

In this DHL newsletter you will find some short items and in more detail specific topics.

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- Short (news) items
- **Topic 1:** Utilities, smart thermostats, and the IoT at home market
- **Topic 2:** Samsung launches 60 stores across Europe
- **Topic 3:** Quirky, Home Depot, RF agnostic, and an open platform
- **Topic 4:** News about/from the Bosch Group

More details will be given about:

- The vertical energy with its smart thermostats and business models (why home security is leading in selling new energy services)
- The strategy of a huge European Global player on the IoT market: The Bosch Group
- The fast roll out of Samsung stores in Europe
- A US start-up company Quirky (an example that illustrates how fast things are moving in the US and the growing role/involvement of retailers like Home Depot with open platforms).

Many items are based upon presentations and networking activities during the interesting Digital Home World Summit in Berlin on June 3 and 4 organized by Informa. DHL had a role as roundtable leader on this Berlin event. Other topics are based on articles and white papers.



Short (news) items

- Competition will be between a limited number of platforms. Timeline: from utilities to security companies and operators to retailers and the big tech companies and manufacturers; from closed to open platforms, because: retailers need competition between manufacturers.
- Vivint, the largest home automation services provider in North America, today unveiled Vivint Sky, the next generation of Vivint's intelligent home experience. Vivint Sky introduces powerful cloud technology and smart learning capabilities that take the home to the next level of intelligence. For instance, Vivint's automatic HVAC control will take cues from homeowners' daily patterns and make guided decisions to help increase the home's energy efficiency.
- The start-up Quirky creates a Smart-Home Products Company: WINK; this company will lead an ambitious effort, beginning next month, to accelerate the adoption of smart-home products. Their main technology is software intended to be the equivalent of an open operating system, helping to seamlessly connect all kinds of automated home devices; the Quirky and Wink approach impressed Home Depot enough that it chose Wink as its technology partner. Home Depot now sells 600 smart-home products, six times as many

- as it did two years ago; as from July 7th Home Depot will have WINK displays in nearly all its 2.000 American stores.
- ❖ G.E., America's largest manufacturer, did fund Quirky; Beth Comstock, G.E.'s CMO explains: "For G.E., Quirky and WINK have provided a way to hasten the big industrial company's entry in the smart-home market with its two consumer lines, lighting and home appliances. WINK grew out of a collaboration with G.E. on joint products, like a smart air-conditioner that adjusts to a household's pattern of use, to reduce electricity consumption. "
- Retailers are going to expand their role on the IoT at home market; ATT opens up its platform for third party devices and is in a process of getting partnerships with one or two retailers (Home Depot and/or BestBuy). In EU by far the biggest retailer is Saturn/MediaMarkt from the Metro Group; they just announced in The Netherlands to merge the Saturn outlets with those from the MediaMarkt; this will be the only real Pan European CE Retailer. What will become their partnership policy?
- Technology to build open platforms is getting much better and cheaper. In an article d.d. July 8th James Middleton says: "Vendors develop open source framework for Internet of Things. Atmel, Broadcom, Dell, Intel, Samsung and Wind River are the founding members. They want to ensure that the OIC specifications and open source implementations will help companies design products that intelligently, reliably and securily manage and exchange information under changing conditions, power and bandwidth, and even without an internet connection. Focus is on improving interoperability and defining connectivity requirements for the billions of devices that will make up the IoT."
- Mr Harriman of Telefonica presented a sheet during the Digital Home World Summit with the statement that several corpses are lying down in the Digital Home cemetery: Verizon/Motorola and ADT Pulse.
- In EU, sales figures of Belgacom / Swisscom are disappointing.
- ❖ DT/Qivicon announces a partnership with a big German retailer with 1700 outlets. Miele will launch 100 new products this year for the Qivicon platform; in US articles is written that DT wants more; DT is also seeking U.S. device partners to certify with the program.
- Many announcements of other big global players; GOOGLE expands its network to the car, the home and the body (to everything if it is possible to connect it to the internet). Google's Nest Labs bought Dropcam (a company selling web-camera's) recently; they announce Android TV, which is not supported by Samsung; APPLE also announced software to manage lighting, security, heating and white goods in the home; they are hiring many Health executives to move Apple into the connected health products.
- ❖ Internet connectivity is being implemented into everything from cars to beds to smoke alarms, a trend known as "the Internet of Things" (IoT). Research company IDC has predicted that household items with connectivity, devices that can be controlled remotely and other such gadgets will make up an \$8.9 trillion market by 2020, *Businessweek* reported.
- ❖ A Vodafone white paper about the M2M adoption 2014 explains the next wave of M2M evolution: "The most interesting set of findings from the M2M Barometer in 2014 relates to the use of M2M for internal versus external purposes. What is clear is that there are distinctly different motivations in M2M, between implementations that are internal, and predominantly aimed at efficiency, and those that are external and aimed at a range of things, from adding new product features through to creating new business models.

