by O2. This involved 240 interviews of those responsible for or actively involved in managing their organisation's relationship with mobile operators from a broad cross section of industries in the UK, Germany France, Benelux, Spain and Italy. Approximately 40% of the respondents were from €1 billion plus turnover Enterprises with the remainder in the €100m to €1 billion range. Other sources of data are highlighted where they are used.

There has been a great deal of speculation in the communications industry about the future direction for mobile operators. Will their utility roots hamper them in exploiting their investment in expensive data networks to gain an acceptable return? The more important question, however, is whether operators can step up to the mark and deliver the kind of advice, service and support that their corporate customers need and are beginning to ask for.

KEY FINDINGS

- **Mobile business communications continue to grow**

Companies see more spending on mobile telecoms, for over 70% it was increasing either modestly or rapidly. Despite ongoing sensitivity to voice call costs, these increases are largely based on airtime. Data is accounting for much of this, as access to corporate applications and data services, which has been the subject of many trials, broadens to wider deployment through 2005.

- **Business needs are seldom changed by technology only thrown into sharper relief**

Enterprises have made significant investments in core IT applications, and recognise that development of mobile access allows greater usage and extends business processes to the point of use – wherever that may be. Wireless access to corporate information outside the office isn't a new development, but is now more obvious and more widespread with almost 20% of companies already active, and over 50% becoming active.

- **New technologies create options, but also uncertainties**

Wireless technologies, like Wi-Fi don't have the same level of adoption as cellular for mobile data, but over 70% of respondents would like to offload the network selection issue by having agglomerated service packages that include the different wireless networks in a coherent package. Beyond this, the next logical step to incorporate fixed line connectivity is less appealing, but only 32% dismissed the possibility altogether.

- **The mobile communication supplier landscape is evolving**

Employees need transparent mobile connectivity across national borders, and for this to include different forms of networking. So far, attempts to provide international support with an alliance model similar to that employed in the airline industry is proving difficult with 57% unaware of either of the European alliances, Freemove or Starmap. Even with awareness, there is still caution, as many remember the past failings of similar models between fixed operators.

- **Businesses are looking for deeper and more trusting relationships with their suppliers**

40% want strategic advice on technology and services, over 60% want tactical advice on how to get the best out of wireless data services, and there is a continuing interest in outsourced and hosted services. These need additional software, hardware and integration skills, with operators playing an important role as partner or catalyst in a broader ecosystem addressing businesses needs for a whole solution.

- **A strategic relationship is in the best interests of all**

Almost 70% of businesses welcome a strategic relationship with their operator suppliers, echoing previous research results. A closer partnership benefits everyone. Operators add value and become more than bit-pipe utilities. Enterprises gain service provision instead of disjointed communications, allowing them to focus on enabling their business processes and not technology problems. The question is, can operators step up to the mark?



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1 Introduction

Mobile communications has evolved from the supply of straightforward voice calls and point to point pager or text messaging to a more function rich set of media, providing closer integration with IT. No longer should mobile communications be seen as an adjunct to existing IT, but something to be more deeply integrated within.

This increases significantly the complexity of service provision, as a broader range of skills are required to offer a total solution. These skills do not exist in a single supplier, but require a combination of suppliers to work in concert, in a close relationship with the customer. If mobile operators are not actively participating at this level, their service is simply a utility, forcing their customers to build the relationships themselves, and for that, they may well go elsewhere.

The aim of this report is to look at the emerging needs of enterprise mobile communications. As background to this, 240 managers in larger organisations with responsibility for, or active involvement in the relationship with mobile operators were interviewed (see Appendix A).

The report examines the issues involved in dealing with the complexities of mobile data, and where businesses should legitimately expect their telecommunications suppliers to offer more than a utility connection.

This report is intended to be read by those with responsibility for sourcing mobile data services and dealing with mobile operators. It offers them a peer review and information for their negotiations with mobile operators.

2 The simple bit pipe utility

Plain old voice telephony has a simple model. A call is initiated from one point, connected to another and billed by the time period. Long distances between participants add to the call cost.

Communications needs have progressed beyond voice, as analogue signals have given way to digital data transmission. Data communications are both simpler and more complex than voice.

The simplicity is the malleable format of digital data. In 1995, Nicolas Negroponte¹ talked of everything becoming just 'bits'. But he also said that 'transporting bits is an even worse business to be in than that of the airlines with their fare wars.'

The cost of transporting data across a network is based on the amount transmitted and acceptable delay in receiving, not connection time, or for that matter, distance. So the complexity comes from the potentially diverse usage of data networking, and this is where value, rather than pure cost of delivery becomes important.

IT applications take fixed networks for granted; the costs of using a network are based on its capacity, not volume of data delivered. However, where data is delivered over a wireless connection, every bit of data transmitted has a cost. So, a financial trader will value the timely handful of bits describing a market movement far more highly than the multiple-megabyte photograph of a colleague, despite the higher cost of transmitting the latter over a wireless connection.

Size matters to an operator, but value matters more to the user. Since wireless spectrum resources are more precious than cables or fibre in the ground, mobile operators have to balance the cost of each bit transmitted, versus the income gained. If an operator is just a 'bit pipe' utility provider, delivering and charging for simple raw data, this places a greater onus on the user to manage their use of the actual services carried.

