**A Defense Intelligence Agency (DIA) Knowledge Lab Project**

# Learning and Adapting while Doing:
# Acting upon Lessons Learned to Improve Performance Outcomes in Real Time

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## Executive Summary

To achieve its goal of becoming a knowledge-based culture (DIA Strategic Plan Goal 4,) DIA must be able to draw on and act upon both the knowledge and experience of its employees. To use knowledge as a force multiplier, organizations must be flexible enough to learn continuously and adapt in to improve outcomes.

The DIA Knowledge Lab practices lessons learned approaches that encourage "learning while doing," allowing course corrections while an initiative is in progress in order to improve results. By contrast, traditional lessons learned approaches are retrospective and occur only at the end of a project. The Knowledge Lab also strives to identify up front process owners who will take action on recommendations for improvement stemming from Lab lessons learned activities, thereby short circuiting a common IC complaint that lessons are rarely implemented.

Organizations that espouse real-time learning to improve performance put in place processes like reflection in which employees make time to think together about an activity to understand what is working well, what could be working better, and why. Real process improvement occurs only when teams deliberately think about the relationship between its actions and the outcomes. By embedding time for reflection directly into established team work processes, groups can immediately implement and benefit from better practices or modify approaches to surmount barriers hindering progress.

A shift in IC cultural norms to empower employees to reflect and take action to implement working level solutions will help to build a more effective DIA. By recognizing the untapped knowledge at the practice level, peers can resolve issues and craft solutions to the problems they face by creating mechanisms to share knowledge and experience among peers. Organizational leaders can help by encouraging time for such networking and providing resources necessary to enable it.

Under an FY 2008 Office of the Director of National Intelligence (ODNI) Lesson Learned Center Awareness Program grant, the DIA Knowledge Lab undertook initiatives

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to foster sharing and implementing of real-time Lessons Learned in two DIA operational units. Organization A, whose workforce is constantly affected by forward deployments, wanted to understand how to best capitalize on organizational knowledge to help its members at all stages of the deployment experience: (Pre-, During-, and Post-deployment.)  Organization B asked how to connect and share knowledge and experience among its frontline supervisors, a mission-critical role that experiences rapid turnover.

The Knowledge Lab believes that lessons learned approaches can help organizations to continuously learn and adapt in real time. To capitalize on and instantly implement tactical lessons, Intelligence Community (IC) organizations will need to shift thinking and make changes to processes and cultural norms that promote real-time course correction. Based on our experience with these projects the Knowledge Lab makes the following recommendations shown in Figure 1:

Figure 1: Recommendations

| Recommendations for Realizing Real-Time Performance Improvement Outcomes | |
|---|---|
| **Implement Learning Processes** | 1. **Embed reflection in workflow processes to enable organizational Learning** |
| | 2. **Support Communities of Practice at all levels** |
| **Introduce IC Learning Norms** | 3. **Empower groups at all levels to take action that implements the results of their own reflection** |
| **Promote Real-Time Learning (Improvement)** | 4. **Record and replicate successful initiatives as opposed to studying only those that experienced problems** |
| | 5. **Reduce the difficulties of hand-offs by involving those who can implement lessons learned findings on tactical study teams** |
| | 6. **Position Directorate-level Lessons Learned activity out of staff elements and place them into an operational elements** |

## Introduction

Although agencies within the IC have different views about how to conduct lessons learned they share a common set of challenges.

On the front end of the process, all struggle with the nature of the intelligence work. This work especially that of analyst and collector, has been and continues to be, to a large extent, a highly individualistic endeavor. Our IC focus on individuals impacts: how we view lesson learned issues, as individual problems vice system problems; and can hinder effective methods to solve problems through group reflection. On the back end of the process, many experience great difficulty in turning knowledge into action, seeing that the lessons are implemented. In general, agency lessons learned professionals experience a negative attitude from peers about lessons learned. They also find that necessary reflection time and effort required to develop useful lessons is undervalued and therefore not actively incorporated into norms and processes of the organization.

The most common lessons learned method in the IC is the retrospective approach best suited for policy creation. The most common content is findings from in-depth retrospective studies about historical events or experiences.