Efficiency (internal) applications have a very simple motivation: reduce costs. However, when it comes to externally focused initiatives, it requires more than the simple sign off from the CFO. They have the potential to totally disrupt the way in which a company does business."



Topic 1:

Utilities, smart thermostats, and the IoT at home market

Alarm.com and iControl in the US

A recent survey from iControl found that family security overwhelmingly tops the list of most important features of a smart home. Two-thirds of respondents said family security was the number-one reason to invest in a smart home system, and 100% said that a home automation system without some sort of security capability was unacceptable. It appears that far more people want to protect their children, pets and material objects than want to geek out on energy use. Utilities understand this and are starting partnerships with security companies to push their home energy offerings. A US example is the partnership between Alarm.com and Pure Energies.

Another important aspect in this article describes that security dealers are selling what America wants: safety and convenience. They're also already in the living room, having a conversation with home owners that most utilities either don't really want to have or don't know how to have. While they are there selling comfort and convenience, energy services can be an easy upsell.

Hive and British Gas

Hive developed a smart thermostat for British Gas and started selling it in OCT 2013. Up to now they sold 80.000 pieces to 54.000 British Gas customers and 26.000 other customers. So, the uptake is interesting and Hive wants more. They consider to start selling also security devices. In DEC 2014 they will decide if they are going to do it and how! An interesting figure: British Gas has 10.000 technicians visiting 50.000 HH's per day.

Quby and Eneco

Quby / Eneco: QUBY is a fast-growing dedicated OEM-company of connected products like a smart thermostat and inhome cameras; they developed TOON for the Dutch utility Eneco and the CEO of Eneco (> 2 M customers), Jeroen de Haas, said: "We realized that we need to transform into being an energy provider, to stay competitive, and have added value for our customers. For us, TOON, is crucial in reaching that goal". Moreover TOON played an important role in convincing the Dutch government to install smart meters in all Dutch HH's and businesses within 6 years.

DT/Qivicon and Vattenfall

An example of an operator working together with an energy company is DT/Qivicon with Vattenfall. The utility sells a connected home package for € 308,85 and gives the customer, if he signs an energy contract for 2 years, a reduction of € 300,00; this means the customer gets the Qivicon Homebase, a door sensor and two smart thermostats for an amount of € 8,85.

Differentiators of connected products

In The Netherlands an article was published in March 2014 which stated that the Dutch Minister of Economic Affairs decided that within 6 years all Dutch HH's and businesses will possess a new digital electricity and gas meter. The decision was based upon a test covering 600.000 old power meters replaced by new smart meters. A very interesting aspect was the critical role of "TOON" (a smart thermostat) from QUBY. Because of this smart thermostat HH's will have insight into their usage, so that they can save energy.

DHL evaluated this with the CEO of QUBY: Joris Jonker. They developed TOON with Eneco which was used by the government during the trials. Very interesting to learn was the number of features which are part of this smart thermostat and which can be seen as differentiators versus all other thermostats:

1-Power (batteries lifetime, USB-powered), 2- Cloud services, 3- Price, 4- Look and feel of the hardware, 5- Billing services, 6- Remote support, 7- Upgrades over the air, 8- User interface/experience including the APPS, 9- DIY-installation (how easy to install it?), 10- Remote control from smart phones, 11- IoT communication protocol, 12- Interoperability (does that add value and with how many other smart devices?).

The conclusion is that you need some "Fingerspitzengefühl" to find the right mix of differentiators. Quby has 10 years of experience with that and pleased with TOON the CEO of a big utility and the Dutch Minister of Economic Affairs.

Topic 2:

Samsung launches 60 stores across Europe



Photo: Samsung has continued their seemingly endless quest for Global domination with this, the opening of their first "Samsung Mobile Store" in Paris, France.

