

US SUPPLEMENT
IoT Evolution
event preview

Marc Jones of Aeris:
Orchestrating the next
wave of IoT innovation

Numerex on new
product strategies for
a changing market

KORE: LTE brings a
new spectrum of
opportunities for
M2M and IoT



**LATEST NEWS
& VIDEOS AT**
www.m2mnow.biz

Reproduced from M2M Now Magazine

PLUS: CTIA Super Mobility week preview • East and West Coast News Roundups and Contract Wins



Orchestrating the next wave of IoT innovation

The IoT sector is reaching an important second stage in its evolution. Pilot projects might be running within individual companies or in vertical markets but, in many cases, the supporting IoT ecosystem – which now also extends into the critical area of analytics – is still too fragmented and diffuse for benefits to be realised quickly and cost-effectively. The current challenge for our industry is to help smooth out a path for users, turning their first faltering steps into a smoothly coordinated dance, joining together different devices, connectivity options, business processes and partners and customers in hopefully elegant and intelligent ways.

One company that's been doing this for nearly twenty years is US-based Aeris which includes such names as **Hyundai, Acura, Rand McNally, Leica** and **Sprint** amongst its customers. Building on its years of investment in its own core network, application platforms, billing and management systems and cloud infrastructure, the company is now exploring new ways of bringing its solutions to market, making access to the IoT world faster, cheaper and more directly relevant to individual companies.

M2M Now's Alun Lewis recently caught up with the CEO of Aeris, Marc Jones, to discuss his insights into the future of the IoT space, where the likely stumbling blocks on the road ahead might lie, and how the industry can adapt itself to add greater value to its customers.

M2M Now: Marc, you've had a fairly diverse industry background before joining Aeris. Can you talk us through your journey and lessons on the way?

MJ: From the perspective of today, it all makes sense – as these things sometimes do. While I've also been a securities lawyer and investment banker, I've been intimately involved in some of the key building blocks that now make up the IoT universe. Fairly early on in the high-tech part of my career, I was VP in charge of making the first chip sets for IBM PCs. That gave me an invaluable insight into manufacturing issues from the ground up and how components and devices had to fit into longer value chains – all in an intensely competitive, cost versus performance environment.

From there I moved to become president at **Madge Networks** just as network technologies were undergoing a revolution and great effort had to be put into aligning with rapid changes in standards – not dissimilar in some ways with where this aspect of the IoT is now.

The next piece of the jigsaw saw me at chairman and CEO of **Visionael**, an OSS vendor. That again was relevant to the IoT, given the need to provision, control and manage ever larger numbers of remote devices in smoothly seamless ways with minimal human intervention. Finally, I was invited onto the board of **Aeris**, becoming its CEO in 2009.

Complementing that commercial journey, I've also served as chair of the **National Cyber Security Partnership's** Enterprise Task Force and testified before the US Congress on both cyber security and on Sarbanes-Oxley corporate governance issues.

M2M Now: Chatting earlier, you mentioned two recent Aeris initiatives that you felt would address some of the more problematic areas in growing the IoT that are fast becoming apparent. Could you talk us through those?

MJ: Firstly, what's clear is that – for once – industry hype is finally backed up by hard evidence of major IoT deployments across an ever-widening range of industry and business ►

Reproduced from M2M Now Magazine

IN ASSOCIATION WITH AERIS



Marc Jones, chairman
and CEO of Aeris

sectors, reaching into our homes, cars, offices, factories – and even into our clothing and healthcare. Even the smallest, most arcane and niche business could almost certainly find some benefit from IoT – especially in terms of the tactical and strategic insights that the data gathered can provide if used appropriately. I'd doubt that you'd find a major industrial or business concern on the planet now that doesn't have some IoT project underway, or isn't actively evaluating it in terms of both threat and opportunity.

That said – and speaking generally – it still takes far too long and is far too difficult for many businesses to get to grips with the complexity of all the options open to them in what we might call first generation IoT. Right across the value chain – from device enablement and integration issues through connectivity to the management and business process integration areas – these factors have, so far at least, stifled the truly widespread application of IoT innovation. Compounding this are very necessary concerns about ▶

Reproduced from M2M Now Magazine



“Neo has been specifically designed to eliminate many of the factors previously facing companies of all shapes and sizes who were looking to engage with the IoT”

security, especially as we move into a world where devices talk to other devices with potentially unanticipated results, such as car-to-car signalling, or where critical systems such as the utilities and smart power are involved.

Increasingly important too is the global nature of today's business world. Having the ability to reach out and interact with devices and, by implication, with their users and customers - wherever on the planet they are - is another obviously key building block.

What's needed is a way for a company's engineering teams to make a start exploring the possibilities now open to them. The ability to start with an economically justifiable pilot project and see how different options best align with a business strategy and product or service line makes pragmatic sense. Fortunately, technologies like the cloud and Platform-as-a-Service options are as applicable here as they are for companies that already use **Google** or **Amazon** - but only if they're backed up with deep IoT-specific knowledge that also includes insights into specific mechanical, manufacturing and market issues and the all-important and often vulnerable connectivity segment.

M2M Now: So what's Aeris doing to address these problems?

