



**News Flash**  
pg. 2



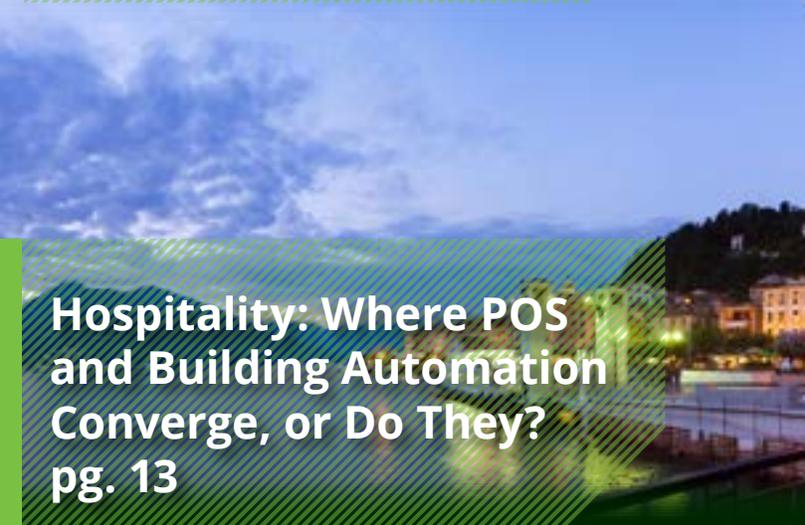
**The Future of Vending**  
pg. 5



**Fun Facts**  
pg. 8



**Mobilizing the POS/Retail Industry**  
pg. 9



**Hospitality: Where POS and Building Automation Converge, or Do They?**  
pg. 13



**Up Coming IoT Events**  
pg. 16

# News Flash: Digicel, Stream Technologies, and Sprint



## Digicel, Stream Technologies, and Sprint

Our research shows, some of the most important things for enterprises are to be able to quickly easily activate, suspend provision, update and manage remote devices and assets. Visibility and control are keys for carriers to provide a sticky M2M service.

With that in mind, earlier this month, international tier-1 carrier Digicel, covering 33 markets in the Caribbean, Central America, and Asia Pacific, announced partnership with Stream Technologies to provide platform services.

Digicel will leverage the award-winning Stream IoT-XTM unified access connectivity environment to enable comprehensive and secure management of connected devices regardless of connection type—allowing its customers to reach beyond the gateway all the way to the sensor level and providing a single, unified view of every relevant connection, whether it be satellite, cellular, Wi-Fi, short-range or low-power WAN.

And hot on the heels of the Digicel/Stream announcement, Sprint announced the launch of Command Center 2.0.

The old saying goes, ‘If you can’t bill for it, it doesn’t matter, if you can’t manage it, it doesn’t exist.’ With Command Center 2.0 Sprint customers now have full visibility and control of their remote devices. This puts Sprint at parity with best in breed competitors. Command Center 2.0 will be one of the keys to propel Sprint’s growth in a hyper connected world.

# News Flash Cont'd: Intel and Ingenico & CalAmp Acquires Crashboxx



## Intel and Ingenico

Earlier this month, chip behemoth Intel Corporation and Ingenico Group announced a partnership combining Intel's Data Protection Technology for Transactions and Ingenico Group's secure payment acceptance for the Internet of Things for IoT service offerings. The initial collaboration will result in a mobile tablet that supports EMV1 and NFC payment functionalities, a standard required by banks to help prevent credit card fraud, and will pave the way to a broader set of initiatives and value-added services to address other IoT devices, including intelligent vending machines, kiosks and digital signage.

Today, banks are responsible for fraudulent activity on credit cards. Our research shows fraud costs banks more than \$14 billion USD annually.

By October 2015, banks will require retail merchants to upgrade their POS equipment to support EMV chip cards, however if they don't make the transfer, retailers will be responsible for recovering the funds if fraud should occur. The shift in liability could cause an untenable burden for retailers. This collaboration should result in secure solutions which are easy to deploy and manage for merchants.

