March 21, 2002

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Attached is the final report of the CDIE study developed by the Review Team.

The Report now has included an implementation plan and greater specificity.

The two senior leaders of CDIE, Jerry Britan and Elaine Grigsby have been briefed on our findings. The team suggests this report be made public. In addition, the team suggests a few next steps for your consideration.

The team believes that adopting the recommendations described will facilitate the transformation of CDIE and PPC into the knowledge management flagship for the Agency.

With best wishes for the future.

Sincerely,

The CDIE Review Team

Sheila Ronis, The University Group, Inc.
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Joseph Gueron, USAID
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United States
Agency for International Development
(USAID)

Policy and Program Coordination Bureau

Center for Development
Information and Evaluation (CDIE)

Review

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EXECUTIVE SUMMARY

The Review Team's general conclusion is that CDIE's knowledge support infrastructure is healthy. The overall design and range of services available is comprehensive, oriented to the task of supporting policy level research. The acquisition instruments used to obtain outside contractor support are generally flexible, provide "short order" channels to augment levels of service as needed for specific purposes, and are generally of sufficient scale that contractors have an incentive to manage their CDIE relationship responsively.

In examining how CDIE can play an effective role in the reorganized PPC, the Review Team found it very useful to borrow concepts emerging from the new discipline of knowledge management. In this paper we define knowledge management as the process of capturing and applying the collective expertise of the Agency and its partners to fulfill its mission. We describe CDIE as a knowledge management service unit and its main functions as supporting decision-making.

Despite the general health of CDIE, the organization will need serious attention if the assets it now has at its disposal are to best serve the emerging needs of PPC and the Agency. To maximize the utility of these assets to PPC the team has concluded that:

- PPC is undergoing a major transformation and in order for PPC to fulfill its new mandate, CDIE will need to become more focused on PPC priorities. CDIE's work plan should be policy driven and focus on themes directly related to PPC's research needs. CDIE should also be charged with providing a similar array of support services for the Strategic Planning and Budget Office.

- The key to a more successful CDIE is providing the office with clear directions in terms of how it can best support the Bureau's core functions of policy research, strategic planning and budgeting. After reaching agreement on these directions a work plan should also be developed that clearly describes expectations related to progress on agreed to themes.

- CDIE needs to reinvent itself focusing on its role as a knowledge management service unit equipped with the tools of today's technology. CDIE has in place the basic foundation for this transition – high quality IT skills, a large body of qualified researchers and quick access to specialized expertise.

- Evaluation results play a key role in many policy issues and are a critical component of the Agency strategic planning process. Current expectations for the evaluation function and the resources available to CDIE to meet those expectations are not sustainable. The Agency-wide vision and mission functional statement for the evaluation function has not changed in the last decade while staff resources have declined by 70%. CDIE evaluation activities should be focused on supporting PPC's policy agenda and multi-sectoral linkages between the Agency strategic plan and

program results. Responsibility for evaluation within technical sectors should be assigned to the Pillar Bureaus.

- Reconfiguring CDIE in the ways described above move it much closer to what we have termed in the paper as a knowledge management support unit. Emerging best practices in the discipline of knowledge management have highlighted the fact that only a small portion of what we know is codifiable or "explicit", the vast majority of knowledge is "tacit" and uncodifiable, "stored" and "dispersed" in the staff organization. By fomenting collaboration and nurturing communities of practice, PPC would be able to increase its ability to "harvest" some of the tacit knowledge residing in the collective experience of Agency staff.

- The existing IT infrastructure provides a solid basis to support PPC's role as the Agency's new "think tank". Optimizing CDIE's role as a knowledge management support unit will require some additional work on the most appropriate IT architecture to facilitate this change.

Introduction:

With a new Administration in the White House, and a new War on Terrorism, the need to establish an "intellectual leadership" role for the U.S. Agency for International Development (USAID) in the development and execution of U.S. foreign policy and aid is critical. This can only be accomplished with increased capability in the Bureau for Policy and Program Coordination (PPC) and Center for Development Information and Evaluation (CDIE) whose functions will necessarily need to support the new "intellectual leadership" capability of PPC.