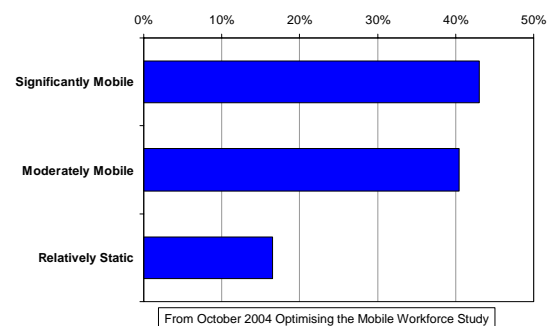
This is not in the best interests of anyone. Value added by an operator will strengthen its business model, and allows users to get more effective application use from the overall service. An operator is best placed to understand the limitations and possibilities of mobile communications, and therefore play a more sophisticated role in their exploitation than simply 'carrier'. Although operators will charge more for the higher value services they deliver, users will be able to choose and pay for services better matched to their application and business needs.

3 Addiction to mobile voice leads to mobile data dependency

The growth in interest in wireless working has been a consistent feature seen in previous Quocirca studies² (Figure 1). This is partly driven by specific business needs – a sales person needs to visit customers, an engineer needs to travel to site to fix a broken component – and in part from a growing need for increasing general flexibility and productivity across a business. Employees as a whole are becoming more mobile, and need to communicate with each other, and increasingly access the office IT infrastructure remotely.

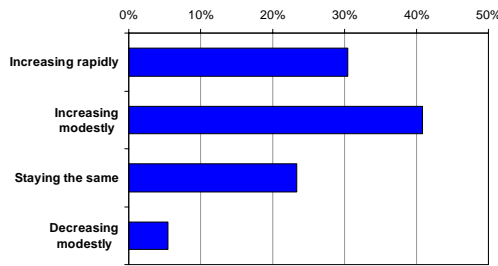
Figure 1

Overall, how would you describe your workforce in terms of level of mobile working (e.g. on the road, in the field, etc)?



Mobile data projects have been deployed widely, but have been limited in depth, with many pilots providing only narrow services. Significant growth in airtime spending, at a time of only moderate economic growth, now demonstrates broadening deployment (Figure 2).

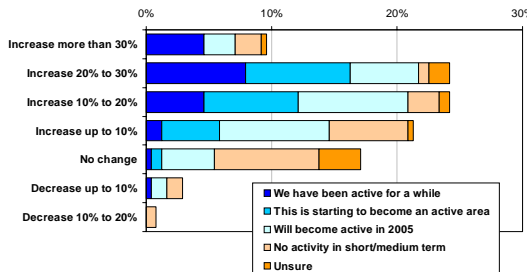
Figure 2
How would you say the average spend per user on mobile telephony is changing? (services costs as opposed to handsets)



Airtime includes voice as well as data, but the maturity and widespread use of mobile phones for voice calls, combined with competitive pressures in the supply market between operators has meant that costs, whilst still a major concern, have settled to a regular pattern. Data is now building on the dependency for voice.

This trend will continue (Figure 3), and those with existing wireless activity are leading the charge.

Figure 3
Overall, how does anticipated spend on services, i.e. airtime for voice and data, with mobile operators in 2005 compare with 2004? (Combined with overall activity levels for wireless technologies)



This includes users connecting to email and/or other corporate IT systems from a laptop PC, PDA, smart phone or other suitable device while away from the office, so whilst the growth is solid, it is covering a lot of ground from an application perspective.

Individual applications and user requirements merit specific attention. Wireless access to data is not something to be applied either across the board without concern for specific needs, or as a sticking plaster to bad business processes. Mobile data creates more challenges than mobile voice.

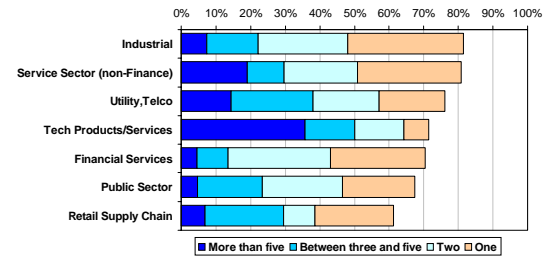
4 The challenges of mobile data

Several factors add to the complexity of mobile data services. A mix of technologies and services from both IT and telecommunications suppliers are required and this has an impact on the strategy and commercial approach taken by customers.

4.1 Strategy often led by tactics

Early experience is widespread and the growth in general purpose wireless remote access is not restricted to particular industries (Figure 4). Even in the retail supply chain sector, over 60% of respondents are aware of at least one project, and across the board around 46% are aware of at least two.

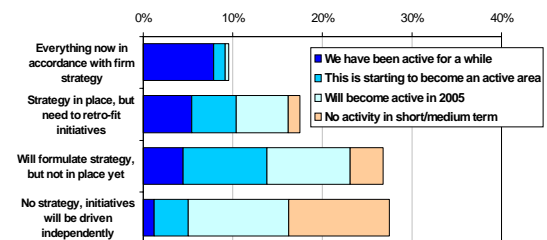
Figure 4
How many wireless email or general wireless remote access pilots or projects are you aware of? (Split by industry)



These will include early stage pilots, but it shows industry agnostic acceptance of the potential for mobile services. However, over a third of respondents in the technology sector admit to knowledge of at least five projects, so some overall control is necessary to ensure that projects can build on each other, without overlapping or competing for attention and funding. Projects should not be led by fans of technology, but by business requirements.

Those with existing experience are most likely to have a strategy in place and be working to it (Figure 5). Developing a plan for mobile working and mobile technologies must fit into the overall business strategy, not sit alongside it, and this is an area where suppliers, including operators should have more influence.

Figure 5
Regardless of how projects were initiated, how much is activity in this area now being carried out in line with an overall adoption strategy?