## CalAmp Crashes the Party with Crashboxx

CalAmp announced acquisition of software company Crashboxx for \$1.5M plus incentives through an earn-out. Through this acquisition, CalAmp, already one of the leading hardware providers in the automotive and transportation market, moves up the stack from simple hardware to margin-rich value added services. CalAmp seeks to commercialize the CrashBoxx offering by 2017 and offer high value services to countless other application types from fleet management to transport asset insurance.

Learn more about what CrashBoxx brings to the table. Read our blog [here](#).

# News Flash Cont'd: Orange Buys into Fleet Management & NIST: IoT Indefensible



## Orange Buys into Fleet Management

In keeping with the growing industry trend of expanding footprints across the value chain, global network services provider Orange recently announced its purchase of the French fleet management company, Ocean. Together, the company says, they intend to become the European leader in fleet management, servicing more than 100,000 vehicles. We expect to see Orange not only drive geographic expansion for the Ocean offering, but to leverage its platform for other industries as well. Stay tuned.

## NIST: IoT Indefensible

Talk about incendiary: the National Institute for Standards and Technology stated this month in a draft publication that the complexity behind Internet of Things solutions gives malicious hackers the edge over the IoT, and that national security requires a cautious approach when it comes to critical infrastructure -- which the document basically defines as everything. Moreover, the draft stipulates that, although standards organizations around the world are working on developing standards for IoT, few address security concerns adequately, if at all. We suppose it is not the job of the team working on this at NIST to weigh the potential benefits of IoT versus the potential threat, but we sure hope somebody does. We'd hate to give up the future promise of IoT across so many parts of our lives as a result of fear.

# The Future of Vending: Parlevel Systems has the Right Stuff



For many operators, Vending Management Software (VMS) is not an unknown tool. It has been around for several years, often being bundled with telemetry hardware as a means to help owners and managers obtain visibility into the performance of machines, drivers, office staff, and the business as a whole.

By James Brehm

When working as designed, VMS has proven itself to be an invaluable resource. This technology retrieves data from vending machines that can be used to trigger alarms that notify operators when a machine malfunctions, a coin jam occurs, or other hardware issues are present. Some VMS offerings can also deliver information on inventory and cash receipts on site, which is certainly helpful in giving the operator a better picture into the performance of each machine and each location. Using the information garnered from the VMS, operators can dispatch service personnel if a machine is down, plan routes more efficiently, and improve profitability.

If all these benefits are commonly understood in the vending industry, then why has VMS adoption remained

relatively low? According to some industry estimates, the number of vending operators using VMS technology hovers around 33 percent. And the actual quantity of machines connected to a VMS platform is far lower than that—somewhere in the vicinity of four percent.

There are many reasons why VMS has failed to get off the ground. While the benefits are for the most part are universally understood, the pain and expense associated with implementing traditional VMS solutions has been a huge barrier for most operators. And therein lies the problem.

## *The Technology Barrier*

Most vending operators would admit that they are not technology experts. Many are unfamiliar with the highly technical requirements to integrate complex VMS and telemetry technology into their businesses, and most do not have experienced staff to deploy these solutions. In those situations, it means going outside to hire a consultant or technician to implement the VMS solution. Not only is this a significant financial burden for many operators, it has also proven to be disruptive to the business. Software needs to be downloaded and configured, back end systems need to be integrated into the VMS solution, which in turn, means that expensive middleware must be licensed in order to get typically



incompatible systems to work together. It's expensive, cumbersome, and problematic for the business. And for most operators, it is as good a reason as any to push back against VMS.

### *A Different Idea*

A company based out of San Antonio Texas is working to change the VMS experience. Parlevel Systems offers an innovative approach for delivering VMS capabilities to operators. By focusing on a simple and easy-to-use solution that is designed with the operator in mind, they are seeing VMS adoption rapidly escalate across the country—which is a welcome departure from the norm.

Unlike most other VMS providers, Parlevel's origins are steeped in the vending industry, and not solely on software development. The company's founders have a long history working within the sector, with several having owned and managed their own vending companies. Combine this in-depth industry experience with in-house technical expertise, and Parlevel can package a VMS solution that is substantially different from competing offerings.

One of the more visible differences is in the way that Parlevel architects its VMS technology. While most other solutions are delivered as software, Parlevel instead provides its VMS solution as a web-based service. This means that there is no software to be downloaded, no

expensive servers or computer hardware to purchase, and, above all no disruption to the business. Information is presented to the operator graphically in a web browser on any mobile device or Internet-connected computer, anywhere at anytime.