The DIA Knowledge Lab, on the other hand, is pursuing a real-time approach focused on operational support by sharing experiences amongst peers and project team members to rapidly create new behaviors, processes, and norms. Viewed in this light, the real-time approach is a technique for overcoming barriers to achieving goals or objectives within a performance improvement framework.

The DIA Knowledge Lab performance improvement framework helps improve execution in the pursuit of goals and thereby improve organizational alignment. The Lab executes this framework at the project level using two capabilities:  a leading indicator-based measure concept and a suite of capabilities that can help overcome barriers identified through the leading indicator framework.

Leading indicators help identify resource issues that are creating barriers to achieving goals. The capabilities suite consists of organizational behavior, process, program review, technology portfolio, and human performance techniques that can be used to overcome the barriers. The real-time operational use of lessons learned is one of the organizational behavior techniques that the DIA Knowledge Lab uses.

## IC Challenges Around Lessons Learned

### 1. The individual nature of intelligence work

Unlike the teamwork that characterizes most work in both corporations and government agencies, intelligence work is still largely an activity that an individual analyst or collector conducts independently. Performance metrics tend to be based on numbers of intelligence reports from individuals.

Although individual analysts may have suggestions for making changes in how they each get work done, they tend to not see value in coming together to look at the overall process. Simply executing a work process does not produce in-depth understanding about the system in which the process operates, or how to improve it. Process improvement requires deliberate reflection on the cause and effect of actions taken and results produced across the whole of the system. Coming together as a group to reflect on the total process increases the identification, validity, and usefulness of lessons by engaging a diversity of thought and experience. However, when employees both work and are rewarded as individual contributors they perceive little value in joint reflection.

## 2. Disconnect Between Gathering Lessons and Implementing Them

The most frequent concern expressed across the IC is the difficulty of getting lessons implemented.

There are two major factors that impact this gap. First, those responsible for producing lessons are seldom accountable for the implementation of what has been learned. Lessons learned in most of the Intelligence Community is located in non-mission support units such as training, IT, or history, which necessitates handing off the results to mission units for implementation. Under the best of circumstances this handoff of findings from studies and reports is notoriously difficult to accomplish effectively. When non-mission units, who have limited technical mission credibility, produce the studies the findings are too easily dismissed.

Secondly, most lessons learned lack the initial identification of a specific target audience. There appear to be two general audiences for lessons learned across the IC; 1) senior management groups, who may be briefed or receive reports on the findings, with the intent that the findings should result in policy and procedure changes, 2) a general audience, which is expected to "pull" lessons on an as-needed-basis to address a specific situation. Without a pre-designated target audience for the lessons, recommendations are necessarily general and lack the specifics that would make them actionable.

## 3. Negative Connotation

The term "lessons learned" carries several negative connotations in the minds of most IC personnel. First, the term is primarily associated with failed events or initiatives. Reports based on lessons learned studies are perceived as attempts to find out why the failure occurred and therefore, for many people, are associated with or seem similar to an Inspector General inquiry. Secondly, when lesson learned reports are developed in-house, those responsible for constructing the reports may have to deal with political fall out and attempts to suppress or modify the findings. Finally, there is a general view that lessons learned are of little value to accomplishing the mission and are usually just shelved or buried. By re-framing IC thinking about lessons learned as the way we learn from experiences (both positive and negative), the IC could overcome this negative
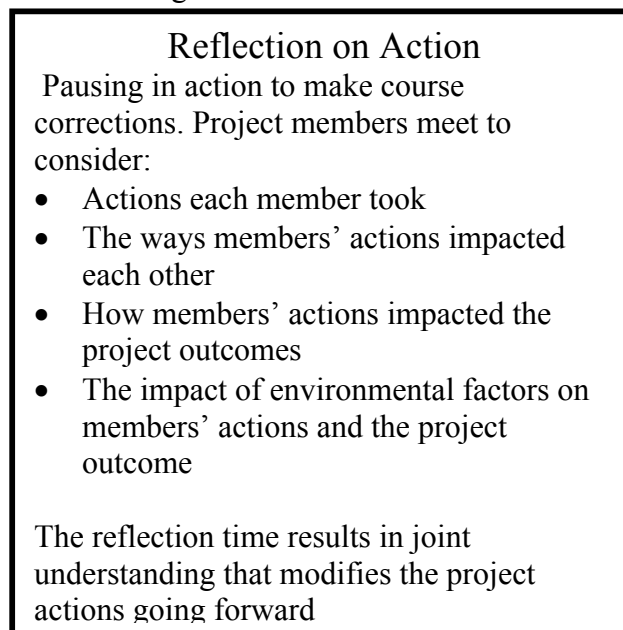
association. IC views also should include capture and real-time replication of tactical-level best practices as a worthy goal of lessons learned activities.