A valid mobile strategy should be an iterative process building on support from all levels, and leading to the development of corporate wide standards and solutions, as follows:

- get the buy-in from senior levels to ensure support and suitable business direction
- identify an area where extending a business process to a mobile individual will have tangible value
- investigate potential options with all suppliers, including network operators

- conduct limited trials, managed internally, but with the full participation of all suppliers
- communicate the results internally for cross business co-ordination and to ensure the experience further refines corporate strategy

This way, companies gain the experience and confidence necessary to build solutions which support a business strategy that uses mobile technology to improve the efficiency of their business processes. Suppliers also gain more experience in how to match their technology or services with business needs.

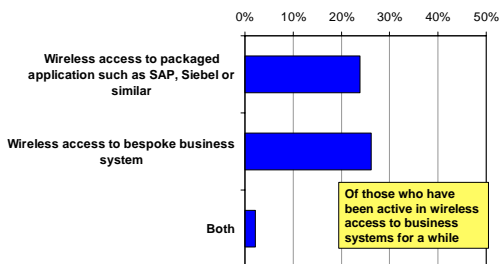
4.2 Extending Business Processes

Companies have made major investments in their IT infrastructure, providing direct end user access to business intelligence, customer relationship, management information and supply chain systems. What use is a desktop software license to a user who is outside the office? It is just an expense to the business unless the user can access it.

For employees who are moderately or significantly mobile, the most effective time to access their corporate IT services is at the point in the business process where the need arises, whether in or out of the office.

Those with some experiences of wireless technology are now able to build on this to provide access to corporate systems (Figure 6). Looking at their combined responses, over 50% of those already active have plans to deploy access to enterprise applications during 2005. Experience clearly leads to further extension into more sophisticated projects, as both knowledge and external partnerships grow.

Figure 6
Do you have one or more significant wireless projects slated for 2005 for access to enterprise applications beyond mobile email and general connectivity?



Many packaged application vendors have offered some element of mobile access for their products, but those planning wireless access to bespoke business systems are on a par with those working with packaged applications. These solutions require more effort by the in-house IT function, who will find external support and advice from a communications company very valuable.

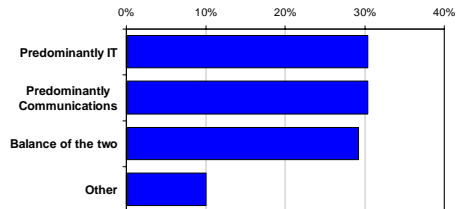
4.3 The collision of IT and Telecoms

The convergence of voice and data services changes the purchasing relationship between mobile operators and businesses. Commodity voice services are purchased by

buyers primarily seeking the best price, the added complexity of data services require other criteria also to be assessed.

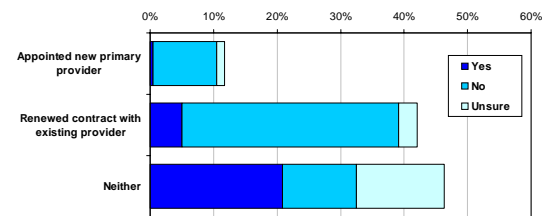
Operator ability to deliver more complex data services is mixed, with differing levels of supporting skills from different operators. This encourages a more strategic view of a supplier by the business, encompassing consistency, support services, and future plans, in addition to cost.

Figure 7
Is your role predominantly associated with IT, communications or both?



The individual responsible for mobile operator relationships is increasingly associated with IT as well as communications (Figure 7). This balanced view bodes well for future developments, as an understanding of the challenges and opportunities from both areas will be vital for creating the mobile solutions needed for business. Too harsh a focus on cost means that valuable opportunities may be overlooked; too much enthusiasm for the technology-de-jour will be limiting or expensive.

Figure 8
Have you appointed a new primary provider or renewed your contract with your existing primary provider in the last six months? (and will you review or re-tender in 2005?)



The large potential for supplier churn is still evident. Over half reviewed their contracts with existing providers or appointed new primary providers in the last six months (Figure 8). Of those indicating 'Neither', almost half will re-tender in 2005, indicating that almost all will be reviewed over a 24 month period.

Regular ongoing reviews are encouraged, but major changes every two years are too frequent for the development of true strategic partnerships, especially where significant investment is necessary and a number of further third party relationships need to be nurtured.

Much of the need for review revolves around the problem of making comparisons between suppliers and determining

value for money. Finding a consistent method of benchmarking services and tariffs offered would benefit both supplier and customer. Then comparisons between suppliers can be made during the tendering process, and longer contract terms offered.

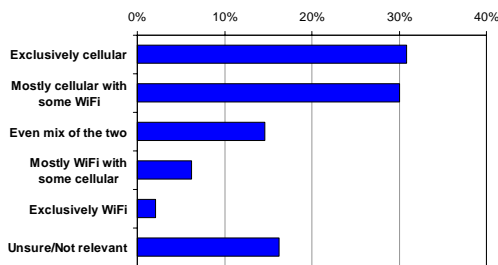
4.4 The disruptive influence of Wi-Fi

Previous Quocirca studies have shown interest in multiple forms of wireless connectivity, in particular the rapid emergence of Wi-Fi as an option³.

Wi-Fi offers high bandwidth wireless networking, and outside the office is typically purchased on an ‘all-you-can-eat’ tariff, paid for on the basis of time periods starting from one hour up to a monthly subscription. Within a closed environment, such as a suitably equipped home or office, it provides the flexibility to wander freely without requiring a network cable or a socket.