SAMSUNG and Carphone Warehouse have announced a collaboration that will see more than sixty new Samsung stores rolled out across Europe. These will soon start cropping up in the UK, Ireland, Germany, Spain, Portugal, Sweden and the Netherlands. Carphone Warehouse is a major telecommunications retailer in Europe, using the Carphone Warehouse brand in the UK and Ireland, and the Phone House brand elsewhere.

In terms of timescale, you can expect to see these 'concept' stores arrive in the next few months and, according to the announcement, they will have a "premium look and feel", selling Samsung products exclusively, including smartphones, tablets, laptops and wearables.

Carphone Warehouse CEO Andrew Harrison said, "We are delighted to have been chosen as Samsung's preferred European partner for their store rollout. Our Connected World Services business will combine Carphone Warehouse's retailing expertise and systems with one of the world's biggest brands and will help us make even more lives better through connected technology."

The big question will be: when will Samsung start selling all other connected products in these shops, like their white goods, TV's, multi-room speaker system and camera's. What a user experience would that be for the first time in Europe!! Managing with your phone your home music system (with an online music service like Deezer or Spotify) as well as your Smart TV as your indoor and outdoor camera's and your dishwasher. To be able to open the front door with your TV remote, while speaking with the visitor and use the TV as display to be able to see who is at your front door. Which platform will show this user experience for the first time in Europe to the buying consumer? That is not necessarily Samsung. And when will that happen: DHL estimates NOV/DEC 2014!



Topic 3:

Quirky, Home Depot, RF agnostic, and an open platform

The start-up Quirky creates a Smart-Home Products Company; "The Internet of things is still for hackers, early adopters and rich people," said Ben Kaufman, Quirky's 27-year-old founder and chief executive. But Quirky, like others, thinks that is about to change. The company will lead an ambitious effort, beginning next month, to accelerate the adoption of smart-home products. It is setting up a separate company, Wink, whose main technology is software intended to be the equivalent of an open operating system, helping to seamlessly connect all kinds of automated home devices. The Quirky and Wink approach impressed Home Depot enough that it chose Wink as its technology partner. Home Depot now sells 600 smart-home products, six times as many as it did two years ago.

Home Depot's Jeff Epstein, vice president in charge of home automation products, said: "We wanted a partner who could take all these products and make them work together. Frankly, Quirky and Wink were the only ones who could do that — at least so far. Home Depot will have Wink displays in nearly all its 2.000 American stores, starting on July 7. The packaging on Wink products will have one of two logos: one for "Wink app ready" products that can communicate with a home Internet router, and one for "Wink app compatible" products that require a hub as a translator."

Brett Worthington, vice president for partners at Wink, said: "A hardware hub is a machine, about the size of a hardcover book, that can handle communications from wireless technologies including Bluetooth, ZigBee and Z-Wave, as well as Wi-Fi, the open Internet standard. For Wink, hub-making is a near-term necessity because many smart-home devices on the market now do not yet use Wi-Fi. We would love not to be in the hub business."

Home Depot and Amazon will sell the Wink hardware hub for \$79. The Wink app will also be available on July 7, on Apple's App Store and on Google Play for the Android app.



Topic 4:

News about/from the Bosch Group

The Bosch Group is a leading global supplier of technology and services. According to preliminary figures, its roughly 281.000 associates generated sales of 46.4 billion euros in 2013. Its operations are divided into four business sectors: Automotive Technology, Industrial Technology, Consumer Goods, and Energy and Building Technology. The Bosch Group comprises Robert Bosch GmbH and its more than 360 subsidiaries and regional companies in some 50 countries.

Bosch has set up a new company; **Bosch Connected Devices and Solutions GmbH** for the internet of things and services. The company will supply compact electronic products and software expertise designed to make devices and objects intelligent and web-enabled, across a broad range of applications. It will initially focus on sensor-based applications for intelligently networked homes or "smart homes," as well as for activities in the fields of traffic, transportation, and logistics. Dr. Volkmar Denner, chairman of the board of management of Robert Bosch GmbH, told *Bloomberg*: "From vehicles and smart phones to containers and machines – by 2015 more than six billion things will be connected to the internet. Entirely new services will emerge that will transform people's everyday lives and open up huge new business opportunities. These services will rely on the smart networking of devices within wider systems. Setting up Bosch Connected Devices and Solutions is a key strategic step in our plans to expand our portfolio for the internet of things and services. It's no longer a question whether networked things are coming. It's a fact, and we want to be one of the leading players." Bosch Connected Devices and Solutions GmbH is headquartered in Reutlingen and will also have sites in Coimbatore, India, and Suzhou, China.

