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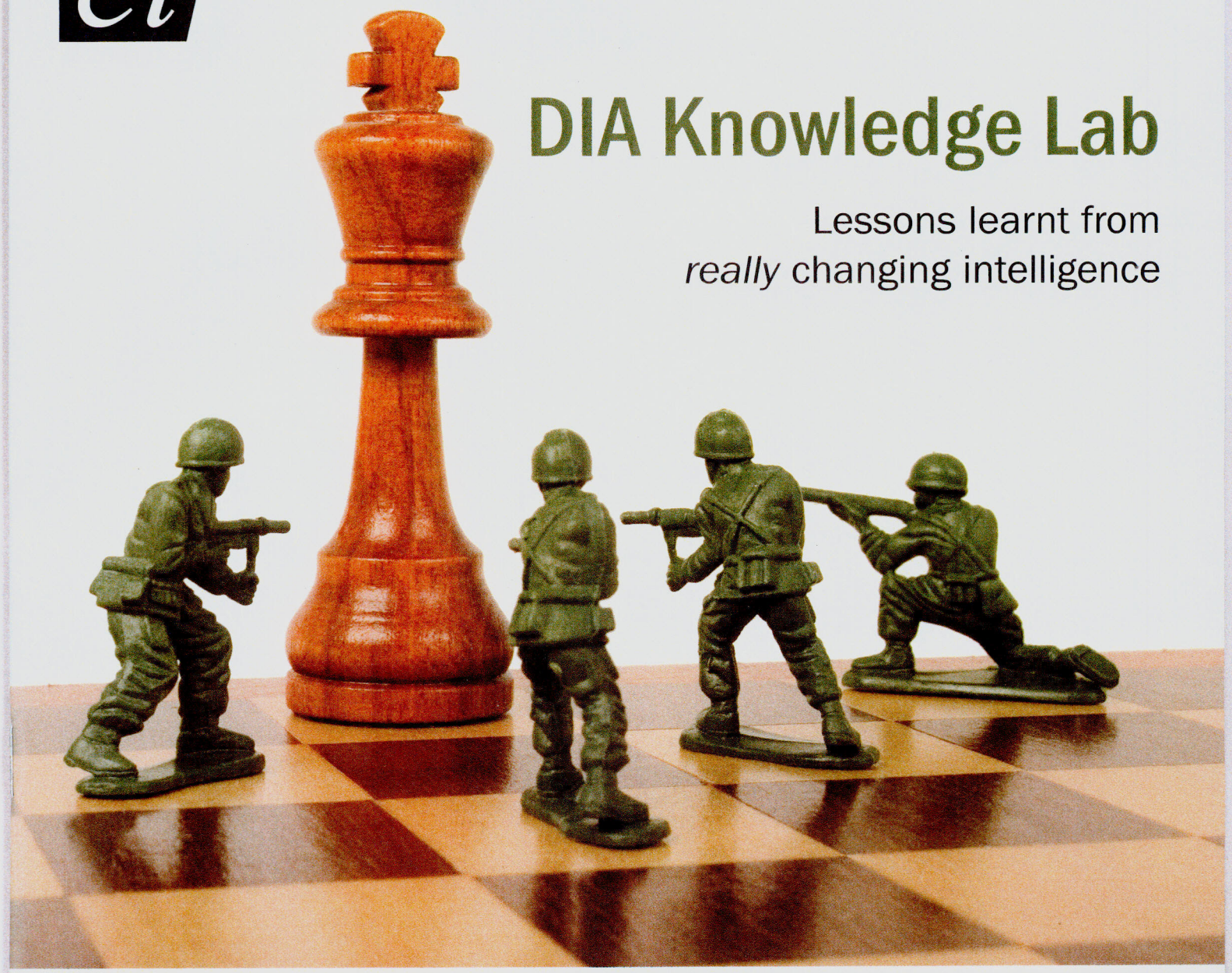

DIA Knowledge Lab

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Lessons learnt from *really* changing intelligence

"The term 'jumbo shrimp' has always amazed me. What is a *jumbo shrimp*? I mean, it's like 'military intelligence' – the words don't go together, man."
— George Carlin, *Saturday Night Live*, October 11, 1975

By Zeke Wolfberg

I don't understand 'jumbo shrimp' either, but I assure you that 'military' and 'intelligence' do go together. Let me explain.

