

Testimony of Joe Pasqua Member of Business Executives for National Security

Before the United States House of Representatives Armed Services Committee

October 27, 2015

Chairman Thornberry, Ranking Member Smith, Members of the Committee, my name is Joe Pasqua. I am honored to appear before this committee as a private citizen and member of Business Executives for National Security (BENS). Having been asked to address ways to shorten the Defense Acquisition cycle, my statement today will address how the rapid pace of innovation has affected the information technology requirements and acquisition processes in the private sector, and how open architecture can enhance an organization's agility and ability to adopt innovation.

My testimony will be based on my over three-decade career in the information technology (IT) industry and my experiences at companies including Xerox, Symantec, Veritas, and currently as Executive Vice President for Products at MarkLogic Corporation. As I stated, I also appear before you today as a member of Business Executives for National Security, a non-profit non-partisan organization that for over thirty years has been a primary conduit through which private sector leaders can help build a more secure America.

Although my testimony is reflective of BENS' perspectives on how private sector best practices can improve public sector efficiency, the views I express are my own.

As an informed observer I would like to first congratulate the Committee on your efforts at acquisition reform. I agree with Chairman Thornberry's approach to make incremental, modest (and subsequently achievable) changes as a means to realize the comprehensive reform necessary. Much of that reform needs to take place in the ways in which information technology requirements are determined, developed, and acquired.

Information technology underpins the vast majority of capabilities in the public and private sectors. Therefore, an organization's capacity to efficiently acquire IT and adopt innovation has become fundamental in today's operating environment. In this vein, we have seen that the smaller, more agile companies are often the most disruptive and the most innovative. However, because of their disruptive nature they are also often the most difficult to engage and work with. For this reason, I would like to commend the Department of Defense for its progress in forging connections with smaller, more agile IT companies.

In the past, barriers for both the Department and these small companies have impeded building effective partnerships. Traditionally, smaller companies have not viewed DOD as a viable customer because of the myriad requirements associated with doing business with the Department. Navigating the requirements process and long timelines creates a high barrier to entry for smaller companies. Indeed, it isn't that these companies don't want to engage with DOD, rather doing so is too high a risk for these innovative but still young businesses.

Likewise, in an increasingly crowded market space it can often be difficult for the Department to identify which small company with which to engage, and even harder to adjust its requirements processes once it has decided to engage.

So the question becomes, how are nongovernmental companies engaging with these disruptive innovators? The answer is that there has been a fundamental shift over the last 5 to 7 years in the private sector's requirements and acquisition processes. The rapid pace of innovation has made the longer, more expensive requirements processes untenable. As a result, we are seeing less of what I call "big bang" acquisitions.

Instead, companies are starting small, conducting iterative evaluations in real-time, and adjusting as needed. Advances in cloud computing and scale-out architectures have enabled companies to do several proof of concepts and purchase IT hardware as they need it rather than investing in an expensive system in advance. This is a challenge for large organizations which have much more inertia and a lower risk threshold. But even here we are observing a trend toward more transformed acquisition processes as they try to adapt at a similar pace as their disruptive competitors.

An important point must be made here. The smaller scale approach not only allows an organization to adopt innovative technology more quickly, it also helps to address and mitigate risk up front. Traditional requirements processes are intended to mitigate risk by conducting long-term studies, contracting with consultants, and ensuring all options are reviewed in advance of the decision. An agile approach, however, allows companies to start small, avoid making large up-front investments, get a quick read on what was implemented, and scale up as appropriate. Keeping the initial investment small helps to reduce the overall risk and obviates the need for longer requirements processes.

In fact, inherent in a traditional long-term requirements process is the risk that the solution an organization seeks to acquire will be the wrong fit for the market once they acquire it. Indeed, this is a new type of risk that private sector companies are factoring in. Nowhere is this truer than in cyberspace, where the pace of innovation changes the environment on a seemingly monthly basis. A two-year acquisition process will almost guarantee that the solution will be outdated by the time it is realized. In such a dynamic space, the requirements process needs to account for an organization's current needs and be able to adapt to an inevitable change in the market space.

This is one of the primary effects of the pace of innovation and one way to accommodate it is through open architecture. No longer can companies acquire large systems by planning into the future to the "Nth" degree because by the time that future arrives the inputs will have changed, new inputs will have been developed, and the competitor and market space will be different. Open architecture allows an organization to build a system that is suited for today's issues and adaptable to tomorrow's changes. It provides increased interoperability, modularity, and the ability to incorporate new technologies without overhauling an entire system.

As an example, at some point a company will emerge that will provide a very effective technology that won't be able to do everything, but will solve one very important problem. A cybersecurity firm, for example, that doesn't provide end-to-end security but excels in one specific area. In a closed architecture it would be very difficult if not impossible to incorporate that new, niche technology. Conversely, open architecture allows an organization to evaluate new technologies and then decide whether to adopt them.

In summary, the private sector has benefited from the rapid pace of innovation while decreasing their acquisition cycle time by using smaller-scale, agile acquisition processes which reduce risk in a new way. They also increasingly employ open architectures to accommodate the undefined but inevitable changes that will take place in the market.

I recognize that in a large organization such as DOD it will be difficult to fully implement even some of these practices across the organization. However, reviewing best practices and understanding and implementing these approaches would help the Department to become more

agile and responsive to innovation, allow a slightly different yet still effective risk mitigation strategy, and encourage participation from a wider segment of industry.					
Thank you for	the invitation to testi	fy. I am prepared	d to answer any	questions you may	/ have.