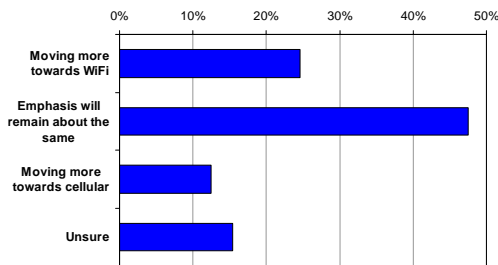
The downside is short-range, and when used outside the office, it relies on service providers offering Wi-Fi ‘hotspots’. These are prolific in high traffic locations, such as airport lounges, coffee shops and hotel lobbies, but coverage at the precise location required may not be present, or may be provided by only one of any number of service providers. Connection is neither simple, guaranteed nor secure.

Figure 9
Homing in on laptop/notebook users, how much do your plans to support them include cellular connectivity (GPRS or 3G) versus the use of WiFi hotspots over the coming 12 months?



Despite this, Wi-Fi has some appeal, for users travelling to locations where there are known connections. This benefits ‘road warrior’ laptop users, but very few near-term plans for laptop connectivity rely entirely on Wi-Fi, and most will require cellular (Figure 9). There is a clear need to connect in the cold expanses between hotspots.

Figure 10
As both 3G and WiFi coverage increase, do you see the trend moving more towards one or the other over time?



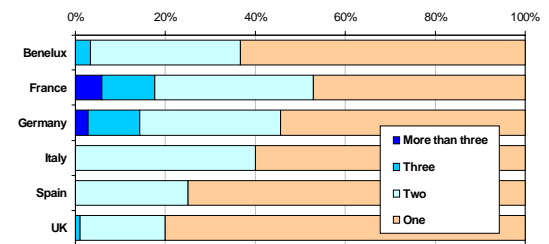
Wi-Fi will undoubtedly figure in the longer term. Almost a quarter think that increasing coverage of both Wi-Fi and high speed cellular (3G) networks, will provide a trend moving more towards Wi-Fi, double the number who would see a similar move towards cellular (Figure 10).

Even with its disjointed nature, any operator providing mobile data connectivity must take Wi-Fi into account.

4.5 An International Perspective

Despite the high concerns about call costs, the majority only have contracts with a single supplier, although this picture varies somewhat across Europe, as in France over half had two or more, and around 17% had three or more (Figure 11).

Figure 11
How many service providers do you have current contracts with for provision of cellular services?

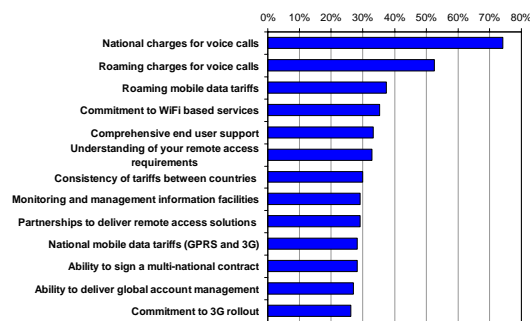


This indicates some coverage issues, especially in France, and it might indicate that one operator is preferred for voice (most likely because of price), and one or more others provide point application data services, such as mobile email, or data cards.

When this is the case, it is another level of complexity that most businesses could do without, and there is an opportunity for one operator to take the lead and manage the relationship with another, either on a customer by customer, or broader basis.

International alliances, rather than a complex set of bipartite relationships are one positive way to address the issues with consistency of tariffs between countries, global account management and multi-national contracts (Figure 12).

Figure 12
Which of the following were significant considerations when you last negotiated your primary contract?



Alliances simplify issues for users and permit the members to collaborate on new projects and increase buying power. The track record of this model in the telecoms industry has not been good, as partners find it difficult to come to terms with competitive differences or their own weaknesses. Alliances need to deliver more than simplified commercial agreements, and offer consistency of service levels across providers.

The alternative is for one supplier, ideally more, to build a global presence capable of solving the multi-national needs of international companies. It is difficult to see more than a couple of mobile operators at this level, and probably in the short term, only one. It would fix the multi-national issue, but without adequate competition will not deliver the keenest price.

In any event, even a global operator will not have a geographic footprint that precisely matches all customers, so inter-operator relationships will continue to play a key role.

5 From utility to solution provider

The challenge of combining IT data and applications with mobile access creates a service delivery opportunity; integrating the commercial considerations of customer service levels, multiple provider billing and international relationships, with the technology challenges of complex data over transient connections.

This moves the argument from one of the cost of supplying a commodity utility to one of value, service delivery and solution provision. This is well suited to the skills of a network operator, although could be provided by an aggregator of services from several operators.

However, cost is still a major consideration when negotiating for a primary mobile service provider (Figure 12). Overall, with roaming costs also being major concerns, this is an opportunity for operators to be more flexible on price, in order to achieve a deeper relationship.

Operators who demonstrate the ability to address additional issues of concern, including the understanding of remote application requirements, commitment to Wi-Fi and the use of international partnerships to deliver solutions move beyond the constraints of the bit pipe mentality towards value added service provision.

6 Raising the Game

This needs a change in the mindset of the mobile operator, to understand the broader connectivity needs of their customers, and to build relationships with third parties in a wider solution.

6.1 Core skills

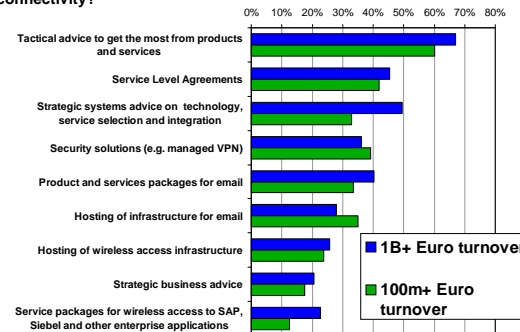
There are several areas of services that are of interest to businesses and are attractive over and above simple network connectivity, but one item that stands out is plain and simple advice (Figure 13). Businesses want to get the best out of their current mobile investments, and rightly believe the operators are the most appropriate ones to help.

