

# **Technology Recommendations: Rebooting State**

American Foreign Service Association QDDR Technology Working Group

#### **INTRODUCTION**

As the Department of State re-aligns its priorities for the next four years, AFSA recommends that the Department rethink basic assumptions and received wisdom regarding technology and innovation. Seismic shifts in the use of technology have occurred over the last five years, but their impact has not been felt inside the Department. IRM must become a part of the solution and needs to be elevated as a true partner. It must develop a bold vision and communicate it effectively. It must hire the best people and give everyone more flexibility to do their work. Transformation is not easy, but must be done before the bureau loses relevance and our diplomats lose their competitive edge.

#### RECOMMENDATIONS

- Change how we use technology: IRM does a solid job maintaining existing infrastructure, but it has been slow to embrace disruptive technologies. State's disparate information systems must be reorganized to talk to each other. New ways of doing business call into question previous assumptions about our infrastructure. A cross-disciplinary research organization should be stood up outside IRM to better prepare us for the future.
- **Empower people**: IRM must improve its terse public communications. It should embed knowledgeable and approachable IRM staff as agents of change across all bureaus, geographic and functional. IRM should be relieved of responsibility for programs like mail, pouch and radios that are not within its core competency. It should assume responsibility for information security from DS, so that one bureau is responsible for the confidentiality, integrity, and availability of Department information.
- Improve the way we do business: Employees are our biggest asset and our largest cost. Improving productivity has immediate bottom-line benefits. State needs to provide best-in-class mobile computing tools; to champion innovators throughout the organization; and to find ways to recruit a new generation of information savvy diplomats and technical experts. Technology and innovation are not just IRMs responsibility. We need to create a culture that values user-input and user-driven processes. Our leadership needs an infusion of technological know-how.

#### **Change How We Use Technology**

 <u>Solve today's - and tomorrow's - problems today: move away from desktops, develop an overarching</u> <u>tech vision</u>:

The State Department's reliance on desktop computing and office applications is no longer appropriate in an interconnected 24x7 world. The present system tethers employees to their desks and limits

interactions with the wider world. State needs to embrace a new model, where our diplomats have the tools they need to truly do their job anywhere. Why spend \$500,000 per year to station an employee abroad only to have old technology keep them stuck at their desks?

The lack of an overarching technological vision is a major issue at State. We must think holistically and pay more attention to end-users' experiences. Our websites and applications need to become easier to use. In the Bureau of Human Resources alone there are nearly fifty separate applications or self-service websites in use, each with a different, often contradictory, user interface. This inconsistency causes confusion that wastes tens of thousands of person-hours of labor annually.

## • Make it easier to access and creatively analyze information system-wide:

State does an admirable job of organizing cables but the rest of its treasure trove of information is in disarray. Data is stove-piped in bureaus or trapped in emailed documents. It is nearly impossible to find an authoritative list of country desk officers or the record of the Secretary's meetings with foreign leaders. This is an enormous waste of the human capital that created all that information in the first place. Modern, off the shelf knowledge management tools can – and should - provide these capabilities today.

The Department's legacy computer systems and homegrown applications contain vast amounts of data that remain hidden, inaccessible or forgotten. Our search engines cannot see it. Our cables do not reference it. A consistent and documented software application programming interface (API) needs to be implemented across our technology platforms, old and new, so that anyone with a need to know, not just IRM experts, can see our data and connect the dots.

#### • Explore and implement alternatives to doing everything in-house:

Technology is getting ever more complex and expensive. Diplomacy, not technology, is State's core competency. State should seek out new partners in areas like technology where it has no comparative advantage. In order to benefit from rapid technological change, we should do less in-house development and more off-the-shelf procurement. USAID has shown strong leadership in embracing disruptive change. Numerous organizations now provide backroom "data utility" services that did not exist five years ago. The Intelligence Community is using outsourced "cloud" services even for data classified at the highest levels. These services can provide a higher level of redundancy and availability than our present systems. When was the last time Gmail was down?

#### **Empower People**

• <u>Provide everyone with the right tools to do the job: move from Blackberries to smart phones:</u>

The Department's exclusive reliance on the dying Blackberry platform must come to an end. Smart phone capabilities now approach - and even outclass - traditional desktop systems; we cannot ignore them forever. In 1999, the Overseas Presence Advisory Panel directed the Department to provide its employees "the fastest possible access to all information that might help them do their jobs." Nearly fifteen years later this goal remains elusive. Despite the occasional embedded photo, our cables have

remained essentially unchanged since the Long Telegram. New or improved tools could have immediate benefit. A smartphone-aware contact management system can give reporting officers an electronic BCL for every meeting, making meetings more relevant and officers more productive. Every office should have access to email/scan/print/copy multifunction devices.

