Travel To The Cloud – By Going Back To The Future

Government struggles with migration to cloud-based infrastructure and services — more often than not, due to internally imposed, artificial barriers that need to be overcome.

I gave a presentation on cloud to an international technology conference with an audience of about three hundred. I cited its advantages as cost, scalability, productivity, and resilience. I also enumerated the concerns with this technology as control, security, and dependency.

I observed that virtually every industry had already accepted cloud as a proven technology and would leverage its capabilities in the years to come in order to gain competitive advantage. The date was August 2016.

The concept of cloud is simple, namely, on-demand delivery of digital services virtually from a centrally managed provider. The idea has been around for about sixty years, so it's not novel.

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I contend that every bit of my 2016 presentation remains on point in current technology discussions, to include its universal adoption and implementation within the private business sectors over the past several years.

So, why is government still struggling in its journey to the cloud? I maintain that the answer lies within — as uncomfortable as that may sound to some.

Stuck In The Known — Afraid Of The Unknown

When experts are confronted with solving a challenge, they often resort to that with which they are most familiar and have been successful at in the past. Subject matter experts, irrespective of the discipline, often have clouded vision (no pun intended) when it comes to evaluating alternative solutions outside the realm of their experience base.

The skills and tools needed in a cloud environment are inherently different than those of IT network architects, system developers, administrators, and accreditors found running the legacy systems within government. Yet, those are the very people that we turn to in order to evaluate what I maintain has been a technology disrupter in delivering digital services over the last decade.

Smart, well-intended officials tend to bring a bureaucratic smugness to their deliberations in the supposed uniqueness of their size and requirements. Further, attempts to bring in expertise from the private sector to bear on these issues are frequently marginalized due to their not understanding the internal workings of government.

As a consequence, there's a tendency to emphasize process and retention (in terms of jobs, tech investments, and acquisition practices) at the expense of what matters most in a cloud-based environ-

ment. Such circumstances should cause one to read and learn from Warren Buffett's 1990-published "Institutional Imperatives," which explains his reasoning as to why so smart executives make dumb decisions.

Experts are smart people with deep knowledge and are indispensable to the journey to the cloud. However, the tyranny of experts is their inability to properly account for the broader organizational factors and workforce implications of any given proposal. Experts make recommendations, not decisions. Those should be left to leadership.

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Ideas That Helped Decision Making In The Past

Making a monumental change in government is so fraught with peril that extraordinary measures are necessary. The normal bureaucratic procedures are meant to keep organizational boundaries intact and ensure stability and predictability. These are less than ideal for facilitating dramatic innovation such as cloud.

Perhaps, one of the most successful examples of instituting major mission change was the fielding of Intercontinental Ballistic Missiles (ICBMs) almost seventy years ago. This was accomplished over the strenuous objections of the most powerful people in the Air Force, the general officers of Strategic Air Command (SAC).

The key was institution of the Gillette Procedures, which eliminated all of the levels of review except for a single committee — the one chaired by the Secretary of Defense. There was no delegation of authority or responsibility as the outcome was too important. Does the technical disruption of cloud rise to this level of criticality? Maybe, maybe not. Surely, there are lessons here to be learned here about overcoming bureaucratic resistance in establishing a new normal.

Most of us are familiar with the practice of having prospective suppliers demonstrate proof of concept and performance before the government makes the final production decision. We've seen this technique work in the acquisition of aircraft, space systems, ships, and armaments, among others. Some might argue that the government has followed this recipe in some IT matters through a down-select process that often entails quality killing lowest price technically acceptable (LPTA) provisions.

However, I would submit that IT-related efforts fall short of this competitive methodology, most especially that of actually requiring a" flyoff" or concurrent development among competing alternatives. For those of us who have been around for a while, there were elements of a "flyoff" among competitors for the Defense Message Service (DMS) as the replacement for the Automatic Digital Network (AUTODIN) in the 1990s. The past holds examples of success if we only look for them.

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Very Little Is Unprecedented

I view the continued debate within government regarding the pros and cons about cloud to be a bureaucratic stalling tactic in order to avoid having to make hard decisions. Clearly, fielding a cloud architecture ranks as a difficult milestone to achieve within government — and we need to get on with it. Unprecedented is frequently a term used by those destined to repeat the mistakes of the past. ■

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