This review of CDIE has culminated in a set of recommendations that, when implemented, will assist the Agency in fulfilling its new "intellectual leadership" mission.

The Center for Development Information and Evaluation (CDIE) currently has three Divisions:

- The Program and Operations Assessment Division (POA)
- The Development Information and Outreach Division (DIO), and
- The Performance Measurement and Evaluation Division (PME).

The new intellectual leadership challenge for PPC and CDIE will be to support the USAID four "Pillars" that focus on the Agency's core capabilities:

1. Global Development Alliance
2. Economic Growth and Agriculture
3. Global Health, and
4. Conflict Prevention and Development Relief.

A major issue is the Agency's ability to (1) develop and execute policy internally, while developing team behavior across sectors and geographic boundaries and (2) establish AID as the intellectual leadership center in the development of U.S. foreign policy externally to the State Department and all of the Agency's other stakeholders.

Conceptual Framework

In the study we describe CDIE as a knowledge management service unit and its main functions as supporting decision-making. The power of knowledge lies in its role as a basis for action within an organization. The foundation of the organization is neither its physical assets nor the shape of its organization chart. Its foundation is an open system of information and a free flow of knowledge shared across functions by individual employees who use common processes and systems and communities of practice. Making decisions in an atmosphere or culture of shared knowledge (e.g., going from

existing organizational knowledge to improved organizational knowledge) is to provide USAID better decisions regarding policy.

Knowledge management (KM) is designed and dedicated to the learning process, to the development and distribution of information and knowledge, and to helping administrators move beyond facts and analysis to decision-making that incorporates broader understanding of the relevant environment. One of the most powerful ways that KM works is through **communities of practice**. This is because the most important knowledge in organizations tends not to go from top to bottom or from bottom to top. It moves laterally. The collegial culture of CDIE and PPC promote communities of practice and these need to be nurtured by leadership.

See Appendix A for a discussion of knowledge management.

Methodology

In this study, a team from both inside and outside the organization reviewed the Center for Development Information and Evaluation (CDIE). The Review Team interviewed most of those in CDIE. In addition, the team reviewed all prior CDIE documentation from customer surveys to other reviews of CDIE that have been conducted. The team also facilitated individuals within CDIE in a visioning exercise.

The POA, DIO and to a lesser extent PME functions are included with an emphasis on what CDIE will need in order to support PPC's new role to provide "intellectual leadership" in the development of foreign policy in the areas that represent the core competencies of the Agency.

This study has ten sections and three annexes. They are:

1. Supporting Intellectual Leadership
2. CDIE: An Overview
3. CDIE/DIO Review
4. CDIE/POA Review
5. CDIE/PME Review
6. IT and Information Issues
7. Human Resource Issues:
    i. CDIE Culture and Morale
    ii. Retirement of the Agency's Core Knowledge
    iii. Agency Core Knowledge in Contractor's Organization
8. Findings and Recommendations
9. Implementation Plan
10. Next Steps

Annex A: Organizational Action Plan for Knowledge Management
Annex B: Selected Bibliography for Knowledge Management
Annex C: Recommendations for IT Next Steps

1. Supporting Intellectual Leadership

The policy development process helps to define what an organization is trying to do and *how* the policy should be executed. It can be described as the rules by which everything must work, the guidelines for behavior, the governing principles. Policy is also the mechanism to communicate, educate, train, and instill values to the people of the organization. It is an enabler to help the people of the organization to accomplish the vision, mission and objectives. It is taught to the rest of the organization. It is "lived" every day. It is reinforced continuously. Policy should also provide individuals with a sense of the role they play in the organization. Policy provides alignment in the organization. This is the internal role that the Policy Office plays. "Lessons learned" that are developed within CDIE, especially POA, should be translated into the policies that define the Agency's practices and processes.

The real issue is that the policy development process has two elements; the creation of the policy and its execution. The development of the policy occurs in a planning mode with an external focus and can affect foreign policy. Once that policy is defined and agreed upon, it's execution requires the development of practices or procedures that, when followed, lead to the overall accomplishment of the policy.