I work for the US Defense Intelligence Agency (DIA). I run the Knowledge Lab. As described in our official history, DIA's work focuses on the continuous tasks of collecting, processing, evaluating, analysing, integrating, producing and disseminating 'military intelligence' for the Department of Defense.

More simply put, DIA is a knowledge enterprise. We gather data and information from every available source and transform those into knowledge about potential risk and harm. A lot of the information we gather, as you might imagine, is hard to come by and difficult to interpret. We're generally not free to talk about our successes in reducing risk and preventing harm because it may reveal our capabilities against the adversary (and we would not want to do that), but if we have a failure, we know it will be on page one of every major newspaper because it would deserve to be.

Changing mindsets

Even though DIA *is* a knowledge enterprise, for the first four decades we didn't think of ourselves in that way. We didn't equate intelligence and knowledge, and thought of ourselves as an intelligence enterprise. As a consequence, our culture

was excessively secretive and conservative. The knowledge we formerly produced was as factual as it is today but our culture didn't encourage speculation or making inferential leaps based on the facts. We might have lacked, as someone said, "creativity and imagination". Because our culture constrained us from peak performance as a knowledge enterprise we set about to change the culture. We created a Knowledge Lab.

The Knowledge Lab's mission was – and is – to improve mission performance across DIA by helping DIA become a highly networked, knowledge-based organisation by increasing collaboration and knowledge integration. What does this mean?

'Increasing collaboration' means getting people who should work together to actually work together. It means people who today work in parallel might start to share their research and analysis. It also means people who work various pieces of problems (like what it takes to send our people on overseas deployment) get together and start working as a team. It also means that people who today 'collaborate' by sharing their finished work products stop doing that and start sitting down together from the start to solve problems.

'Knowledge integration' means overcoming the tendency to hold onto information – whether collected, analysed, distilled, created, or however it came into one's possession – as if it belonged to your own office or to your personally. Knowledge within the intelligence community cannot be proprietary property, and by sharing it we enable it to find the people who need it.

The need for something to drive these new characteristics in DIA emerged from the 2004 strategic planning process. In the post-2004 future, DIA would need to become a learning organisation, capable of constant self-correction and self-improvement. It would have to treat knowledge, rather than products (e.g., reports), as the primary value of what we do.

This different perspective introduces the need for knowledge to flow freely within DIA as well as the resulting value perceived by customers and partners from working with a DIA that senses internal and external needs almost automatically. Knowledge is not constrained by the allocation of resources whereas products are.

At the heart of the shift to a learning organisation is the move away from an industrial framework (allocation of resources to produce products) to an organic, networked framework (knowledge is alive).

The question began to loom over those involved in the 2004 process: how do we become something we're not? How do we behave collaboratively? How do we seamlessly move across organisational boundaries? How does a hierarchical organisation intentionally promote the use of personal networks?

Knowledge lab model

There was no model from which to work. We – meaning the civilian and military employees and the senior leaders of DIA – arrived at the concept of a new kind of structure called a 'knowledge lab'.

A knowledge lab would have to meet certain criteria:

- It would be assigned not to a line organisation, where its direction, processes, procedures and cultural norms would necessarily skew towards one stove pipe or another among many. It would therefore be sponsored in the agency's Command Element (the DIA is, after all, a military organisation);
- It would focus on changing the behaviour of employees at multiple levels of the organisation. This means not just decision makers, but the analysts, technicians, case officers, project managers, human resources professionals and other job functions. If these people don't learn to work differently by seeing the advantages working together provides – working more collaboratively, sharing their knowledge – then no edict from leadership could make them;
- It would prove its value in improving collaboration and knowledge integration behaviours by identifying new work practices, testing them in small pilot projects, evaluating the results and building a base of internal customers;
- It would not build an empire. It would operate largely as a network of volunteers from across DIA. Staff and funding would be only what was absolutely necessary.

Thus, the role of the DIA Knowledge Lab is to change behaviours, to experiment with ways to increase DIA's effectiveness and improve the performance of the enterprise. Created in 2005, the lab introduces changes in the way DIA goes about its work by encouraging and asking new questions, experimenting with new ways of doing business, and unleashing the energy of a growing agency-wide network of volunteers to change the behaviours of DIA's knowledge workers. I was its first employee.