There are a number of services that further extend the value of connectivity, and which most operators are already well placed to supply. These fall into the following categories:

- Packaged solutions, such as mobile email or mobile office applications, including the professional services support necessary to deploy a solution.
- Hosted services, such as mobile access management, device management or mobile email.
- Service level agreements which move beyond network performance issues into applications and towards business process monitoring.
- Direct account management tools for self provisioning, monitoring and managing service levels.
- Dedicated end user support for business customers, with a choice of channels through an integrated contact centre.
- Managed security services, providing virtual private network connection services.

Figure 13

As your use of wireless data connectivity evolves, which of the following services would you regard as attractive over and above simple network connectivity?



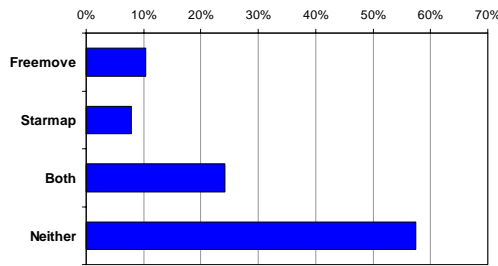
For larger enterprises, there is also a more strategic element to this interest in making future technology investments. Savings here drastically overshadow the concerns over operational costs, so knowledgeable advice on mobile technology selection and efficient utilisation moves the emphasis onto value.

Demonstrating understanding of customer issues, sharing lessons learned elsewhere, and offering services that are best suited to the business all have real value. Salespeople in any price sensitive marketplace know this is a great route to success in the short term, and when the advice is valuable and sound, generates a longer term and deeper relationship.

6.2 The importance of alliances

Two European alliances, between groups of operators, Freemove and Starmap were announced in the middle of 2003, and they are both actively trying to encourage membership from other parts of the world.

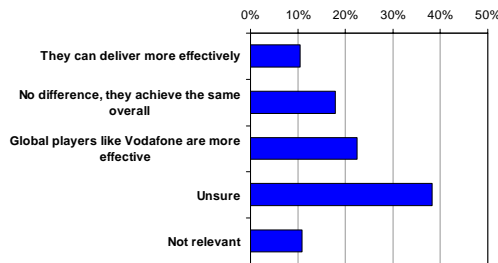
Figure 14
Picking up on the multi-national issue, are you aware of alliances such as Freemove and Starmap between mobile operators?



Eighteen months on, awareness of these alliances is still not great (Figure 14). Freemove, with the big European names of T-Mobile and Orange behind it has slightly better individual awareness than Starmap, which has O2 and a larger number of somewhat smaller Tier 2 operators from across Europe as members.

Although a larger number are aware of both, around 57% are unaware of either, which is not a good response from this key audience for the alliance message. Even where account managers are only responsible for local relationships, this is an opportunity to increase awareness of the alliance concept that is clearly being missed. These alliances will not be successful if they are unknown.

Figure 15
Can such alliances deliver as effectively as global players like Vodafone on the things that are important to you?



With respect to whether these alliances provide sufficient value, the indications are equally bad (Figure 15). Far more believe that a global player, such as Vodafone, is better placed than any alliance. This will be due in part to the positive effect of being a market leader, and in part to their perceived ability to deliver a consistent service across their networks, but given the high number of respondents who were unsure, this is not conclusive.

Part of the problem is the perceived requirement for a global relationship. It is a fine objective on a corporate strategy to standardise on a single worldwide supplier, but even large multi-nationals have regional issues and local powerbases that deliver policy on the ground. Deals struck locally, whilst losing some of the economies of scale, give businesses more flexibility to foster partners better suited to the local solution.

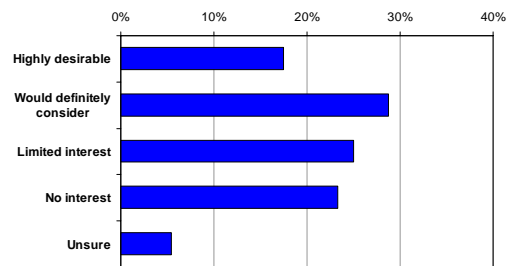
6.3 Simplifying network convergence

The disruptive influence of Wi-Fi affects many (Figures 9 and 10), so commercial connectivity requirements for public hotspot use will need to be addressed. This involves in-country roaming agreements between non-overlapping hotspot providers, roaming internationally and aligning with cellular contracts. It is a complex commercial challenge, but one with few technical issues, so businesses can realistically expect, and encourage operators to move in this direction.

The influence of Wi-Fi will be disheartening to mobile operators with large scale ongoing investments in 3G networks. However these results focus on laptop connectivity, and these users are most likely to be travelling to locations where hotspots are found. For all locations in between, cellular networks will be relied upon.

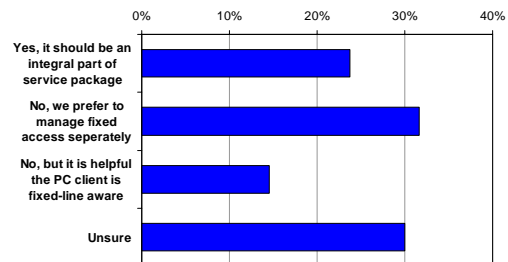
However, it will be necessary to incorporate both, and there is strong interest in solutions that take the pain away from the user and provide a combination of Wi-Fi and cellular (Figure 16).