## 4. The Lack of Reflection

The op tempo inside the IC is high. Projects, teams, change initiatives, and strategic operations rarely pause to consider what they have learned from their actions. Without some level of group reflection, as shown in Figure 2, it is difficult for those involved to assess what is currently happening in order to correct course, or at project end in order to derive lessons learned.

Although content review procedures are in place for IC analytic assessments, few, if any, processes are in place to reflect upon the effectiveness of these analytic processes. By explicitly allocating time to reflect on how the analytic process worked, the underpinning methodology and procedures can be updated and improved as better practices are discovered. Unless reflection is valued and time for reflecting upon actions is built into the way analysts work, the op tempo will take precedence and IC organizations will lose performance improvement opportunities.

Figure 2: Reflection in Action

### Reflection on Action
Pausing in action to make course corrections. Project members meet to consider:
- Actions each member took
- The ways members' actions impacted each other
- How members' actions impacted the project outcomes
- The impact of environmental factors on members' actions and the project outcome

The reflection time results in joint understanding that modifies the project actions going forward

## 5. The Retrospective Approach as the Predominant Approach

Lessons learned across the IC tend toward retrospective content, formatted either as composite in-depth reports or lessons from individuals placed in a repository.

Retrospective lessons are valuable, particularly when they are developed in response to a question from an operational unit that intends to implement the findings through policy or procedures. However, there are many tactical lessons that are more effectively shared and acted upon in real time. Intelligence information, particularly at the tactical level, has a short shelf life, so that lessons that are over a few months old are no longer valid. Across the IC the balance between retrospective and immediate access to lessons weighs heavily toward the former.

## Project Description

Using funding from the ODNI Lessons Learned Center, in 2008 the DIA Knowledge Lab team worked two projects in DIA Directorates A and B focusing on translating lessons learned into near real-time performance improvement.

In Directorate A Office A, the Knowledge Lab continued to build upon a lessons learned initiative that was begun in 2007 to improve Directorate A's performance on issues surrounding deployments. During the 2007 work the DIA Knowledge Lab introduced a model of Lessons Learned to Directorate A intended to introduce a new set of capabilities to:
- Focus on lessons from successes as well as failures to take advantage of the many innovative ideas in the field
- Share lessons learned in real time as well as through retrospective reports
- Move lessons learned horizontally between peers as well as up and down the organizational hierarchy.

The Directorate A staff director and the Director of Office A (responsible for lessons learned) acknowledged the potential value of the new focus areas and agreed to work toward implementation of these capabilities. A number of initiatives commensurate with the new model were designed in 2007 anticipating implementation would continue into 2008 including:.
- Development of a knowledge sharing network, known as a Community of Practice, around deployment issues that would support sharing and moving real-time lessons laterally across Directorate A
- Design of the Post-deployment Re-Integration (PDR) process that would streamline and sequence the interaction between those returning from deployment and those in need of their lessons
- Development of an interactive exchange forum between those readying for deployment and those recently returned from deployment for inclusion in the Pre Deployment Conference (PDC)

By the end of 2007 Office A had accomplished the following:
- Built a new AAR process that would allow real-time entering of observations replacing the retrospective reports crafted only at the end of the tour

- Designated time for lessons learned (replacing an optional activity) at the PDC for direct dialog and exchange between returning deployees and pre-deployees in a more interactive format
- Created and delivered several roundtables/Seminars addressing issues based on lessons identified in interviews and AARS
- Developed an Intellipedia page where deployees suggested useful reading to pre-deployment employees in preparation for their deployment
- Identified a software application to support the Community of Practice scheduled to go live early in Sept of 08 to support real-time networking and peer-to-peer knowledge exchange
- By the end of 2007 there was a more positive and broader view of lessons learned among the staff of the Office A as well as with a limited number of Directorate A senior leaders with whom the Knowledge Lab had interacted.