Owners and managers can instantly see route status and machine alerts, and can access inventory reports, payment statuses, and sales information by machine, route, or customer with a few clicks of a mouse. All of these functions can be securely accessed by authorized individuals from any location—greatly improving productivity and efficiency.

In addition, by using a web interface, the data that Parlevel delivers to operators is all in real time, giving businesses an accurate view into the performance of the business. The real time access, when combined with simple but robust inventory and merchandising tools, radically changes tasks like pre-kitting. Many operators rely on educated guesswork and experience based on the information provided from drivers in the field or the DEX information received from individual machines to forecast product quantities and mix for each machine and route. Operators would estimate which products sold—when and at what time—and then hope for the best when they send their drivers out on a subsequent truck roll, armed with the products and quantities they think will sell.

As inexact as this method is, it remains the norm with most operators. Parlevel's real-time solution takes a different tack. It enables operators to gain real-time insight into the performance of the business, taking the guesswork out of activities like pre-kitting. Pre-kit orders based on actual sales performance data are recommended by the Parlevel platform, and operators can follow the plan or make changes based on their own experience. With this method, trucks are loaded with the exact product that is required. In addition, the web-based Parlevel VMS offering provides other critical

information in real-time, like exactly how much cash is in each machine, and where drivers are at any particular time. Data like this has an enormous impact in terms of improving efficiency, preventing shrinkage, and reducing truck rolls and other costs.

*Support That Matters*

To emphasize its commitment to make VMS not only digestible, but also compelling for the operator, Parlevel has taken a different tack when providing technical support. While its competitors can certainly assist in helping a customer set up their software, *t h e i r* expertise is usually lacking when it comes to explaining how features can benefit a vending business. Their skill set revolves around software development, so this is understandable. On the other hand, Parlevel’s industry DNA helps operators understand how they can use VMS technology to improve specific aspects of their own business, in language that they understand. With every deployment, Parlevel sends a team of technicians to each operator, to help them learn the system, understand the nuances of its VMS technology, and gain the confidence to manage the solution on their own. Parlevel also maintains in-house support agents that constantly monitor the performance of each customer’s VMS. No other VMS provider goes to these lengths to assist its customers.

*Innovative, Financially Strong*

Some VMS providers have served the market for years, and in comparison, it may seem that Parlevel is an upstart in this space. But in fact, the company has strong financial backing and has a technology heritage that surpasses many providers in the business, giving Parlevel the resources to satisfy customer needs for many years to come.

Its initial investors either founded or helped build giants like Rackspace, Garmin, FEMSA and Cisco, and its core technology was accepted into Techstars, ranked among

the best business technology accelerators in the world.

From this foundation, Parlevel has enjoyed steady growth, adding customers around the country, and is looking to continue its expansion through the combination of superior technology and customer support. It’s a formula that appears to be working.

Parlevel has already built a loyal following; deservedly so. It’s a company that brings a fresh perspective and compelling technology that can help operators finally overcome the tight margins and escalating costs that have plagued the industry for years.





## Fun Facts

### Grecian Vending Machines

The Greek mathematician Hero seems to have got the ball rolling in 215BC, when he invented a machine to vend holy water in Egyptian temples.” Source: [Automatic Vending Association](#)

### The First Vending Machine in the U.S.

In 1888, the Thomas Adams Gum Company introduced the very first vending machines to the United States. Source: [UMW Blogs](#)

### Five Odd Things You can Find in a Vending Machine

Vending technology has advanced beyond simple snacks and beverages. Customers are now able to get a wide assortment of products and “things” from vending machines, such as:

- Lobsters
- Dog Wash
- Gold
- Marijuana
- Caviar

Source: [Lobster Zone](#); [Dog-o-Matic](#); [Gold](#); [Marijuana](#); [Caviar](#)

# Mobilizing the Retail Experience: How Close are We?



The Point of Sale (POS)/Retail industry has gone through a lot of changes throughout years, but nothing has completely altered the industry more over the last ten years than the genesis of smart mobile devices, the Cloud, and the Internet of Things (IoT).

