By: Jim Dunlap

Telecom people have a habit of sticking to certain industry words long after the meaning behind those words has dramatically changed. Take “billing,” for example. Back in the 1970s, telecom billing was considered strictly an accounting function. But today, billing has evolved to encompass a broad spectrum of telco-to-customer interactions, from pre-paid charging and real-time marketing offers, to usage analytics and e-billing. Though, by the way, billing still does actually include batch processing of monthly invoices.

“Convergence” is another one of those catch-all terms with remarkable staying power. Carriers have been talking about “convergence” for at least a decade—maybe longer. Convergence has always been about joining things—fitting one system or component with another. Today, we also use the term to describe several industry marriages, such as the convergence of telecom services into quad-play suites, the merger of pre-paid and post-paid billing databases; and the consolidation of B/OSS systems. There are probably a dozen more telecom “convergences” you can think of that I haven’t listed here.

So when telecom people start using the “convergence” word in a new way, it’s worth paying attention. They may well be pointing to a trend of great industry significance—an opportunity that is understandably hazy right now because the infrastructure and technology for it are new and still evolving. Machine to Machine (M2M) is one of those emerging, tough-to-pin-down, but highly significant trends that will affect telecoms immensely. Making the most of the incredibly promising M2M market requires a whole new way of looking at convergence, which we’ll revisit in a moment. But first: a little background.

What is M2M and Why Get Excited About It?

At the recent TMForum Management World event in Orlando a few weeks ago, the keynote address was given by AT&T’s business development VP of emerging devices and M2M programs, David Haight.

M2M is the non-human interaction of computers, sensors, and devices across network pipes. M2M not only monitors the status of people, animals, and things, it can also retrieve information, or remotely control things at the other end such as closing the garage door you left open when you drove to work.

M2M has actually been around a long time. Swiping a credit card at the grocery store for credit approval is an everyday example of M2M. GPS navigation in your car is another. You bought a GPS receiver at a store, but it’s delivered as a continuous M2M service via satellite.

So if M2M is already with us today, why is AT&T so excited about M2M’s future? Because it sees the M2M market exploding—thanks to low-cost sensors, cloud computing and the networks, smartphones, and mobile tablets that AT&T sells and integrates.

A recent market study from ABI Research backs up AT&T’s optimism. ABI predicts that 50 billion new M2M devices will appear in the next 10 years—and that contrasts to only 2 billion mobile phones deployed around the world today. ABI also forecasts that connectivity revenue alone for M2M will reach $12 billion in 2020.

In truth, M2M isn’t a market itself—it’s an enabler for dozens of markets and hundreds of unique business models in industries as diverse as health care, transportation, banking, energy, and digital signage.
What are some of these nascent M2M opportunities? Here’s a brief look at three categories:

- **e-Health Care** - The most common theme for medical M2M is to have wearable medical devices that collect a person’s vital stats, then push the data into the cloud where doctors and nurses can examine it. Here’s another powerful app: If your 84 year old grandmother falls in her home, a device she wears signals an emergency response team to react. e-Healthcare will probably be slow to develop because of public safety issues. But once the lab tests and regulatory hurdles are cleared, you can bet that it will be a huge market.

- **Automotive M2M** - Every major auto manufacturer in the world is getting involved here. They know they need to have an embedded module in the vehicle to handle diagnostics, security and safety. M2M will double up by delivering both front-seat dashboard data plus backseat entertainment and comms. What’s more, insurance companies will use GPS-equipped sensors to track driving habits and charge lower premiums to good drivers.

- **M2M in the Home** - In addition to automatically adjusting heating and air conditioning by sensing what rooms are in use, M2M will put your home’s electronics and major appliances on a central monitoring and control system. One of the biggest hits is likely to be systems that track children for parents. One device manufacturer has built a GPS sensor module the size of an Oreo cookie that parents of schoolchildren can tuck inside their backpacks for emergency location or simply monitoring their activity.

