Why the Hub of U.S. Cybersecurity – the D.C. Beltway - Produces So Few Commercial Cyber Startups

By Robert Ackerman Jr. and Mike Janke

FULTON, Md. -- The Washington D.C. Beltway is a beehive of cybersecurity activity. In Maryland alone, Fort Meade houses the U.S. Cyber Command, the National Security Agency and the Defense Information Systems Agency.

Fort Meade's approximately 60,000 employees – more than double the number of workers at The Pentagon – and other bastions of local cyber activity, such as the CIA, reflects the federal government's huge cybersecurity presence here. It also mirrors decades of collaboration between government labs and the University of Maryland and other local universities in the business of training cyber engineers.

It should be no surprise, then, that the population of cyber engineers and analysts throughout the Washington Beltway is 3 ½ times as big as the rest of the U.S. combined.

What is uncanny, however, is the inability of the region to produce a respectable supply of product-oriented cybersecurity startups. Don't get us wrong. There are plenty of cyber startups in these parts, but they are myopically wedded to the local economy. Fundamentally, they look askance at the cybersecurity world in general. This means significant economic potential lies fallow.

According to a recent study by American University's Kogod School of Business and Amplifier Advisors, there are a hefty 858 cybersecurity-related firms in metropolitan Washington. But a mere 5.7% of these companies, or 48, actually offer products in the marketplace. Instead, the vast majority are services companies focused on offering services and related expertise to government customers – in many cases, in fact, the same customers that helped them develop their cyber expertise.

This conundrum boils down to this. While the alumni of tech giants such as Google and Facebook leverage their knowhow and move on to build high-growth global product-oriented companies, the alumni of world-class institutions, such as the NSA and CIA, move on merely to launch local, slow-growth services businesses.

This local services orientation has two unfortunate by-products: 1) It severely limits access to commercial sectors, and 2) it precludes the growth of a robust and sustainable community of cyber innovation – a highly focused, mini Silicon Valley, if you will. Such a community requires a product orientation.

The disconnect between the enormous expertise in The Beltway and the almost single-minded focus on the services sector is reflected in the amount of venture capital funding in the metropolitan Washington area. According to an analysis of Q2 2017 venture capital investment activity by the PwC- CB Insights Money Tree Report, metropolitan Washington garnered 40 venture deals valued at a total of $370 million. By contrast, Silicon Valley and San Francisco garnered 342 deals valued at more than $7.7 billion.

Moreover, the pace of funding in San Francisco and Silicon Valley is rising while it is falling in metropolitan Washington. The funding level in San Francisco was the highest since 4Q 2016 and in Silicon Valley the highest in two years. The VC funding level in metropolitan Washington, meanwhile, plummeted to a two-year low.

What is happening is stunningly clear. Venture capitalists – the financiers of technical innovation – are focused on product companies. These reside overwhelmingly in Silicon Valley and environs. If a cyber entrepreneur is running a services company, he is basically off VC radar.

This is unfortunate not only for metropolitan Washington D.C. but for the entire country, which needs all the help it can get from innovative startups that develop and produce innovative products that strengthen the fight against the mounting infestation of cybercrime. According to Cybersecurity Ventures, cybercrime will cost the world in excess of $6 trillion annually by 2021, double the amount in 2015.

To better fight this growing nemesis, Cybersecurity Ventures adds that global spending on cybersecurity products and services will exceed $1 trillion cumulatively over the next five years, from 2017 to 2021. It would be a shame if cyber startups in metropolitan Washington D.C. continued to sidestep this enormous opportunity.

The Beltway cyber community has its stars, such as the cybersecurity hubs of defense giants Boeing and General Dynamics and a few heralded startups. But it’s not nearly enough. Elite cyber alumni of the U.S. intelligence community default to building service companies because that is what they know -- and what exists -- in the Washington area.

Then, too, the local entrepreneurial path from public servant to services contractor is well-known and understood. The D.C. area is optimized to facilitate this pathway in terms of government contracting mechanisms, business financing opportunities, legal support, and technical recruiting efforts.

Getting too comfortable, however, is just plain unwise. The Beltway needs to step up to the plate, broaden its ambitions and truly embrace the deep reservoir of cyber engineering expertise in the D.C. area – a magnet of untapped wealth.

Early to rise to the challenge, Mike and I and others have formed Fulton-based DataTribe, a holding company that partners with D.C.-area entrepreneurial engineers with deep cyber expertise. Yes, they lack the commercial DNA essential to commercialize market growth. This is where DataTribe enters the picture. It is a startup "studio" currently housing three cyber startups and filling the commercial expertise hole by bringing to the party Silicon Valley expertise, human capital, customer relationships and investment capital. DataTribe and its entrepreneurs form partnerships with engineering entrepreneurs to co-found startup companies.

DataTribe selects and intensely coaches seed-stage startups and provides seed financing of up to $1.5 million. It will kick in additional funding for each company as a member of their Series A investment syndicate. Two DataTribe-based startups – Dragos and Enveil – are already poised to attract formal venture capital shortly. Dragos is an industrial control systems security firm. Enveil is developing a next-generation version of homographic encryption, which allows enterprises to process data while it remains encrypted, substantially improving security.

The biggest fans of DataTribe are our resident entrepreneurs. "It was easy for me to start and run a services company, but I wanted to make the jump to a product company," Robert Lee, the CEO of Dragos, told me recently. "That expertise is hard to come by in the Beltway. Fortunately, DataTribe partnered with me to start Dragos, helping me fill in critical gaps."

DataTribe represents a good start in getting Washington area-based startups on the map, but it is just that – a start. Much more remains to be done. It is product companies, not services companies, that move the economic needle. And if more Beltway cyber entrepreneurs "productize" cybersecurity technology, Americans ultimately will benefit. Beltway cyber technologists simply need to be catalyzed into action.

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