The Directorate A staff director asked the Knowledge Lab's for help in the implementation of the initiatives that had been designed in 2007, and requested Knowledge Lab's assistance with four new initiatives focused on operational lessons. Those included:
- Develop a Terms of Reference for Continuity Books at each deployment location that would serve as a handoff from the exiting to the incoming leaders in Iraq and Afghanistan
- Design and initiate a "Chiefs Roundtable" to share first hand advice and expertise among deployed Base Chiefs and Directorate A senior leaders
- Establish weekly peer-to-peer [face phone ]conversations between functional area stakeholders with the intent of exchanging real-time lessons learned
- Create an explicit connection and feedback loop between those that develop and deliver training to Directorate A employees and those who collect and make sense of (vet) operational lessons from the field.

The Director of Directorate A's deployment office asked the Knowledge Lab to help it work with the DIA Logistics and Operations Center (DLOC), the organization responsible for deployment logistics across all DIA organizations, to improve the pre-deployment process.

Under this initiative, all stakeholders and process owners came together to construct a process map of the deployment process steps and sequence. As a result of the following improvements were realized:
- The medical assessment was moved to the front of the sequence of pre-deployment steps thereby eliminating medically disqualified pre-deployees from attending training or going through other pre-deployment steps
- A new module was created in DIA's Human Resources Management System, known as eZHR, that outlined the sequence of steps leading to deployment; previously pre-deployees conducted the steps in any order
- Shelf-life requirements were established for deployment training courses eliminating unnecessary repeat training

- Individualized checklists tailored to specific deployment requirements were created; previously the same checklist was given to everyone, resulting in taking unnecessary steps

Also in 2008, the Knowledge Lab worked with Directorate B to build a peer-to-peer knowledge sharing network (Community of Practice) of frontline supervisors modeled after the Army's CompanyCommand. Directorate B identified two challenges the Community was designed to address:

1) Frontline supervisors are being promoted earlier in their tenure and tended to move into the supervisory role with little training or preparation. Yet their position is pivotal in the creation of timely, high quality intelligence analysis.

2) Knowledge sharing and collaboration across Directorate B offices is less than optimal. Frontline supervisors and Division managers are rarely aware of what is happening in other Directorate B Offices and are thereby unable to establish collaborative relationships to capitalize on knowledge held by their peers.

Directorate B leadership saw that a Community of Practice for frontline supervisors was a viable way to address both of these issues and helped to identify four Directorate B Offices (A, B, C, D) to participate in the Community pilot. The Knowledge Lab personally contacted each Office Chief to explain how their frontline supervisors could benefit from being part of the Community. The Office Chiefs were enthusiastic about supporting such a Community and each provided candidates to serve on the Core Team.

| Community of Practice |
| --- |
| A community of practice is composed of people in the same job role who come together on-line and in face-to-face meetings to exchange ideas and experiences about how to do their work more effectively. A community of practice is voluntary and the members themselves organize and facilitate network activities. |

The Directorate B frontline supervisors' Community of Practice, called "Spearpoint," was developed with a Core Team of five supervisors from these four offices who launched the Community in February 2009. Spearpoint remained small until April 2009 when the Core Team engaged in membership drive to expand participation to all Directorate B offices. At that point Spearpoint began to grow.

The Core Team discovered it needed a larger base to draw upon as well as greater awareness across the Offices than could be achieved by the personal networking attempts it had been making. Core Team publicity engaged senior leadership within Directorate B who explained and advocated Sprearpoint at their meetings. Announcements also appeared in several newsletters to let frontline supervisors know about Spearpoint. With this push the Community of Practice has begun to expand, although on-going activity on the part of the Core Team will be necessary to build the both numbers and content.

## Project Findings

1. **The individual nature of intelligence work:**

   Within Directorate A, the success of the deployment system process mapping work with DLOC illustrates the value of a group reflection process. Engaging all deployment process owners in thinking about the end-to-end deployment experience produced efficiency outcomes that no amount of individual AARs would have been able to reveal. Previously, employees preparing to leave viewed deployment as "an individual going to a new job", not as a system process in which employees and process owners were jointly engaged.

