

Sales Director, UK, 2002

A World Without Wires

International wireless telecommunications company

The long predicted “anywhere-everywhere” wireless world is taking form. Wireless communications that extend beyond simple voice connectivity are becoming practical, affordable and real. Wireless applications are appearing in areas as diverse as motor vehicles, vending machines and agriculture. The year 2002 could see key developments in the emergence of this era.

Globalisation, interdependence and furious innovation may make this new wireless world technologically possible. But whether it will be a commercially fruitful world is a separate question. The fate of unloved, unwanted WAP stands as testimony to those who proclaim, “build it and they will come”. They did, and the customers didn’t.

The key to the new world of wireless is therefore not technology. It is what makes commercial sense. And no one approach suits all. There are discernible and quite distinct forces at work in different market segments. Mobile telephony, the continuing mainstay of wireless communications, is being profoundly transformed as players search for sustained profitability. Automotive wireless applications are about to go mainstream, but large commercial questions remain unanswered. In a third area, telemetry or machine-to-machine wireless communications, businesses in a dozen industries are searching out commercially viable approaches.

The biggest change is in mobile phones where, over the past year, handset equipment makers have been squeezed. Sales have slowed. In wealthier markets, such as Hong Kong, Singapore, Japan, and Western and Northern Europe, most people who want mobile phones have them. Intense competition demands ever-shorter product cycles to serve the fragmented market segments, each wanting different combinations of features. All the while, there is the drumbeat pressure on when and how to move to new technological standards. Taking nine to 12 months to develop new models that might miss their market therefore represents too great a commercial risk for even the largest and most established players.

Handset makers are already starting to respond by outsourcing their manufacturing and using finished components. This results in new products coming to market more quickly and cost effectively. The next step will be to outsource design for the man-machine interface and other software. Handsets will increasingly use open platforms. Ericsson and Motorola have begun outsourcing and, at the end of 2001, announced plans to follow the open platform route. Nokia is the only major producer to buck the trend and retain control of the entire design and manufacturing process.

The concept of outsourcing the design of the core wireless function will not be far behind. Handset makers are set to follow the PC market and become a combination of marketers and integrators. Their core functions will be the design branding and user interfaces of a product, with hardware and software outsourced.

In contrast to the slowing handset market, 2002 could be the year when automotive wireless breaks out. At present there are an estimated 2.8 million private vehicles equipped for wireless. But this year, Fiat of Europe will become the first major manufacturer to fit a complete range of new cars with wireless capability. In three years’ time, industry analysts are talking about sales of wireless-equipped cars topping nearly 16 million, with two-thirds as many again – 11 million -- being fitted in commercial and public service vehicles.

For drivers, wireless offers the promise of satellite navigation, emergency and breakdown communications, security, as well as built-in voice and data telephony. For transportation companies, wireless opens the way to better route planning. For example, drivers can be sent revised schedules through short messaging services. That translates into improved vehicle utilisation and reduced costs.

Unlike handset makers, vehicle manufacturers take years to develop a new model. Installing wireless equipment in vehicle dashboards represents a chance to provide features that competitors don’t. However, automakers are agnostic as to whether their vehicles are configured for GSM/GPRS, CDMA or any other standard. The key, for them, is that any wireless equipment is easy-to-fit, robust and economic – not really affecting the final sticker price -- and actually works in whichever geographic market the vehicles are intended for.

Writing & Editing [Trade Magazine Opinion-Editorial]

One commercial issue needs to be resolved quickly: who is responsible for providing and maintaining services to drivers. Is it the automaker, or a telco operator or some other third party? The lack of clarity as to who will make money -- and how -- stands as a barrier to automotive wireless actually being used. Watch for someone seeking to take on the opportunity.

The third area likely to see significant developments this year is wireless telemetry. This is primarily a business-to-business market, unlike mobile telephony and automotive wireless that are strongly consumer oriented. Wireless telemetry is less about generating revenues streams. It is more about allowing organizations and businesses to improve internal work practices and efficiencies, and optimising costs. Users that see the value are already gaining a competitive edge. In Scandinavia, for example, deregulated power utilities are installing electricity meters with wireless links. Their end-users' electricity usage can be tracked in real time. (This particular example does have revenue implications: accurate measuring opens the way to market-sensitive, differentiated billing for electricity consumption.)

Demand for wireless telemetry will be increasingly driven by what makes commercial, competitive sense, irrespective of the industry. A device that automatically waters a field of crops, or activates security scanners in a warehouse or switches on or off a machine allows organizations and companies to operate over greater geographic areas with fewer people. Devices that measure, record and report on how equipment miles away is performing deliver valuable market data as well as data on the workings of remote machines. In a parallel development to what is happening in automotive wireless, freight and transportation businesses are exploring monitoring cargo movements and vehicle usage through remote interrogation of fitted wireless equipment on containers and trucks.

One set of expected beneficiaries of telemetry have been surprisingly slow adopters to date. Fitting a remote, standalone vending machine with a wireless module or modem seems a natural combination. A machine-to-machine wireless link allows a food company or a drinks distributor to know automatically, when a particular machine needs restocking, and with which products. The machine can even let it be known when it has been vandalised or needs routine maintenance. Yet to date, barely two per cent of the estimated

28 million vending machines around the world are fitted with wireless devices. Conservative managements seem slow to change, even though a wireless link can pay for itself with its first year and then generate net savings of hundreds of US dollars a year per machine. This will no doubt change when someone creates a thriving vending business using wireless links.

Companies developing and supplying wireless solutions for this new wireless world need to offer easy-to-use, cost-efficient options. As with PCs and game consoles, encouraging third-party applications will open up new, undreamt avenues. The move to open platforms in the wireless world is a sign that things are starting to move. By the end of 2002, the landscape of this new world will be discernible to all.