XONA PARTNERS

# Internet of Things

## The Turning Wheels of IoT Investments

Dr. Riad Hartani, Frank Rayal,
Dr. Dean Sirovica

February 26th, 2015

Investments are steadily flowing into the Internet of Things (IoT) ecosystem as investors attempt to match market analysts' optimism about the sector. As an example, French-based SigFox has recently raised $115 million (€102m) from Telefónica, NTT Docomo, and SK Telecom in addition to other investors. SigFox developed a low-power, long-range technology to connect devices and has been rolling out networks to provide connectivity infrastructure services for different industrial and commercial applications such as utility smart meters among other applications. This technology, which is commonly referred to as Low Power Wide Area (LPWA) connectivity, is considered as complementary to what mobile network operators provide in their current M2M offering which is skewed for high data-rate applications that justify the higher charges MNOs want to bill for this service. This investment follows another made a few months earlier when Huawei acquired Neul, a UK-based company developing a LPWA protocol.

The optimistic investor sentiment has permeated all aspects of the complex IoT space which spans devices and connectivity technologies, applications, platforms and services. Corporations view IoT as the next phase of growth where new business opportunities will be created similar to what happened in the Internet space connecting people. On the other hand, the dynamic environment of the IoT space provides genuine opportunities for startups to make their mark and to profoundly impact the status quo where IoT applications have often stuttered because of poor business case, a complex ecosystem and complex processes that did not allow all elements of the ecosystem to derive value. Yet, there are two areas of real growth seen today: one related to industrial IoT where utility smart meters have been leading and another related to wearable technologies that leverage the smartphone as a connectivity gateway.

From a strategy and investment perspective, corporations are jockeying to secure and solidify their home turf against competitors and to establish new opportunities for growth. They are investing and partnering to accelerate product development, expand service offering, license technology, and acquire knowhow. An example is Qualcomm's acquisition of CSR for about $2.5 billion to secure leadership in Bluetooth for short-range connectivity. Qualcomm had prior made investments in other chip companies such as startup Ineda which is developing an ultra-low power system on chip (SoC) for wearable devices. GE on the other hand partnered with and invested $30m in Quirky to develop connected home solutions and services while Samsung acquired SmartThings to gain a platform for connected devices. Telecom operators have also been on the lookout for acquisitions in the IoT space as a way to get into adjacent markets via non-organic growth. The automotive sector has been a primary focus. Most relevant examples include Vodafone's acquisition of Cobra Automotive Solutions and Verizon acquisition of Hughes Telematics.

Corporations are setting up funds for IoT investments as well as investing in incubators of IoT focused startups. Samsung setup a $100m accelerator fund for IoT investments into startups in the $100k to $2m range. Cisco has allocated at least $250m for IoT startups in addition to other investments into accelerators and private equity funds focused on IoT. In particular, Cisco has focused on cyber security with a number of acquisitions to solidify its position in an area critical to the take-up of IoT services. For example, Cisco invested $2.7bn in SourceFire and made additional investments in ThreadGrid, Cognitive Security, and Virtuata. Intel on the other hand opened an IoT lab (Ignitition Lab) in Swindon, UK, in June 2014 to focus on smart cities including applications for buildings, retail and transportation. It also acquired Basis Science which makes wristband health trackers for more than $100m.

Telecom infrastructure vendors have been ramping up their in-house development of IoT solutions as well as making strategic acquisitions. The acquisitions have focused on areas around cloud platforms and network OSS and analytics solutions for IoT applications. The objective behind these acquisitions is to optimize the solution offering to cater to a new wave of IoT deployment models. Examples would include Ericsson's acquisition of MetraTec which is related to OSS and Cisco's acquisition of Tail-f which is related to infrastructure virtualization and optimization. We foresee the next wave of investments and acquisitions to include IoT specific solutions in different business verticals, along with areas related to infrastructure development.

Chipset and subsystem IoT providers are faced with the most significant challenges in terms of where to focus investments given the fragmented nature of the IoT connectivity market. The leading vendors are likely to monitor and hedge the market via their venture capital investment arms. Intel Capital would be a primary example, having been the number 1 venture capital investor in IoT in 2013. Qualcomm setting up a China-centric IoT investment fund with $150m would be another example.