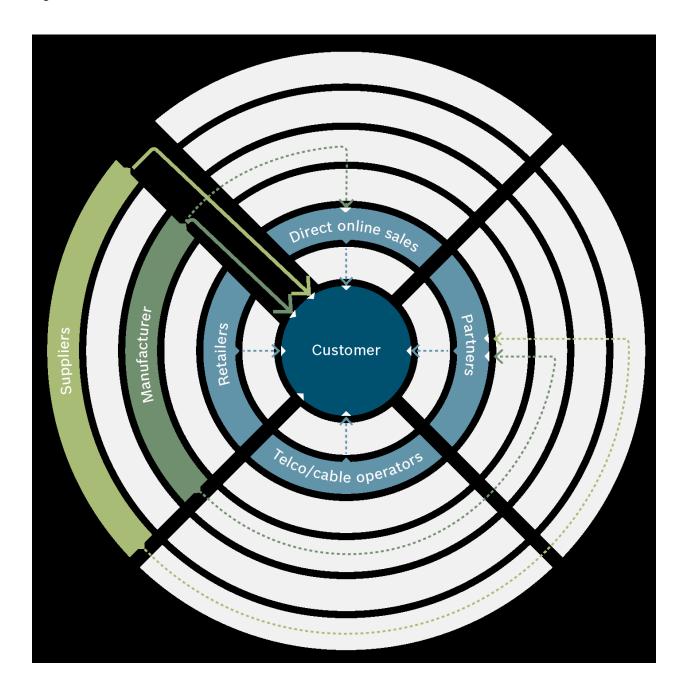
"The introduction of MEMS sensors in automotive electronics in the 1980s and 1990s marked the first wave of growth. The second major wave has been their widespread incorporation in smart phones, tablets, and games consoles since the beginning of the 21st century – and the internet of things and services now heralds the third wave. We're convinced that it will far surpass the first two waves," Denner says. "Sensors, signal processing, batteries, and transmitters have become so small, energy efficient, and inexpensive – even as all-in-one units – that they can be used in their billions. And at the same time radio networks are now available almost everywhere."

The IoT is the next generation of the internet. It is a global system of IP-connected computer networks, sensors, actuators, machines, and devices. Merging this physical world with the virtual world of the internet and software enables companies and consumers to create and enjoy new services that are founded on web-based business models. This will have a big impact on the way we do business.

Product / lifecycle management: For manufacturers in particular, the overall challenge in the IoT is securing and extending their existing hardware business. This means first IP-enabling their products and then providing new services based on these connected products. The industrially manufactured product is no longer the focus, but rather the web-based services that users access through the device itself or by using smartphones and tablets. The focus is also on developing solutions that enhance the quality of life instead of providing pure technology. We believe the development from M2M to IoT is already happening, so the most important questions for every decision-maker are: How does this affect my organization? Does the IoT offer new opportunities for my organization to save money or to make money? The right amount of creativity and the courage to think unconventionally and not just focus on the next quarter will be the most important success factor.

See below figure 1: it's taken from the white paper "Bosch Connected World" (FEB 2014) about changing business models. The IoT at home market will bring many OEM-companies channel conflicts. They need to concentrate on selling a combination of a good with services instead of goods only. By doing this the company will get the customer relationship on a higher level: they will know their connected customer better in the IoT future and it will become easier to add value to the customer. Think about how Philips business develops their lighting product HUE on the global market: 1- they sell the product in their own shop-in-shops, 2- they have a partnership with Staples, so that HUE is part of an open platform, 3- Amazon is selling HUE, 4- APPLE is selling HUE, 5- Saturn sells HUE in Europe. As a manufacturer they will ultimately use every possible channel/business model of figure 1.

Figure 1:



The new 'sales arena' in the IoT: adapting sales and marketing approaches is necessary because the IoT might create channel conflicts.

Source: Bosch Software Innovations, 2014