   Prior to the eZHR module, there was no step-by-step reference or visualization of deployment as a process, either for deployees or for those responsible for executing pre-deployment activities. Problems that arose were viewed as problems of specific individuals and were resolved on that basis. For example, DLOC personnel tracked the total number of complaints and sought to reduce this number.. Perceiving deployment as an individual problem or issue, precluded thinking about it as a system that could be improved. The Knowledge Lab intervention raised the individual issues to the level of process that could be more effectively addressed as a group.

   Before working with the Knowledge Lab the major Office A lesson learned activities were AARs from individuals or interviews with individuals. These individual accounts were analyzed for patterns across the aggregate, but no effort was made to bring groups of post deployees together for joint or group reflections. The same was true with the returning Base Chiefs who individually debriefed their deployment experience with senior management. When the Knowledge Lab, attempted to put in place a Chiefs Roundtable as requested by the Staff Director for Directorate A, this idea met resistance from the operational units who believed that Office A, under whose auspices the meeting as request was made, should not interfere with operations.

   Within Directorate B, frontline supervisors held a similar individual mindset. Supervisors tended to see the issues they faced in assigning responsibilities, motivating, evaluating, and disciplining analysts as their own individual problem. Attempts to address those issues primarily consisted of sending difficult problems up the chain of command for resolution. To a large extent frontline supervisors lacked the awareness that other frontline supervisors were struggling with similar issues. This view resulted in limited outreach to their peers as a source of knowledge on how to address such supervisory issues.

   The cultural shift the Knowledge Lab undertook was to re-focus the resolution of supervisory issues from the chain of command to peers.
   However, even after several weeks of discussion, the Core Team still tended to think of Spearpoint's role as primarily a way to provide the Directorate B senior

leader with greater understanding of the issues his supervisors faced, rather than seeing Spearpoint as a source of insight into solutions for their own problems. The change in Spearpoint Core Team thinking has been gradual, but over time it has begun to move toward empowerment.

Likewise it has been difficult for the Core Team members to see face-to-face building of personal, trusted relationships with peers as an essential task to building the Spearpoint Community. The Core Team members appeared to have few existing relationships with peers outside their workgroups that they could call upon. Also, the Core Team lacked skills for establishing relationships with potential members whom they did not already know. Development of relationships has been a learning experience for the Core Team members and for the Knowledge Lab in terms of how to encourage the shift from individual to team work.

2. **Connecting the Production and Implementation of Lessons Learned:**

A second key success factor in improving the deployment systems processes was group engagement of both producers and implementers of deployment process lessons.

Evidence from Directorate A's AARs showed that the DIA pre-deployment process presented problems for some Directorate A deployees. To address these AAR lessons, the Knowledge Lab team suggested the Directorate A's Deployment Office Director bring together all parties who impacted the pre-deployment process to construct a deployment process map that included the deployment process steps and sequence.

The Knowledge Lab suggested the use of process mapping and provided guidance on how to conduct a group process mapping exercise. In May of 2008 two meetings were held with representatives from each step in the process. This group reflection process resulted in identifying and charting end-to-end all processes in the deployment system; the resulting deployment process map eliminated unnecessary steps, tailored and streamlined procedures, and effectively defined key dependencies, e.g. training.

By bringing together those that could implement findings from their joint reflection, the Knowledge Lab connected the production and implementation of lessons learned.

3. **The negative connotation of the term lessons learned:**

In Directorate A, Office A, responsible for Lessons Learned, has had difficulty both recruiting and retaining personnel. During 2008 the position of Director of Office A turned over three times. The full complement of staff for the Office is five; however, during 2008 the staff consisted of only two people, one of whom

was a new hire in training for much of the year. Office A has had difficulty recruiting personnel and those hired tend to quickly move to other positions within DIA.

Both the Director and staff of Office A found it difficult to interest Directorate A operational units in implementing the findings from their lessons learned efforts. Office A found it equally difficult to gain the cooperation of operational units to collect needed data such as interviews with returning deployees or completing AARs.