By Joyce Deuley and Martha Vazquez

Our reliance on mobile or connected devices has forced many industries to shift traditional business models to fit, and the POS/Retail industry is no exception. Stores can now track customer behavior in real-time, and send customers coupons while shopping. They can even offer innovative payment options, keep tabs on inventory through cloud-based data storage, and ensure customer satisfaction through enhanced, personalized services.

With rapidly changing customer preferences resulting from the prolific use of smart devices, customers are demonstrating that they are ready for a more immersive experience, including mobile payments. Unfortunately, the current U.S. POS/Retail market doesn't seem quite ready to provide customers with what they are looking for. In order to make it happen, the industry is going to need more flexible, integrative solutions, more secure payment services, and to enable personalized experiences through proximity marketing solutions. This transition will be challenging, as many POS systems need hardware,

software and connectivity upgrades in order to provide merchants with integrative, multisystem services to better serve their customers.

## *Traditional vs. Current Market*

Point of sale is defined as the time and place a customer completes a retail payment to a merchant in exchange for goods or services. This can be done either in-store or online, or at a vending kiosk. Traditional POS systems only served transactional purposes, often at stationary terminals within brick and mortar stores. This model is changing entirely. New POS terminals are lighter, faster and more powerful. Many are equipped with software that has CRM capabilities and inventory tracking solutions, as well as customer retention services (i.e. electronic mailing list databases).

Traditionally, independent sales organizations (ISOs) and resellers would sell merchants cheaper credit card services on behalf of banks, such as Wells Fargo. Merchants would then use those services for a savings on the transaction cost. Today, the POS/Retail market is going through an evolution where it's not only about the service cost, but what you can do with customer data. The introduction of the Cloud has enabled a breadth of marketing analytic solutions and has brought new competitors to the market, such as Cox Communications and other telcos.

Because new marketing technologies are being introduced and mobile-device reliance continues to increase, the current POS/Retail market will be massively disrupted,



taking the POS/Retail experience to a whole new level: we're talking immersive customer experience and seamless transitions throughout the entire shopping process, allowing for every customer to have a tailored retail experience. The POS/Retail industry is poised for true disruption and innovation through enhanced customer services by reducing fraud via compliance with global payment standards, proximity marketing via beacons, and providing customers with mobile payment options, such as Apple Pay and Google Wallet.

### *POS/Retail Trends*

Currently, several trends are driving the market closer to unlocking the potential of mobile payments globally, such as changing customer preferences through the use of mobile devices, the rising need for POS systems to do more for the merchant via integrative services, and the fact that mobile applications can assist merchants by relieving retail pain points through increased efficiency, reduction of costs and improved customer service. Additionally, proximity marketing through beacons is emerging, along with new security standards (i.e. chip-enabled cards). Despite these new innovations, the challenges with implementation need to be addressed in order for the market to become truly activated.

### *Proximity Marketing*

Proximity marketing gives merchants the ability to send mobile marketing messages to customers based on their location within the store or their proximity

to a particular product or department. These messages and advertisements are sent to the consumer's smartphone. It's no secret that by offering consumers personalized service there is an increase in customer retention and satisfaction. Proximity marketing takes this beyond traditional forms by tailoring the customer experience in real-time, pushing out new deals, incentives, loyalty program notifications, suggested purchases and more as the customer shops. This type of

marketing helps increase immersive and customized customer experiences, ensuring brand loyalty as they receive instant benefits. This marketing is exceptionally effective because it relies on consumer behavior in real time, rather than projected use cases and lengthy surveys instantly providing retailers and merchants with deep, actionable insights.

This innovative, precise form of marketing is only possible through beaconing technologies. Beacons increase sales and customer retention by locating customers using the geolocation capabilities of their own mobile devices. Beacons can be placed in or around a store to locate customers and track their movements as they shop. These low-cost, Bluetooth-enabled devices are small enough to be placed on walls or counters without being too noticeable or taking up too much space. Once a consumer passes in front of a beacon, the beacon can then send location/product-based incentives directly to their mobile device. Beacons can be used in several different markets, adding a compelling advantage to those in retail, event planning/hospitality, transportation, and educational communities (i.e. university campuses).