Figure 16
How attractive do you regard offerings from service providers that encompass multiple wireless networks (WiFi, 3G and GPRS) in a coherent package?



Instead of having to find or use a preferred connection method, or subvert the system by claiming a non-preferred method on expenses, a user simply connects. It improves matters from the enterprise perspective too by packaging all costs, service levels and problems in one place, simplifying management and getting the most cost effective and suitable tariff.

Figure 17
Is it appropriate for fixed line connectivity to be included in such offerings?

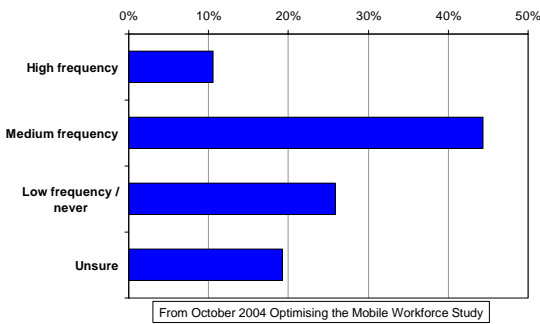


Taking this a stage further and adding fixed line connectivity into the same offer is less convincing (Figure 17). Mobile data is moving the mobile telephony relationship into an IT frame of mind, but fixed line telephony is still closely related to fixtures, fittings and facilities.

The level of unwillingness reflects a separation of responsibility or at least budgets. Not all organisations push fixed line call costs down to the user level, either because of limitations in their billing arrangements, or flexible use of office space, whereas mobile bills can be more readily identified with the user, their department and therefore a unique cost centre.

This is one area to closely monitor however, as over half of employees are thought to use their mobile in preference to a desk phone (Figure 18). If anything this is likely to be an under-estimate, as employees use the most convenient tool for the task in hand.

Figure 18
How often do employees use their mobile in preference to their land line, even when sitting at their desk?

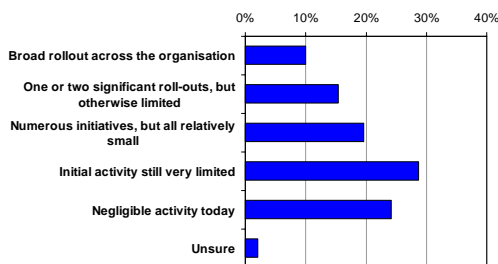


The effect of this on telecommunications costs is significant, and the converging of fixed and mobile telecommunications will undoubtedly impact all suppliers, as businesses aim to combine the cost advantages of fixed line with the flexibility of mobile.

6.4 IT supplier partnerships

When considering mobile applications for the business, the one that most immediately springs to mind is mobile email. Usage of the RIM BlackBerry device, particularly by senior executives has done much to raise awareness of mobile applications. So far however, awareness and use at senior levels has not yet propagated throughout the whole organisation (Figure 19). Cost of ownership and uncertainties surrounding standards are both factors in this.

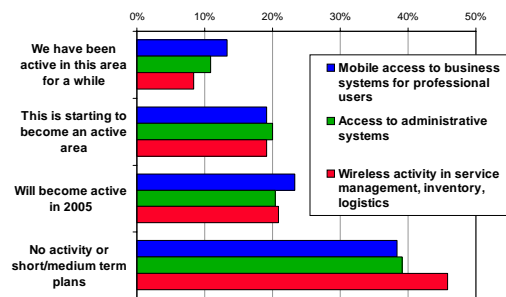
Figure 19
How would you describe the degree to which mobile email (on handhelds) has been rolled out across the organisation as a whole – as of today?



Email is already an extremely important tool, but within the IT infrastructure there are many other uses. Some are mission critical, and many have been developed with significant investment over many years. These applications are key to supporting the primary business processes – customer management, employee administration, product supply chain, order processing, sales and support, etc.

Extending these applications to reach the user when out of the office will have more direct impact on the business, both in terms of increased productivity, and unlocking the value held in the current IT investment. This has to be done in a way that makes existing processes more efficient, without radical changes just to fit the technology.

Figure 20
Beyond wireless email, how active are you with mobile access to other business systems? (We are thinking here about access from handheld devices rather than wirelessly connected laptops).

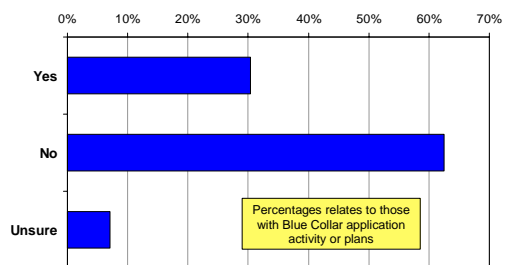


Whilst mobile email has the hype, the number of companies becoming active in this area, appears to be mirrored in those looking at other business applications to extend (Figure 20).

Many companies have no planned activities in the short term, which is understandable. There are many pressures on businesses, and unless benefits are clear and obvious there is little point embarking on complex or grand projects.

However, there are opportunities to make incremental improvements. Many blue collar roles – field service, logistics and inventory – involve collecting a set of tasks, processing them in order and returning with the results. The communication at either end of the day, and exception processing during the day, wastes time, causes frustration and has a knock on impact on customer service. This is one application area where there are some plans, a little experience, but greater scope for further deployment (Figure 21).