# <u>Recruit innovative and technologically competent people for 21<sup>st</sup> century statecraft:</u>

The 13 dimensions that make a successful Foreign Service officer, essentially unchanged since 1997, need to reflect the realities of a 21<sup>st</sup> century workplace. We need to formally assess prospective employees' technology competence and innovative spirit, and then include these two specific criteria in our recruitment efforts, for generalists and specialists alike.

The recruitment process for IRM Foreign Service positions should be redesigned. IRM needs to recruit experts of the highest caliber. The present system is finding neither the high level technicians we need in our missions today nor the technology managers of tomorrow. When was the last time someone joined IRM from Google or Microsoft?

## • <u>Compensate new IRM Foreign Service hires realistically:</u>

IRM is losing the war for talent because of inflexible hiring policies. IRM's main Foreign Service cadre, Information Management Specialists (IMS), join at grade FS-5 regardless of prior experience. Today's IMS candidates are regularly offered starting salaries with substantial pay cuts, often amounting to tens of thousands of dollars per year. Unlike generalists, there is no mechanism for matching an IMS's previous salary. Other specialties, including GSOs and Financial Managers, are recruited at the FS-4 or the FS-3 level. IRM should do the same. Higher starting salaries will entice higher quality candidates to join the Foreign Service, saving money in the long run.

#### <u>Make everyone an innovator</u>:

IRM is an operational bureau, not an internal innovation department. Technology and innovation are a shared, joint responsibility. A mechanism is needed to motivate innovators across all offices, all bureaus and all posts. Awards from the IRM innovation fund could recognize not just persons or groups who create new tools, but also persons or groups that articulate a need for innovation or improvement. The easiest way to do this is to demonstrate true senior management support for this concept. IRM will always have a seat at the table, but our newest employees can be our most promising innovators. Many of our new employees never knew a world without ubiquitous Internet access - until they came to work for the Department of State.

#### Improve the Way We Do Business

• Enhance IRM public communication:

IRM must improve its communications. At present, its public messaging is terse and confusing. It must explain its goals, empathize with its customers and articulate a bold vision. IRM should request that the Public Affairs bureau embed a team of outreach professionals among its staff, tasking them to

understand its audience, improve its image and simplify its communications.

## • Embed high-level IRM consultants in every bureau – functional or geographic:

There needs to be better and closer interaction between IRM and the other bureaus that are its customers. IRM's people can play an outsized role if they are in the right place at the right time. AFSA believes that IRM should embed technology empowerment professionals in all bureaus, functional or geographic. They would work as high level consultants, just as the R bureau embeds Public Diplomacy experts in other bureaus. Embedding will give IRM staff a fuller and broader understanding of the issues faced by its customers. Imagine the insights that could come from collaboration between an IRM "big data" expert and a regional bureau in predicting future global hotspots or in creatively analyzing a decade's worth of CA's visa issuance statistics.

## • Move responsibility for information security out of DS and into IRM:

Information security is important, perhaps now more than ever before. Security risks are real, requiring detailed technical analysis and rigorous change management. The current split in responsibility for IT security between DS and IRM delays projects and increases costs through bureaucratic inertia, without making us more secure. AFSA agrees with the July 2013 OIG report recommending consolidation of Information Security offices. We believe that a single organization will be more effective. The DS Security Infrastructure Directorate should migrate to IRM. In a January 14 follow-up to its audit of State's Information Security Program, the OIG noted "Because DS is actively involved in the Department's Information Systems Security Program, it cannot be considered an independent, impartial assessor."

# Move mail, pouch and radio operations out of IRM:

IRM should be relieved of responsibility for programs like mail, pouch and radios that are not within its core competency. Perhaps this made sense a generation ago, but today it is an anachronism. Highly trained IRM employees are most productive and cost-effective when working on core IRM priorities. GSO sections at post, which regularly deal with customs agencies, should take responsibility for mail and pouch, classified or unclassified. Emergency radio programs, which are a security program, should be run from an RSO office.

# • Think outside the box so we're better prepared for the future:

If the QDDR wants to institutionalize change, a "blue sky" office should be designed on the Defense Advanced Research Projects Agency (DARPA) model. DARPA funded the creation of the Internet and started the program that led to Google's driverless cars. An autonomous group that combines the best of eDiplomacy, M/PRI and policy planning staff could help prepare us for a future that is far different than what we expected. State needs a nimble, stand-alone organization – not within IRM – that thinks outside the box to develop the tools we never knew we needed to solve the problems we never saw coming. The Intelligence Community and the Departments of Energy and Homeland Security have their own DARPA clones. Why not State?