For the Knowledge Lab the lack of consistent, technically credible Office A personnel made it difficult to carry out many of the initiatives that the Directorate A Staff Director requested. During this period there was a mismatch of goals between the Office A and the Knowledge Lab:  The Knowledge Lab was trying to improve the Directorate A lessons learned processes by offering new initiatives as well as helping to improve existing issues. Office A was just trying to survive under very trying circumstances.

4. **Lack of Group Reflection:**

Within Directorate A, before the group meeting of pre-deployment process owners, those responsible for each step in the sequence worked to improve their own process, but were unaware that the overall system sequence was inefficient. This lack of awareness illustrates the need to build periodic group reflection into the workflow of the overarching system.

The success of these meetings illustrates the willingness of Directorate A personnel to be involved in a reflection effort under four conditions, 1) a systematic process is provided to aid group reflection, 2) there are well defined outcomes, 3) the outcomes could be implemented by those involved in the reflection process, 4) the activity does not bear the lessons learned label.

5. **Retrospective approach to Lessons Learned:**

Prior to its work with the Knowledge Lab, the major activity of Office A in Directorate A was the collection of AARs from personnel just back from deployment. Because the existing AAR process only allowed input to the form at the end of a deployment tour, these lessons were often as much as six months old. By the time they reached management to take action on them, management had already begun to address the issues, and naturally experienced annoyance at the belated report.

The Knowledge Lab worked with Office A to more quickly move lessons from the field to those that could act on them. Office A began that effort on two fronts. First they sought to build a dynamic reporting system where employees could input "observations" as they occurred. Because of a change of contractors this

system was never implemented. Now Office A plans to use the Joint Intelligence Lessons Learned System (JILLIS), a lessons learned database that also offers the capability of immediate feedback..

Secondly, Office A attempted to set up a deployment knowledge sharing network (Community of Practice) that would enable immediate exchange of lessons in the field and between the field and HQ.. Office A discovered that the software required to enable this Community was not available on the appropriate network domain. Attempts to work with IT to obtain the software met with postponement and delays. If Office A is able to join the JILLIS system, it will have adequate software and appears ready to move forward on this effort.

The intent to move knowledge in real time, though not implemented because of software constraints, has been fully embraced by Office A and the Knowledge Lab expects the implementation of both the network and the AAR observations in 2009.

Within Directorate B, the standup of the "Spearpoint" Community focuses on immediate capture, transfer, and use of lessons and addresses the balance between immediate and retrospective lessons learned. The focus of the Spearpoint Community is primarily tactical, peer-to-peer exchange.


## Recommendations

### 1. Embed reflection in workflow processes to enable organizational learning

Scheduling group time to think about how the work got done, reflecting upon what went well and what could have gone better, results in continuous updating and improvements to work processes.

Many government agencies and corporations that must increase the speed of their learning, do so by planning regular group reflection into their work processes and production schedules, e.g. NASA's Pause and Learn (PAL), The US Army's After Action Review (AAR), and Intel Corporation's Knowledge Harvest.

The Knowledge Lab work with the DLOC illustrates the efficiencies to be gained from reflection on process. The Knowledge Lab has promoted Fast Learning as a one-time, retrospective, reflection event, but it has not been embedded it in DIA work processes.

| EXPERIENCE IS INEVITABLE; LEARNING IS NOT.      Russo |
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Whatever reflection process DIA employs it should have the following characteristics:

- be simple enough to be implemented by its own employees with a minimum of training (NASA holds periodic workshops to train local personnel in the PAL technique)
- make use of a recognizable label (for example, AAR, Fast Learning) that is employed across DIA. A label elevates an action to the level of an approved practice as opposed to a one-off event. Once established, its value is known and accepted as a part of the way we continually improve our processes.
- utilize a standardized, repeatable format
- engage each person involved in the work process in the reflection process in order to bring diversity of insights and experiences. When reflection is limited to supervisors much of the experience at the tactical level is lost.
- conduct reflection sessions on a regular or scheduled basis, rather than only when things go wrong
- capture and understand what contributed to successful outcomes that should be retained
- focus on creating lessons that are within the group's scope of responsibility to implement, rather than developing findings for those above them or in other groups to implement.
- reflect on what needs to be done differently next time rather than attempting to place blame

Reflection processes need to be built into the workflow process at all levels of the organization. Management as well as frontline workers accomplish their work though processes that could benefit from periodic reflection. For example, every office holds town halls. As a group, Office Chiefs could benefit from reflection on what works about town halls and what does not? What has been learned about the town hall process be make it more effective?

