‘New for IoT’ vendors highlight security, storage and application sectors

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The two companies have worked together for some time developing a video-based LMS for clients. However, we believe the deal opens Paylocity up to offer video tools for recruitment, hiring, performance management and communications, as well – further extending its suite to address a broader set of needs relevant to the employee experience.
Introduction

Enterprise Internet of Things (IoT) deployments encompass a range of technology areas, from connectivity and compute to storage and analytics and everything in between. In some of the most critical areas, like IoT platforms and edge hardware, legacy IT and cloud vendors dominate in-use share, typically riding their dominance in one area – like cloud storage or infrastructure as a service – to crowd out rivals or make the idea of launching an upstart competitor a fool's errand. But insights from 451 Research’s VoTE IoT Budgets and Outlook 2020 survey (see Voice of the Enterprise: Internet of Things, Budgets & Outlook - Quarterly Charts & Figures, February 26, 2020) show ‘new to IoT’ vendors – providers coming into an enterprise for the first time to provide IoT-specific capabilities – making an impact in several critical sectors.

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The IoT vendor market is dominated by large, incumbent vendors that typically exploit their gravity in other sectors of the enterprise to pull in IoT deals as well. It’s a simple fact: much of IoT isn’t new at all but rather just another (massive) source of enterprise data requiring additional connectivity, storage, compute and analytics. At the same time, IoT endpoints, data and applications have unique requirements as well. That opens the door for new vendors and technology approaches in certain areas. For instance, in security, IoT explodes the number of endpoints needed to be secured, in new locations and often a much more limited compute footprint. Elsewhere, IoT applications can make great use of the infrastructure and platform as-a-service capabilities of cloud hyperscalers, but operational requirements often require OT specialists to serve unique application and business process requirements. Truly ‘new for IoT’ vendors may be relatively rare, but they also tend to have a significant enterprise impact that can help them carve out space in the IoT vendor-space and often (as we’ve seen in some cases already, and likely more in the future) make them targets for M&A-driven vendor consolidation.

IoT spending outlook

451 Research’s VoTE IoT Budgets and Outlook survey gathered an array of data on enterprise IoT deployment drivers, budget plans and spending directions. According to the survey, fielded before the COVID-19 pandemic, enterprises expected to increase their spending on IoT by 43% in 2020, continuing the trend of budget increases in 2017 (+24%), 2018 (+35%) and 2019 (42%). Clearly, it remains to be seen how spending in IoT and across the entire IT sector holds up in 2020 (for the latest on this impact, see Voice of the Enterprise: Digital Pulse, Coronavirus Flash Survey June 2020).

That said, central to the VoTE IoT: Budgets and Outlook survey was a series of questions asking respondents about their IoT spending plans across eight product categories (along with a non-product ninth, IoT operating expenses): cloud, security, data analytics, IoT applications (platforms), network perimeter/edge, servers, storage and telecommunications. The survey asked a number of questions about those categories:

- In which categories do you expect to direct IoT spending in 2020? (see Figure 1)
- In which single category do you expect to see the largest increase in IoT spending?
- What IoT-specific products or capabilities within each category do you plan to purchase?
- Which vendors do you currently use in this category?
- Which vendors in this category would you consider adding in the future?
- And finally, for vendors in this category in use today – have you used them elsewhere or is the vendor ‘new for IoT’?

**Figure 1: Technology Categories Receiving IoT Spending in 2020 Q: Thinking about your organization’s 2019 IoT spending plans, in which of the following categories will IoT budget dollars be spent? Select all that apply.**

*Source: VoTE IoT Budgets and Outlook 2020*

Even with the COVID-19 pandemic placing all IT and IoT spending into question, the responses to these questions provide an array of insights into enterprise IoT spending plans and directions, both at the category and product/vendor level. For a more complete look at IoT budget and spending trends, including vendor choices across all eight technology IoT product categories, see 451 Research’s Voice of the Enterprise: Internet of Things, Budgets & Outlook - Quarterly Advisory Report, April 30, 2020.