Venture Capitalists have also been moving into the IoT with over $1.1 billion in funding in 2013 – a 57% increase over 2012. More than $1.4bn has been pumped into wearables since 2009, of which over $500m was invested in 2014 alone. Some venture capital firms have had IoT investments as a priority over the last few years, and have been leading the latest rounds in this space. This includes Intel Capital, True Ventures, Qualcomm Ventures, Cisco Investments and KPCB as some of the most active investors in 2013 and 2014. Health and wellness, location services, and healthcare are the highest investment sectors garnering over 50% of total VC investments. In the last year there has been a notable increase in Angel investor deal flow for startups related to IoT. Activities are relatively high at the seed stage with an almost even distribution between series A, B, and C. There is also a relatively high percentage of strategic investors reflecting the need of the IoT market for large enterprises creating a market for IoT related products and services. Companies such as Jawbone, Fitbit, and mc10 are among the highest funding recipients. Another area that has seen significant VC and corporate interest is the platform space which is where many consider the value of IoT will reside. This space has been vibrant with many entrants as well as corporate investments to have a lock on a critical piece of the IoT value chain.

Machine-to-machine mobile virtual network operators (MVNOs) today account for 4% of all MVNOs. The development of IoT will progressively lead to strong growth of IoT-centric MVNOs, targeting specific industry verticals. This is a further evolution of the data MVNO model. Various startup MVNO operators are in early launch stages while the large Internet players (Google, Ali Baba, Amazon, etc.) are at various stages of validation of these IoT centric MVNO technologies and business models.

The outlook for investment environment in IoT continues to be promising in 2015 as several of the trends that emerged in 2014 will further drive interest and value in this wide ecosystem. Some of these trends include the alliances established to facilitate interoperability between IoT devices (e.g. the AllSeen Alliance established in December 2013 and the Open Internet Consortium established in June 2014), as well as new technologies that will emerge for a number of other projects being standard-based or resulting from independent development.

We conclude this review of IoT investments landscape by pointing to a few developments to watch for in the 2015 timeframe and beyond:

- Telecom operators who have been betting on 3GPP-centric technologies as the main wide area IoT connectivity model are compelled to revisit their assumptions and develop LPWA-related strategies. The specific nature of these wireless network deployments and the amount of capital required for such strategies would require the participation of large corporate venture funds from various industrial conglomerates as well as telecom operators' own investment participation.
- IoT services provide the opportunity for new MVNO models to develop, led by startups, leading industry vertical players, or large Internet players. Significant investment is likely to be made in this space over the next 2-3 years.
- Connectivity in the local area is likely to remain fragmented with various technologies in use, and as such, major chipset and systems vendors are likely to pursue a multi-technology strategy, and monitor the market via their venture capital arms investing in IoT startups globally.
- The IoT platform business will continue to evolve but would remain fragmented for some time with the large Internet and infrastructure players aiming to dominate it in select industry verticals via targeted acquisitions.

Read the original article on: http://www.tmtfinance.com/content/internet-things-part-2-turning-wheels-iot-investments-xona-partners#ixzz3TA7mkc88

TechPolis is a trusted-advisor on IoT policy and regulation to the top global leaders in mobile technologies. We help them navigate ever-evolving policy and regulatory challenges. This includes guiding government relations, building solid industry alliances, designing advocacy campaigns, and providing crisis management. We combine a deep understanding of political and governmental structures with detailed, ongoing monitoring of market developments and state-of-the-art knowledge of technology innovation.

Xona Partners (Xona) is a boutique advisory services firm specialized in technology, media and telecommunications. Xona was founded in 2012 by a team of seasoned technologists and startup founders, managing directors in global ventures, and investment advisors. Drawing on its founders' cross functional expertise, Xona offers a unique multi-disciplinary integrative technology and investment advisory service to private equity and venture funds, technology corporations, as well as regulators and public sector organizations. We help our clients in pre-investment due diligence, post investment life-cycle management, and strategic technology management to develop new sources of revenue. The firm operates out of four regional hubs which include San Francisco, Paris, Dubai, and Singapore.

Xona Partners Pte. Ltd.

www.xonapartners.com

advisors@xonapartners.com