Pilot projects

Let me tell you about our first pilot. When we were still in the process of starting up the lab we reached out to industry and academia for expertise in how one becomes a learning organisation. One of our contacts told us about a methodology they used called Fast Learning, developed by Kent Greenes when he was working for British Petroleum in the early 1990s.

Using this approach, they could dynamically capture lessons learnt to improve ongoing processes. An employee took us to his company's offices in Tysons Corner (Virginia, US) to see how they had implemented this practice themselves. They had built what they called a 'knowledge asset' – an intranet site with lessons extracted, organised and placed in an easy-to-access framework. Ann Griffith, a volunteer who would eventually become my deputy, immediately started a project addressing the question: "How can we capture the knowledge of highly experienced professionals before they retire from government service?"

"It is easy for a new analyst to just focus on one intelligence source and not use other sources. But doing so can cause an analyst to fall into a trap. I can usually find equally a compelling reason or evidence to validate either an argument for or an argument against an issue. It is essential for an analyst to form a hypothesis to prove or disprove what he or she thinks."

One DIA employee spent decades as an air defence analyst. We knew him from a previous job of Ann's. When we asked him to share the key things that an analyst should know, he jumped at the chance. We brought him in for an interview in front of a video camera. He talked about his experiences – and gave his best advice – in how analysts should think about tradecraft (that is, the art and science of intelligence analysis), collaboration, how to use open sources (the non-traditional, unclassified information sources that the rest of the world uses outside the intelligence field) and collection. He gave us vignettes from his career, told us how to build networks and gave an imaginary audience of analysts the best advice he could, based on his long career. We packaged his interviews on a classified intranet for easy reference.

Three months after we launched the website, we briefed over 100 people to share the video with them. What surprised us was the interest that came from unexpected quarters. We had expected the DI folks to be interested in the views of what attributes made for a successful analyst (knowing the mission, preparing by doing a lot of reading, talking to experts, establishing relationship, creativity and knowing that there is no cookbook to do analysis). What we had not expected, although maybe we should have, was that representatives from the Directorate for Human Capital would be very interested in the attributes too because they, for the first time, got a deep glimpse into their internal clients – the people who they were hiring and helping to retain.

We ran other pilots too. We brought in a speaker to share techniques for storytelling in the workplace context. We analysed social networks inside the agency for insights on how geographic and organisational boundaries affected collaboration (the answer: not as much as you would think for the former, and for the latter: a lot more than they should).

We experimented with new approaches to mentoring. We brought together analysts and collectors (people from the Directorate for Analysis and from DIA's Directorate for Human Intelligence) in a pilot project called Fresh Look to work on an intelligence problem in a protected setting that allowed them to focus more on problem identification rather than problem solving.

This afforded the Fresh Look team to give us not only the answer to the problem, but also what they saw as the *right* way to do analysis.

Process model

Over time and with some experience, we developed some approaches that seemed to work. We evolved a basic process model (Figure 1) in which the Knowledge Lab functions as an internal consultant to business units in DIA.

What kind of business units do you find in an organisation like this? The Directorate for Analysis (which goes by the outdated acronym DI, based on its former name 'Directorate for Intelligence') is a large organisation of analysts taking data collected from all available sources (including human, signals, imagery, and open source media) to develop strategic analysis for policy makers and warfighters. Another is the Directorate for Measures and Signatures Intelligence (MASINT) and Technical Collection (DT), which uses sophisticated technology to collect important information on adversary activities (the term 'MASINT' stands for measurement and signatures intelligence).

The Knowledge Lab addresses unmet 'knowledge-related' needs by asking questions that have not been asked before. Any consultant might recognise the steps in the model. It requires – as we learnt from experience – internal customers who are facing challenges in accomplishing their mission.

Working with the internal customer in Step one, we identify areas in which the organisation can improve its performance through collaboration, knowledge sharing, or other related practices. Our initial focus areas included:

- Analytic tradecraft (as in: what are the better/best ways for our analysts to do the art and practice of analysis?);
- Organisational boundary spanning, or how do you cross organisational boundaries to accomplish results?;
- Interpersonal communication;
- Networking;
- Impact of culture (in terms of how to recognise and mitigate the impact of cultural differences in working intelligence issues);
- Knowledge integration – this is a hard one. How do you actually get knowledge shared and used by those that might find it valuable?