Periodic reflection on process is <u>course correction</u> rather than retrospection. It occurs not at the end of an event or initiative, but while the initiative is in progress – learning in real time

## 2. Empower groups at all levels to take action that implements the results of their own reflection

The culture of DIA is one in which people at lower levels expect to be asked to identify problems for upper management to solve. The lessons learned initiatives such as Directorate A's AARs have largely been about employees letting management know what is wrong so managers can fix it. Even the initial view of the Directorate B Spearpoint Core Team was that the Community would primarily serve the function of letting senior leadership know about problems. In referencing Spearpoint, upper management has reinforced this view, suggesting they would like to hear what problems supervisors are running into so management can help to address them. The Knowledge Lab's "Empowering the Middle" workshop participants likewise entered

the workshop saying, "What good will this workshop do us, if you don't carry our concerns to senior management."

Although there are issues in any organization that are beyond the scope of a team or workgroup to resolve, the change that is needed is for groups to recognize they have the knowledge and the power to make improvements to their own work processes. That requires managers above them to support the reflection process that leads to new insights, and to acknowledge the ability of units to identify and implement useful revisions and propose new processes.

The shining exception to this cultural norm of passing all problems upward is Crossing Boundaries, where the expectation is that the idea provider is empowered to implement the solution. It is this spirit that needs to be infused now more widely through embedding reflection process in the production workflow.

### 3. Reduce the difficulties of hand-offs by involving those who can implement lessons learned findings on tactical study teams

Successful hand-off of findings from those who gain and document insights to process owners with authority to make changes are a downfall of lessons learned programs/initiatives/activities. Hand-offs occur when a team, made up of people external to those being studied, conduct a study and then make recommendations to those who are expected to make changes.

The likelihood that action will be taken based on the findings of a lessons learned study are greatly increased when those who are expected to implement the findings are involved in all phases of the process of creating the lessons learned - from the data collection (whether survey, interviews, review of historical documents or observation), through analysis of the data, to the development of findings and recommendations. An understandable concern is that if people "study themselves" they will be less objective than if studied by objective "honest brokers." Having both external and internal members on a study team alleviates that concern. The internal members serve as a source of validity for the larger group who will implement the findings. The external members bring methodology and objectivity.

### 4. Record and replicate successful initiatives as opposed to studying only those that experienced problems

It is human nature to try to understand "what went wrong" but there is an equal amount, if not more, to be learned from studying successes. Performance improvement is more cost effective when it repeats successes rather than just studying missteps. With successes the answer is already known and has been tested, while recommendations about missteps require crafting and testing new solutions, which may or may not work. Crafting and testing is always more costly than replicating. .

DIA needs to seek out processes that are working well, (for example, the collaboration between collectors and analysts that was identified for the DNI-sponsored, Knowledge Lab-hosted 2007 Lessons Learned presentation) and study successful practices to understand the factors that make them work. The findings could then be used in training, stories for in-house publications, and transferred to other units, through peer assists.

The purpose would not be to celebrate these as individual successes or as exceptional events (as in awards) rather to recognize these as <u>processes</u> that could be effectively employed by others.

**5. <u>Support Communities of Practice at all levels</u> <u>and provide: 1) software designed for Communities, 2) adequate IT resources to maintain Community websites, and 3) adequate start-up help to build Communities</u>**

In most corporations and government organizations, Communities of Practice are the major way lessons learned are moved in real time. For example, the US Army has over 60 Communities modeled on CompanyCommand and sponsored by the Battle Command Knowledge System, at Fort Leavenworth.. GE has over 600 Communities, Fluor has over 50 Communities. Within DIA there seems a budding yet limited awareness of the value of peer-to-peer Communities of Practice and certainly little IT support for them. As the Knowledge Lab works to move DIA to a knowledge-based culture, (Strategic Plan Goal 4), learning from lessons and adapting in real time will be a critical element.