Figure 21
In the past, have you deployed specialised mobile devices for use by blue collar workers in the field? (not necessarily wireless)

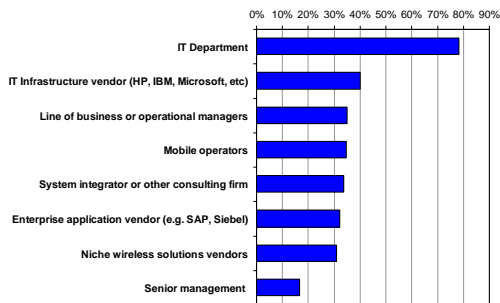


The options for such a process have increased significantly – choosing the devices, integration into existing IT systems and

training users all costs money. The benefits are strong, but are undermined if the wrong decisions are made.

Who should a company turn to for advice? Often the first port of call is the internal IT department (Figure 22). Understandable, but IT departments are notoriously over-stretched supporting existing systems. Technical knowledge beyond their day to day work will be limited to specific areas of interest, and this doesn't give the business the broader view necessary to make sound investments. There is also still a tendency for IT specialists to view apparently voice related technology projects as less valuable steps on their career path.

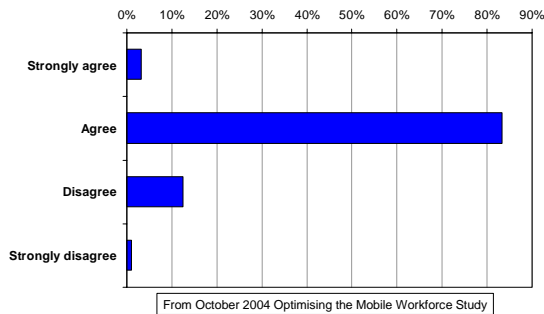
Figure 22
Who typically drives ideas and requirements for blue collar mobile solutions?



External sources have specialist knowledge, but are limited to their own products and services. For blue collar solutions, beyond the IT department, these sources of advice are equally important and should all be used together for a total solution.

Operators must work effectively with their customers' IT suppliers in order to play an effective role in the solution (Figure 23). This doesn't mean that they must become technology resellers, or full blown systems integrators, but they must be able to demonstrate professional services abilities to technically support IT supplier partnerships, and sales models in order to commercially support them.

Figure 23
Mobile operators have an important role to play in enabling remote access to business systems, but only if they can work effectively with our IT suppliers

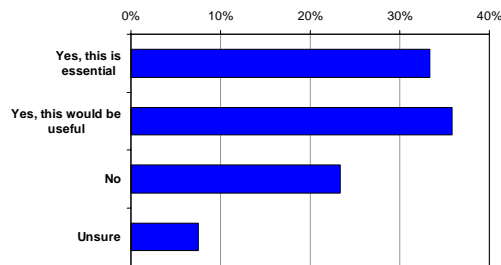


7 Discussion and Conclusions

Technology has a double-edged impact on most organisations. It promises to enhance and automate business processes, but along the way it often starts to drift, go over-budget and fail. No wonder so many are put off starting. This is a shame, as many ideas, with the right support, improve and add value to the business, putting it ahead of the competition.

To be successful and rise above the role of utility provider, mobile operators will need to be able to offer advice, guidance, support and other professional communications services. In short, they must become the overall communications specialists, or trusted advisors to the wider ecosystem.

Figure 24
Would you be interested in developing a more strategic relationship with your primary mobile operator?



Our research has shown consistently that this is what businesses are looking for, and there is a growing recognition that this would not only be useful, but essential (Figure 24).

Mobile data access services could become commoditised as the industry matures. Providing a utility service will only be a profitable business for a few, either as broad industry suppliers, or in one of several narrow niches.

As mobile communications becomes more complex, and more deeply entwined with many business processes, this is not surprising, and it mirrors the changes that took place in the business relationships between IT suppliers and their customers in the 1990s. The operators who step up to the challenge of becoming solution partners will prosper.

Working in partnership with business process specialists, applications specialists and infrastructure specialists, they will have to be able to provide the advice and solutions that businesses need, to get profit and not pain from investments in technology. Their customers would like to see it happen. Can they rise to the challenge?

7.1 Acknowledgements

This kind of research is crucial to all of us in the business and IT community - suppliers and customer organisations alike. We would therefore like to thank all of those participants who contributed so generously, with patience and good humour, towards a better understanding of issues in this important area.

Appendix A – Interview Sample Distribution

By country, by industry, by operator

Figure 25
Respondents by Country

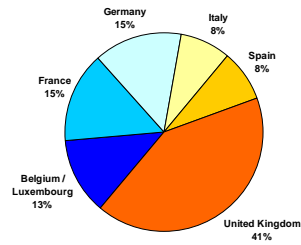


Figure 26
Respondents by Industry

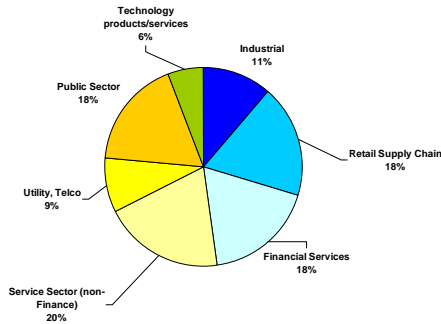
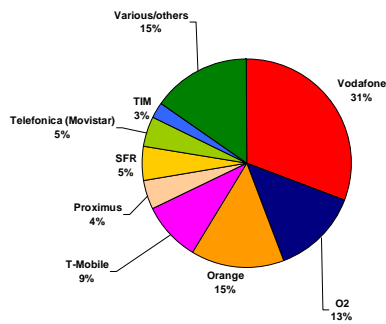


Figure 27
Respondents by Operator



References

<i>Reference</i>	<i>Title</i>	<i>Author</i>	<i>Published</i>
1	Being Digital	Nicholas Negroponte	1995
2	Optimising the Mobile Workforce	Quocirca Ltd	2004
3	Multi-Network Remote Access	Quocirca Ltd	2004