In Step 2, we search the commercial, academic and government sectors for techniques that have been successfully used against similar challenges. We leverage our network in the knowledge-management community (relationships with practitioners who have deep experience in the private sector and the military) for pointers to the right people and organisations who might be able to help.

Former George Washington University professor Dr Nancy Dixon, for instance, came to our attention from her work with CompanyCommand.com. In this online community created solely for them, company commanders in the US Army share tips and advice with one another for how to manage the challenges they all face from the Dakotas to

Figure 1: The DIA Knowledge Lab Process Model

Djibouti. As it turned out, Dixon had created a new way for helping people to communicate more effectively. This became The Seminar on Critical Discourse. More on that later.

In Step 3 we develop a pilot project that leverages the outside practice with special consideration for the people, skill sets, job requirements, security requirements and mission of DIA.

The average Knowledge Lab pilot focuses on determining the value of a specific methodology or business practice, involves a small number of DIA volunteers (except Crossing Boundaries, which has a large number of volunteers) and has a limited duration of weeks or months (although possibly multiple iterations). For example, in an early pilot we brought together analysts and technology specialists. The Knowledge Lab chaired a series of meetings in which these – sometimes conflicting – communities articulated a set of principles by which the participants believed they could work together more effectively. Total number of participants was about 10.

In Step 4, after running multiple iterations of a particular pilot project, we facilitate the broader adoption of the pilot project elsewhere in the agency. The model for the transition is that the Knowledge Lab identifies a logical process owner to take on the new process. This might be, for example, the Human Capital Directorate, which could, one day, take on the task of becoming the new service provider of 'Fast Learning' to the rest of DIA (see below for a description of the Fast Learning pilot).

So each Knowledge Lab should fit the process model, right? Well, it's not that simple. Every pilot project has its own story, its own trajectory and its own creation myth.

Pilot samples

Here are samples of some of the more successful pilot projects to come out of the Knowledge Lab:

- *Crossing Boundaries* (28 sessions completed to date)
  - Purpose – to allow employees the opportunity to solve complicated agency-level problems by integrating knowledge across boundaries;
  - Lessons – employees feel they are making contributions not otherwise able and perceptions of leadership have improved.
    - Organisations can take advantage of the knowledge all employees have to identify and solve complex organisational issues.
- *Critical Discourse* (15 completed to date)
  - Purpose – to improve the effect of oral communication on mission;
  - Lessons – employees and managers have challenges listening to others and they have challenges advocating and clarifying their position.
    - Organisations should realise that the tactical small conversations that occur everyday have major impacts and should take intervening steps to improve communication.
- *Full Spectrum Analysis* (Five completed to date)
  - Purpose – to unleash individuals and groups from existing frameworks and procedures to think and act anew to solve or reframe problems;
  - Lessons – as long as the group is protected from the norms of business processes, they will create new results and have consistently exceeded the expectations of leadership.
    - Organisations faced with new external environments can benefit from creating and using employees who think and act differently.
- *Full Spectrum Leaders* (One completed to date)
  - Purpose – to orient the first or second line manager to the value of Full Spectrum Analysis;
  - Lessons: the mid-level manager can benefit from a FSA perspective in their relations with employees but also with their seniors.
    - Organisations should spend a significant amount of resources to make the mid-level manager a creative and collaborative part of the job.
- *Fast Learning* (Six completed to date)
  - Purpose: to empower teams or organisations to dynamically make necessary changes to be more effective;
  - Lessons – assumptions become transparent, allowing groups to assess what is working and what is not working while the work is happening; clear understandings allow for more accurate solutions.
    - Organisations should empower employees to dynamically assess what is working and what is not, and make changes accordingly. ■

In the February issue, Zeke Wolfberg will share thoughts on relationships as the core value of the Knowledge Lab, tailoring projects to meet the varying goals of each agency, process and programme perspectives, money, leadership and acceptance factors. He ends with his own reflections and envisions the way ahead.

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