One of the greatest impediments to implementing a Community of Practice within in both Directorate A and Directorate B has been the lack of Community software and IT support. That shortfall delayed the implementation of the deployment Community in Directorate A for well over a year and delayed the start up of the Directorate B Community for at least four months. The SharePoint site that is currently in use for the Directorate B Community became functional only after one of the Core Team members, who had past experience with SharePoint, took over responsibility for making the site work. The SharePoint software that the Directorate B Spearpoint is currently using is far from optimal to support robust Community use. For example, it is difficult to change what is on the main page, discussions are buried several layers down, and it is not possible for members to upload their own pictures. Unlike software tailored for Communities, SharePoint does not support building relationships between peers.

IC Community Core Teams need to have a minimum 5-10 members. Communities function most effectively if there is a group of members (Core Team) who are responsible for the content, tone of the discussions, and connecting members. Within DIA Core Teams that govern any Community need to be a minimum of 5-10 people and made up of members from across a number of offices so that a specific mission-related task/event does not adversely impact Community operations or overall viability.

Unlike communities in other settings where the Core Team can respond to Community needs during off hours, most DIA Communities operate on classified networks. Core Team members must manage the Community during regular office hours balancing mission requirements and Community needs. A larger Core Team helps Core Team members better balance Community work with mission requirements.

Provide Core Team members with training in relationship building. One major responsibility of Core Team members is to connect members with each other and to build relationships between the members and the Core Team. From working with both the Directorate A and Directorate B communities, it appeared that many Core Team members have not developed this skill. The Knowledge Lab recommends that the Core Team of newly formed communities be provided instruction and practice in building relationships (e.g. role plays).

### 6. Position Directorate-level Lessons Learned activity out of staff elements and place them into an operational elements

The current location of the Lessons Learned activity in Directorate A, for example, disconnects it from those it is attempting to serve. A possibility might be to put it under a performance improvement office if such exists within the operational elements. In addition, the name of the unit as "lessons learned" works against its mission. The Performance Improvement label would be much more acceptable for reasons outlined above.

### Conclusion

Learning from experience is critical for any system or individual in order to continually improve its own performance. DIA faces a number of factors that make learning from experience difficult: the high operational tempo works against reflection, high employee turn over and rotational assignments result in much knowledge leaving, and the individual nature of analytic work precludes a focus on process.

> ANY SYSTEM THAT IS TO LEARN, WHETHER AN INDIVIDUAL MANAGER OR A NATIONAL CABINET, MUST REGULARLY RECEIVE AND INTERPRET INPUTS ABOUT ITS OWN OUTPUTS.                                            Reg Revans

The process improvement that DIA aims for (Strategic Plan Goal 4) can only be achieved if a culture of reflection on experience is developed. To facilitate that culture organizational processes need to be put into place that provide a systematic way for peers, project groups, and teams to learn from their experience and to use that knowledge to adapt in real time.

<u>**Appendix 1**</u>

Two meetings of the IC Lessons Learned Working Group, facilitated by the DIA Knowledge Lab in April and June 2008, explored the multiple meanings, content, format and methodologies of lessons learned as understood by the members.

**1. Multiple Meanings, Content, Formats, and Methodologies**
Lessons learned is a term in common usage, consequently most people assume they know what is meant when they hear the term. However, across the IC there is no agreed upon meaning nor is there a single established methodology for lessons learned. As a result, both content and format of lesson learned initiatives vary widely.

<u>The Meaning and Content of lessons learned</u> across the IC varies, including for example:
- Understating failures
- Best practice items
- Outcomes of simulations and military exercises
- After Action Review (AAR) reports
- Descriptions of a specific experience or event
- Descriptions of historical events
- Findings from in-depth studies of activities and events
- Transcriptions of interviews with experts

<u>The Format for lessons learned</u> likewise varies, including for example:
- Published reports on historical events or retrospective case studies
- Briefings on current processes (PowerPoint)
- Structured repositories of lessons from individuals or teams recorded on templates
- Articles for in-house publications
- Web-based repositories synthesizing lessons around specific topics or questions, known as Knowledge Assets

<u>Methodologies</u> <u>to develop lessons learned</u> vary including for example :
- Interviews to develop case studies
- Soliciting lessons from individual employees
- Facilitated group meetings to elicit lessons
- Peer-to-peer knowledge sharing networks, sometimes called Communities of Practice, supporting the exchange of knowledge and lessons in real time