**Why Partner Convergence is the Key to M2M Success**

All of the device/service innovations on the drawing boards are tantalizing, but succeeding in M2M won’t be easy. Above all, it requires telcos to warm up to new business models.

Telecoms have always made money by leveraging huge capital investments in networks and enhanced services that they had full control over. That strategy is still key, but with M2M, you will not have full control of the infrastructure.

Making the most of M2M requires a new kind of convergence—partner or ecosystem convergence. The telcos that survive and thrive ten years from now will be those who ditch their old operating model and adopt a new one that involves much more partnerships and collaboration. And that includes conversations with competitors in ways not seen before.

And if you think back, you’ll understand why partnering is so important today. In fact, the key problem the telecom industry faces today—the commoditization and revenue squeeze by over-the-top (OTT) players—might have been avoided if telcos had properly leveraged their leadership position in wireless. Telecoms could have created their own partner ecosystem in mobile, but they didn’t. Instead, Apple, a telecom industry outsider, came along and secured the necessary partnerships with mobile device experts (iPhone), the record labels (iTunes) and apps developers. The rest is history.

So the question of the day is: will this same “not-invented-here” reluctance to partner with third parties play out in M2M, too? Or will telecoms insert themselves into the M2M value stream and get in on the front end of something that could really take off?

In fact, the M2M style of partnering is not completely foreign. Twenty years ago, Southwestern Bell partnered with physical security firms to sell security alarm systems. This wasn’t a technically sophisticated play at all, but that simple service uniquely connected the dots between a security firm monitoring homes and a telco’s trusted relationship with customers.

That service was never a huge moneymaker, but in terms of customer “stickiness,” it was a big winner. Customers were reluctant to churn to a competitor, realizing their home would lose its alarm protection.

In the future, a similar scenario will unfold. If your aging grandparents move to a new home or apartment, which telecom provider will they choose? If one service provider offers an affordable M2M-delivered medical alert service that monitors vital signs, you can bet it’s got a big advantage over a competitor that does not.

**Gaining a Foothold in the M2M Ecosystem**

It’s early enough in the game for small to mid-sized carriers to effectively compete for the M2M business with the big Tier 1s and
win. But there’s no time to lose because in 12 to 24 months, many of the key partners in the M2M ecosystem could be tied up working with other players.

Even still, the M2M industry is evolving as a many-to-many model where devices serve many masters. Let’s say you’re wearing a medical device that’s monitoring your blood pressure. Well, that same device may also be monitoring your heart rate and sending information to an entirely different service provider in the cloud than the one collecting blood pressure data.

So a successful M2M program begins by putting your selling shoes on and developing relationships with the device manufacturers and distributors. From there, you need to work your way back to the network where other carriers will also be components of that larger ecosystem.

The relationships are similar to those who work with handset manufacturers. It’s about understanding where you connect to the network, what all the data sources are, and the kind of data volumes coming off the devices. This is the first step in meaningful partner convergence.

The second half is figuring out how you—as a carrier—add value. And the obvious value-add points are in aggregating data from multiple devices—from not just your own network, but other’s networks as well. Still another valuable service is building portals to show information coming from the various devices. Last, but not least, you need to figure out how to bill for these M2M services.

Cycle30 itself has gone down the M2M partnering path and we’re pleased to say we now have an exclusive contract with a large electronics distributor of M2M devices. So we’re familiar with how these M2M relationships are developed. If we can help you move further down the M2M path, we’d be glad to help.

Bottom line: M2M is a marvelous business opportunity and represents a new style of convergence. But it takes a village. To succeed, you need to partner. Carriers won’t be able to approach the ecosystem and assume that their networks will rule the game. Everyone needs to be accommodating and understand how to contribute and add value to the collaboration.

About Cycle30:

Cycle30 provides a hosted order-to-cash billing platform for cable, wireless, telecommunications, utilities and machine-to-machine services. We empower service providers to focus on their customers, while Cycle30 handles the billing operation.