About O2

mmO2 plc has 100% ownership of mobile network operators in three countries - the UK, Germany and Ireland - as well as a leading mobile Internet portal business. All of these businesses are branded as 'O2'. The company is a founding member of Starmap Mobile Alliance, has operations on the Isle of Man (Manx Telecom) and owns mmO2 Airwave - an advanced, digital emergency communications service. In addition, mmO2 has established the Tesco Mobile and Tchibo Mobilfunk joint venture businesses in the UK and Germany respectively.

mmO2 was the first company in the world to launch and rollout a commercial GPRS (or 2.5G) network and has secured third generation mobile telephony ("3G") licences in the UK, Ireland and Germany.

mmO2 has more than 22 million customers and some 13,000 employees. It reported revenues for the year ended 31 March 2004 of £5.646 billion. Data represented nearly 22% of total service revenues in the quarter ending 30 September 2004.

Starmap pan-European mobile alliance

To strengthen its international orientation, O2 has joined the Starmap Mobile Alliance, a union of eleven leading mobile operators. The Starmap Mobile Alliance provides seamless, enhanced voice and data solutions for businesses and consumers when travelling across Europe. Reaching over 53 million users, the alliance allows O2 to collaborate in the fields of technology, purchasing and sales. The alliance includes only one representative per country, which eliminates the complexities that can arise with multiple in-country partners.

Starmap aims to drive revenue growth by being quick to market with new and innovative cross-border products and services. Starmap members' customers can already benefit from GPRS and MMS roaming, as well as access to familiar services such as voice-mail and short-code dialling whilst travelling in other alliance countries. Flat-rate roaming tariffs for corporate customers have been introduced in a number of territories. Starmap also aims to deliver operating efficiencies for members, who are currently collaborating on initiatives in the areas of sourcing, technology, and sales to large corporate customers.



About the EVUA

Formed in 1992, the EVUA, a non-profit user organisation for large multinational companies, has evolved into an effective organisation which promotes global networking solutions for multinational companies. Continually striving to make the communications market more competitively priced for the business world, the EVUA also gives its members a voice in legislation and the opportunity to gain inside knowledge on the latest developments in the telecoms world.

Our membership includes companies from Europe, USA and the Far East; The majority of them being Global 500 organisations. Our agenda has also evolved. The EVUA is now a global telecommunications focus group examining the network service requirements of multinationals and driving the marketplace to deliver these at competitive rates. To achieve this we address issues as diverse as enterprise network services, managed services, outsourcing, mobility, IP and conferencing.

Working for its Members

Businesses rely on their communications and networking facilities more than almost any other facet of their organisation. It is what enables them to talk to their clients, manage their employees and find and foster new business. It will inevitably, therefore, form a significant part of their organisational structure - spanning countries and continents, and many thousands of employees.

Choosing the right system, implementing it successfully and maintaining it effectively is therefore essential. To help them pick their way through the murky waters of communication management, the EVUA offers a wealth of knowledge and experience.

This includes:

- An opportunity for IT and communications managers to meet and network with their peers from similar companies and discuss issues of common interest in an informal and secure environment
- Expert advice on international services, including RFPs, SLAs and contracts
- Benchmarking and service management reports covering IP, mobile and voice
- Participation in Special Interest Groups (SIG), where members work together to develop common standards and approaches
- A lobby group to ensure that the voice of business is heard on all key issues
- A service development forum with suppliers, to build relationships and ensure that service provision is delivered according to corporate needs
- A user club which provides a forum to ensure members are kept abreast of developments in their field and can discuss and share ideas by email and teleconferences
- Long established relationships with INTUG, Yankee Group, Gartner, Ovum, PBI media and, of course, Quocirca.
- A recently established partnership with Watson, Farley and Williams, a leading corporate telecommunications legal adviser, who works with the EVUA in supplying expert legal advice on contracts

Whilst the EVUA has a close working relationship with vendors and service providers, it is an entirely independent organisation with no vested interests beyond those of its end user members.

EVUA Events

The EVUA holds three conferences each year and a number of one day workshops on subjects ranging from mobile working to IP, from conferencing to outsourcing and managed services. Attendance at these meetings is restricted to EVUA members and guests of the EVUA board. These meetings provide a unique opportunity for representatives from multinational companies to discuss developments relating to the key issues that face them every day. Special Interest Groups are open to all members and meet on a regular basis.

Membership

For more information on the EVUA or to enquire about becoming a member, please visit www.evua.org.uk or call the EVUA secretary on +44 1293 548 260



About Quocirca

Quocirca is a research and analysis company with a focus on the European market for information technology and communications (ITC). Its analyst team is made up of real-world practitioners with first hand experience of ITC delivery who continuously research and track the industry in the following key areas:

- Business Process Evolution and Enablement
- Enterprise Applications and Integration
- Communications, Collaboration and Mobility
- Infrastructure and IT Systems Management
- Utility Computing and Delivery of IT as a Service
- IT Delivery Channels and Practices
- IT Investment Activity, Behaviour and Planning

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 its customers improve their success rate.

Quocirca has a pro-active primary research programme, regularly polling users, purchasers and resellers of ITC products and services on the issues of the day. 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 Morgan Stanley, Oracle, Microsoft, IBM, CA and Cisco. Sponsorship of specific studies by such organisations allows much of Quocirca's research to be placed into the public domain. Quocirca's independent culture and the real-world experience of Quocirca's analysts, however, ensures that our research and analysis is always objective, accurate, actionable and challenging.

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