While these technologies have the potential to transform how retailers and service providers communicate with customers/people indoors, there are challenges that can slow widespread adoption. For instance, there are too many permissions levels, making the process for customers to opt in not ideal. Additionally, maintaining

the beacons' connectivity can be challenging, which could prevent the customers from receiving targeted ads or incentives. Transparency could also be an issue, so merchants and retailers should disclose the presence of beacons, reflecting the value of such technologies in the benefits customers receive by opting in.

To alleviate some of these challenges, retailers and bank institutions are turning to companies like Spindle to take their POS/Retail solution to the next level. Spindle offers a unified commerce solution that enables mobile payments, mobile marketing, and loyalty discount services. Spindle offers merchants, banks, and telecommunication providers the ability to interact with their vendors in a more collaborative way. The platform addresses the challenge of managing separate services by combining the retailer's mobile payment, mobile marketing, and security solutions in to one, easy to manage API. With marketing data analytics becoming a key trend in the future, merchants will need to offer these advanced POS/Retail solutions in order to stay competitive.

### *Chip-Enabled Cards*

Within the POS/Retail market, customers are being offered a more secure form of payment with the rise of chip-enabled cards. Since big retail data breaches are on the rise, retailers and merchants are under more pressure to secure customer data. Many turn to gateways built into their POS systems that reroute payments through VPNs and encrypt them in order to ensure dual authentication practices throughout the entire transaction. There are several companies, like Apriva, that have taken a security-first stance in building their POS solutions (Apriva +), and are looking at providing dual-authentication services to mobile devices, allowing mobile payments to be just as secure as traditional POS terminals. However, by introducing chip-enabled cards, retailers can further ensure security surrounding sensitive customer information.

Credit card and debit card fraud has risen alongside the adoption of cashless transactions and the development of innovative forms of payment. Chip-enabled cards help prevent fraudulent transactions because, unlike magnetic strip cards, they create a unique authentication code that disappears once the transaction is completed. Customers' personal data is no longer recorded on or associated with the card, but rather stored on the Cloud, making potential theft of data much more difficult.



The problem with adopting chip-enabled cards is the actual payment terminals, as traditional mag strip terminals won't be able to process chip-card transactions. "Chipped" cards have been deployed in most foreign markets, making the US one of the last hold-outs, and since the US is the largest user of mag strip credit and debit cards, that means it is more at risk for fraudulent transactions to occur. But deploying chip card-compatible terminals would require retailers and merchants to replace their POS systems because chip-enabled cards need to be "dipped" or "tapped" to be authenticated. "Dipping" requires that the entire card is inserted into a terminal, and the authentication process takes a bit longer to occur than simply swiping a card, while "tapping" allows for the customer to wave/rest the card on a terminal for authentication.

Security standards are being enforced by the EMV, an association made of EuroPay, MasterCard, and Visa. In October of this year, they will have fully implemented their Fraud Liability Shift, meaning that issuers (other than EMV), acquirers and merchants who do not process chip-enabled cards will be held responsible if a fraudulent transaction occurs. Meaning, whoever is least-EMV compliant will be liable. This will prove costly in the US, if retailers and merchants decide not to comply, considering that the US is one of the largest users of credit and debit cards and is behind in adopting chip-enabled cards.

With the adoption of EMV cards and ever-increasing use of data sharing, retailers will still need to look at their security posture, evaluate their overall systems and align security strategy with their marketing initiatives. Focusing on weakness and vulnerabilities, as well as having a solid security plan in place, will help them execute against the threats and mitigate risk in the end.

### *Final Thoughts*

We believe the POS/Retail market will undergo a massive transformation within the next few years as retailers and merchants adopt new, chip-enabled transaction terminals, implement more integrated services through flexible, powerful platforms, as well as empowering themselves through proximity marketing via beaconing technologies.

By introducing a more streamlined opt-in process for customers, beaconing technologies and proximity marketing strategies have the potential to transform the POS/Retail market into a more integrative, customizable service, primarily impacting the hospitality and public transportation sectors. We see beacons as a new form of direct communication with customers with the potential to increase customer loyalty and stickiness, while meeting the increasing need for tailored service. Additionally, due to their positioning capabilities, beacons can help business track and locate customers in and around a store or department, target specific products, and receive deep insights that can be reflected through customer behaviors.