**‘New to IoT’ vendors**

Meanwhile, in this Spotlight report we focus on the last of those questions – is a vendor used elsewhere, or new to IoT? – to explore one of the central questions of the IoT vendor landscape: are enterprises bringing on new vendors for their IoT initiatives or relying on providers they use elsewhere? Or, to look at this another way, is IoT driving growth for new – upstart or startup – vendors or simply making the rich – already-established IT vendors – richer?
In many of the categories we examined, the top ‘in-use today’ vendors also fall clearly in the IT establishment category. For instance, Microsoft, Cisco and Dell were the top three in-use IoT server vendors; they also were largely used elsewhere beyond IoT – 80% of Microsoft, 69% of Dell and 63% of Cisco IoT server users also deployed server products from those vendors elsewhere in their organization. That dynamic played itself out in other sectors as well, including in IoT connectivity, where AT&T and Verizon topped the in-use list and were also largely used elsewhere; and in IoT edge gateways where Cisco, Dell and Hewlett Packard Enterprise led the way, all of which were likely to be deployed elsewhere in a respondent’s IT environment prior to being deployed in support of IoT.

In what categories did ‘new for IoT’ vendors most stand out, indicating sectors ripe for startups and upstarts, open to new ideas and marked by competitive pressure placed upon legacy IT vendors? Three IoT market categories stood out:

IoT security. While Cisco dominated this category (68% of respondents said they deployed Cisco security products in support of IoT, more than triple the level of the next closest rival), a number of vendors stood out as being newly deployed into IoT initiatives. Zingbox (acquired in September 2019 by Palo Alto Networks) was deployed by 21% of respondents today (with another 20% expecting to deploy it in the future) – but with 61% of respondents indicating the vendor was ‘new for IoT’ in their environment. ZingBox’s behavioral analysis and device discovery capabilities are particularly suited for new and growing IoT deployments. Several other IoT security vendors were even more likely to get a first-time deployment due to IoT, including Claroty, focused on OT/IT security convergence (67% new for IoT); industrial security specialist Indegy, acquired in late 2019 by Tenable (64%); and hardware security module maker nCipher, sold by Thales to Entrust Datacard in 2019 (92%). Of all our categories, security saw the most new vendors rise to prominence – accompanied by a healthy dose of sector M&A – as enterprises looked to new providers to help address an array of IoT security challenges, from data encryption and device authentication to asset discovery and behavioral profiling.

IoT applications. The IoT platform and applications market has been in flux since its inception (see IoT Platform Outlook 2018-2019, October 22, 2018). But a few trends have become clear. The largest cloud hyperscalers – Microsoft, Google, AWS and IBM – are also dominating the IoT platform/IaaS sector. They offer the deepest product offerings and are most likely to be used elsewhere, which makes pulling IoT initiatives into the fold relatively straightforward. The other trend is the staying power of an IoT platform long-tail; literally hundreds of IoT platforms have made at least some mark, many being new vendors, especially to the IT side of the house. Several such vendors registered strongly in our ‘new to IoT’ rankings, including Siemens (73% new for IoT), GE (86%) and PTC (75%). Each delivers unique capabilities and deep roots in the operational realm, making them important IoT application/platform players. This top-heavy/long-tail dynamic is one we’ve examined as well in our VoTE IoT: Vendor Evaluations survey (see Voice of the Enterprise: Internet of Things, Vendor Evaluations survey (see Voice of the Enterprise: Internet of Things, Vendor Evaluations - Quarterly Advisory Report, February 13, 2020), where cloud hyperscalers Microsoft, AWS, Google and IBM dominate the top of the rankings but a very long tail of other providers (including IT software and hardware standbys, telcos and telco vendors and OT application providers) make an appearance as well.

IoT storage. Storage plays a critical role in IoT, and enterprises have taken a fresh look at storage technologies and vendors as they move IoT projects from trial to production scale. Established storage vendors used elsewhere dominated the in-use rankings from our survey – led by Microsoft, AWS, IBM, Oracle and Dell. However, a notable dose of vendors ‘new for IoT’ also made their mark, including Veeam (64% new for IoT), Hitachi Vantara (60% new for IoT), Pure Storage (57% new for IoT) and Veritas (56% new for IoT). IoT introduces new considerations for storing, protecting and managing data across a range of venues from the edge to the enterprise core and the cloud (see Anticipating the Storage Needs of IoT Data, July 15, 2019).