MJ: Awareness of these stumbling blocks led us to launch our Neo affiliate program last year which essentially provides self-service connectivity for companies, provisioned through just a few simple clicks. Neo has been specifically designed to eliminate many of the factors previously facing companies of all shapes and sizes who were looking to engage with the IoT. You can simply go to neo.aeris.com, create your free Aeris account and order your SIMs online in under five minutes. There's no volume commitment and we don't lock you in a minimum term contract. You can terminate your service at any time. On top of that, extensive documentation takes users through all the stages involved, a forum helps leverage diverse expertise from other members of the community, and a

number of service packages can provide the right levels of support at the right price.

M2M Now: If the choices confronting individual companies are complex enough, how do you see the state of play with different sectors - each of which usually has its own way of doing things and its associated cultural and technological baggage?

MJ: It's a bit too early to really talk about successful sectors as such and it's probably more useful to look at individual companies that have taken the lead. There are, however, a number of common factors that apply across almost all sectors and that have to be taken into serious account.

For a start, there are the regulatory frameworks involved that have usually built up in each sector over many years - often to protect the public, but also sometimes to protect powerful players from disruptive competition. If you look at the healthcare market for example - and the complementary 'wellness' device and service sector, deliberately renamed to avoid falling under medical regulations - there are a host of different national and international standards that must be met and strictly adhered to for obvious reasons. The IoT has enormous potential to improve the health of both individuals and entire societies across developed and developing countries.

Similar issues arise in the automotive sector, the utilities and with the fast growing interest in smart city solutions. A smartphone or tablet app used by an engineer to interact with a generator, for example, has to incorporate mission-critical engineering principles in ways that a fitness bracelet obviously doesn't.

Tied closely in with regulations are standards - and there's no shortage of involved standards bodies here, both in the IT and communications worlds and each vertical market. The success of particular standards - and the bodies that control them - is going to be predicated on how well aligned they are with the real world business needs of the actual users of standards. Just as with governmental regulations, the standards ▶

Reproduced from M2M Now Magazine



Marc Jones is chairman and CEO of Aeris and has over 25 years of experience in the technology industry as a securities lawyer, investment banker, and senior business executive. Prior to Aeris, Marc was the chairman and CEO of Visionael, raising over \$40m in capital to fund their rapid growth. Prior to Visionael, Marc was the president of Madge Networks, a company that grew during his tenure from \$40m to \$500m in revenue with a successful IPO. He was selected by Goldman Sachs as one of the top 100 entrepreneurs in 2012 and 2013.

world can often suffer from the influence of oligopolies who are happy to play realpolitik games that often impact on business efficiency out in the real world.

Another more commercially-focused problem comes from funding cycles and project timescales – especially where an IoT strategy has to be incorporated into wider manufacturing and business planning timeframes. Different parts of the IoT value chain – embedded devices, sensors, finished products, service support, retail models – are all evolving at different rates and synchronising these together is a non-trivial issue. In many ways this echoes the problems that the mobile sector has faced in the last decade or so where handsets move at the speed of fashion, while the supporting networks must earn their keep over a number of years.

Our part of the industry – the platform and connectivity providers and enablers – have a vitally important role to play here in trying to keep some kind of consistency and trust while the wider landscape continues to change. On one hand this involves dealing with the obvious basics like over-the-air provisioning and upgrades; on the other it involves committing to understanding our customers' businesses well enough to anticipate the changes underway to their business processes and relationships. Ultimately, for example, they don't care whether connectivity is done by 2G, 3G, 4G, 5G, WiFi or the newer Long Range, Low Power options that are now emerging – it could be carrier pigeon as long as they get the actionable information that they need for their business ends.

M2M Now: Your announcement earlier this year of a cooperation with Tech Mahindra seemed to position Aeris as much keener to grow your focus on specific markets. What was the thinking behind this?

MJ: Returning to my earlier theme of speeding and simplifying IoT adoption and exploiting our existing strengths in connectivity, device management and platforms – we looked for – and found with Tech Mahindra – a complementary

expertise in analytics-led, cloud-enabled systems that could give telecom service providers a fast, affordable and infinitely scalable access to true business transformation solutions for their own customers.

We've branded this as 'Jumpstart IoT' and it includes a number of powerful elements such as a device and connectivity management platform, specialised system operations and support services, a device data and analytics services infrastructure and, perhaps most significantly in terms of our own growth and ambitions – a wide range of field-tested vertical applications that can be optimised to meet the demands of each service providers markets.

Complementing this, we're also actively focusing on extending both our reach and that of our customers – and, by implication, their own customers and clients through two initiatives. One of these involves growing our footprint globally. The rise of a truly global marketplace in recent years means that companies of all shapes and sizes want their products and services supported wherever they are being used. The implications of this reach far beyond just adding appropriate connectivity solutions. There are inevitably wider local regulatory or legal issues to take into account for our customers in some countries and regions, such as cross-border data transfer and storage, or data privacy.

The other initiative parallels this blurring of boundaries – only this time it's focused on our customers' value chains themselves. Applications don't exist in isolation any longer and real value will increasingly be added by aggregating data from all the different parties now involved as the demarcation lines between products and services continue to erode. It's no longer simply a B2C model, but instead potentially a B2C2M2M2B etc. chain that is effectively recursive to infinity. In that context, we have to adapt our own systems to support these new ways of doing business. Getting all these players, their devices and their data dancing together in commercial, technological and even legal harmony is the key challenge facing both Aeris and the wider IoT community. ■

Reproduced from M2M Now Magazine