Upgrading current POS terminals with chip-enabled technologies, retailers are better protecting customer data, ensuring increased loyalty, and reducing liability and fraud-related costs. Despite the initial investment, these merchants will see a return on investment, and we will all move one step closer to a global standard for secure transactions. Merchants that adopt chip-enabled cards and supportive terminals move us closer to providing secure, mobile transactions. Through mobile transaction technologies, we will see the traditional POS/Retail market transition more fully into a supportive service that will allow retailers to immerse customers in their own custom shopping experience, ultimately allowing more satisfying transactions to take place anywhere, anytime. Because of this, campus/educational and destination/hospitality environments will see amazing opportunities as a result of these technologies as well.

Overall, retailers are going to have to adopt innovative payment and service solutions as a means to enhance their customer experience. No longer is the POS/ Retail business simply about payment processing. Instead, retailers need to embrace advanced mobile technologies that will allow them to capture, direct, and enhance the customer experience at all times. Those that don't will certainly be left behind.



# Hospitality: Where POS and Building Automation Converge, or Do They?



As a frequent business traveler, I have become something of a connoisseur when it comes to hotel services.

By Sara Brown

As an IoT industry watcher, I also like to think of myself as something of a visionary. Which is why I can't help but consider the possibilities for IoT in the hospitality space. As we begin to see more and more IoT applications spring up in the space, the hotel is becoming a microcosm of the legacy M2M world—a place where many independent, narrowly focused applications exist side by side, but never communicate with each other.

The earliest such applications centered, as most early M2M applications did, on controlling costs. Connected HVAC and lighting systems enabled hotels to reduce energy costs and, in some cases, deliver against the green operations promise important to certain guests. Additional systems delivering some sort of building automation also enable preventive maintenance and even better emergency preparedness and response. Unfortunately, as a rule, the HVAC still doesn't talk to the lighting, or the elevators, or the laundry equipment, or the front desk.

This is changing. And those properties which are merging a variety of building systems are, wisely, banking on a message of sustainability. Take CityCenter Las Vegas, for example. Las Vegas, in general, is not exactly known for being reserved. The lights, the extravagant use of

water in middle of the desert, the noise, the colors . . . yet CityCenter boldly claims, “the most prominent color CityCenter will be known for is green.” Any why shouldn't they? They hold more than six distinct LEED Gold certifications, making it the largest LEED-certified mixed-use property in the world. The complex boasts its own power plant—one that captures its own heat to provide hot water to hotel guests. It depends on a variety of low-draw lighting technologies and energy efficient appliances throughout. More importantly for our discussion, it is all monitored continuously in a state-of-the-art control center to insure optimum performance. The result, 30% more efficient use of electricity than similar properties—enough energy saved to power 8,800 homes for a year. And that's not all. A network of moisture control sensors monitors the state of the complex's lush landscaping, which, combined with drought tolerant plantings, delivers a 60% savings in water usage. Unfortunately, after extensive research, I can still count on one hand the number of properties in the world that have achieved this level of IoT systems integration. Moreover, while impressive, these systems are still connected to the guest experience only in messaging.

Today, we are starting to see point of sale systems entering the hotel space designed to deliver value both to the hotel itself and, more importantly, to the guest. Hotel-oriented systems are popping up in lobbies and restaurants around the world including traffic counters

and interactive guest feedback systems. I even met someone who was hoping to develop a system by which lost guests could be quickly located in the event of an emergency—he was particularly concerned about skiers in an avalanche—in order to reduce the resort’s liability. Of course, faster emergency response benefits that chilly guest as well.

On the guest services side, at any given hotel you’re likely to see dynamic digital signage, interesting new access control tools as well as countless apps including reservations systems and even remote check-in/out. From the traveler’s point of view, I’d say it’s a step in the right direction, but not fully there yet. For example, Marriott’s app notifies me about my impending check-in and offers to do it for me while I taxi to the hotel from the airport, but I’ve yet to be able to successfully check-in remotely, and even when I do, I still have to stop at the reception desk to pick up my key.

Probably the most interesting attempt at an automated guest experience comes from our friends at Disney. You may have read that having concluded their beta testing of their Magic Bands, the company has decided to invest a billion dollars to roll the technology out to all its resorts. Magic Bands are RFID-enabled bracelets which, together with the MyMagic+ Web-based guest services portal and app enable guests to do nearly anything within the park from accessing their guest room to accessing rides to ordering dinner. Enhancing the magic,

the bands even notify staff about pre-programmed guest preferences as the visitor approaches —allowing a child’s favorite character to address him or her by name, for example. Better yet, for Disney, Magic Bands make paying for things magic, too—reserving the pain of shelling out obscene amounts of cash for plastic crap for a less magical time and place, somewhere off property.

Of course, Disney has tons of automated systems running across its parks, but, like most hotels and resorts, they tend to remain siloed—delivering outstanding value for their specific purpose, but not necessarily cross-pollinating. Why is that?

A closer look at the industry reveals that this ongoing disconnect is just as pronounced among the principal vendors to the hotel space. Even if a hotel or chain chooses to single source their automation solutions, they are likely to find that the team who builds systems to connect, monitor and control HVAC simply doesn’t talk to the team building access control systems. In fact, they’ve never met. Worse, they didn’t even know that other team existed inside the larger organization. If they did, just imagine what they could do:

- When I (successfully) check-in during that cab ride, the temperature in my room could be reset to my preferred 73 degrees and a desk lamp turned on so I don’t have to lug my bags into a dark room alone at night.
- Perhaps the elevator music could be set to my favorite tunes.
- I could access my room using the NFC technology built into my smart phone (note, Marriott was pursuing this right up until they fully understood the cost or retrofitting every door lock).
- On my way through the lobby in the morning, I could be presented with a coupon for free breath mints (who doesn’t need those) before my big meeting.



SOURCE: ALLTHINGSD.COM

- When I enter the lobby after a long day of work, I could be invited for a glass of wine in the lobby bar . . . maybe they'll even sell me dinner.
- In the case of Disney, perhaps I am directed to the FastPass line for one ride while maintenance is performed on another.

Interestingly, this type of service is being broadly discussed among network providers in addition to hoteliers. The question remains: Who will bridge the gap? Will it be service providers like AT&T, which has an entire organization dedicated to this particular problem? Will it be the industrial systems providers like Honeywell, Siemens or GE, which, as I'm sure you've seen, talks a good game about what they call the Industrial Internet? Or, will the space become yet another place (like the connected car) for the Silicon Valley Internet giants like Google and Apple to sweep in and solve the problem? One thing is certain, so long as they continue on the path of islands selling to islands, you can be sure the Magic Kingdom, and the rest of the hospitality industry, will remain a Kingdom made of fiefdoms.

## Today

- HVAC monitoring & control
- Lighting monitoring & control
- Access control
- Preventative maintenance
- Work order management
- Guest feedback systems
- Check-in/out
- Foot traffic monitoring/location
- Reservations
- Guest preferences apps
- Ambient music
- Digital signage

## Tomorrow

- Remote environment controls
- Keyless entry
- Predictive maintenance
- Create custom special offers
- Real time, local event notifications
- Book my next visit in advance

## Upcoming IoT Events

### This Week

M2M World Congress, London, April 28-29  
 IoTx Live, hosted by Stream Technologies, London, April 30  
 Internet of Things Summit, San Jose, CA, April 28-29  
 M2M Forum, Milan, April 28-29

### Coming Up

American Telemedicine Association, Los Angeles, May 2-5  
 LiveWorx, hosted by PTC, Boston, May 4-7  
 Maker Faire, San Francisco, May 16-17  
 Re:Work Internet of Things Summit, Boston, May 28-29

### We'll Be At

Internet of Things World, San Francisco, May 12-13  
 James will participate in the Day One: Analyst Briefing and moderate the Smart Cities panel.

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*James Brehm & Associates (JBA) is a consulting and marketing intelligence firm that provides project-based and retained strategic advisory services to technology companies worldwide. With a firm focus on the Internet of Things (IoT), Machine-to-Machine (M2M), and Big Data Analytics, JBA provides actionable insight and direction to a wide range of organizations including Communication Service Providers, Hardware Manufacturers, Software Vendors, OEMs, Private Equity, and Venture Capital Firms. Through projects on market size and share, competitive intelligence, product development, go-to-market strategy, and client-specific consulting services, we help companies reach their maximum potential.*

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