The new intellectual leadership element of the Policy Office will need to be aimed external to the Agency…an output of the Agency that is used to formulate U.S. foreign policy with regard to aid and international development. This will be an enhanced function for the Policy Office. Once external foreign policy is developed, it then translates into internal policy for execution. That is the relationship between the external policy and the internal that translates theory into practice, and may require formal processes.

Both functions, internal and external require the services that CDIE currently has as well as some new, possibly more flexible services that CDIE can provide as well. The new, more flexible services will enable USAID to support its role as a part of the foreign policy structure of the United States.

How will USAID accomplish its objectives? What feedback mechanisms and infrastructure are required to ensure the Agency knows whether or not it is making progress in this area…and others? CDIE provides a portion of this infrastructure as the keeper of core knowledge, lessons learned through evaluations and the formal archives of the Agency.

PPC's challenge to recapture the "intellectual leadership" of USAID as well as being an input to the State Department to develop U.S. foreign policy has begun though the exact nature of this "think tank" is not yet fully developed.

What should such a "think tank" do and what types of scholars and practitioners should the group recruit from the outside or will internal intellectual capital be sufficient? Will it conduct basic or applied research or should it be a combination? Will it commission

research studies of various kinds and from whom? How will it establish links to the academic community and other think tanks? Will it have a publishing arm? Will it become known throughout foreign policy circles for its important symposia? What role will CDIE play to support these various options as they become real? And, can CDIE prepare to provide these augmented services *now* even before the organization is more established?

In an earlier study of PPC by The University Group in November, 2001, the vision of the think tank included becoming the place where USAID's Administrator turns for help and the place where the Secretary of State turns to for special studies and to answer specific foreign policy questions especially with regard to international development and aid issues. If USAID wants to develop a reputation for intellectual leadership, it is essential that the think tank be an independent USAID entity with a USAID identity – not a part of an already established one. That means, although USAID could *partner* with an established think tank, it cannot become part of another think tank. CDIE can be a tool to enable the USAID "brand" to become a reality. Properly used and marketed, CDIE may even be considered a competitive advantage for the "think tank."

The think tank may choose to include senior scholars from across the entire foreign policy and national security communities showcased with the internal "experts" of the Agency. It should define the future role the Agency will play in the articulation of U.S. foreign policy and the role the Agency will play within the State Department and donor communities. Possibly, this group could produce visions of future worlds; scenarios that study the effects of U.S. foreign policy and look at the effects of changing multiple variables.

A preliminary research agenda has been developed and some of the topics were shared. These include but are not limited to:

- Globalization
- Failed States
- Education
- Trade/Science & Technology
- Conflict
- Anti-corruption
- Agriculture
- Democracy/Governance
- HIV/AIDS

The research agenda that CDIE should support must be tied to USAID core competencies and the role that the Agency needs to play with regard to each topic. Otherwise, it may be very difficult to justify to USAID's stakeholders why it is studying any of these topics, let alone why it has expertise that is unique. For this reason, other potential policy areas might include:

- Issues of foreign policy and the role of the Agency
- USAID's role in global security and the National Security Strategy
- How the world would look if the National Security Strategy included more USAID assistance; development, educational, health, governance, etc…
- Issues of "shaping" foreign policy
- Issues of "shaping" world institutions
- Interagency processes and U.S. foreign aid
- Global development model so individual changes in variables can be observed, such as those being built by the Ann Arbor think tank, Global Vision, Inc.

The list of potential topics is endless. What is most important is that the topics coincide with the major objectives of the Agency and their support furthers the mission of the Agency.

The think tank has the opportunity to strengthen the nation's capabilities to promote the well-being and development of nations-in-need through foreign policies. Although funded by Congress, this group should provide independent, nonpartisan scholarly work insulated from political pressures, where possible, but able to assist the Agency's Administrator, the State Department, other federal agencies and departments, Executive Branch, Congress, the donor community and others with research, analysis and information, frequently supplied by CDIE.

As PPC reorganizes to accomplish its new mission of creating an environment of intellectual leadership for the Agency, CDIE and the Policy Office are proposed to report to one of two PPC Deputy Assistant Administrators. This group will be responsible for two functions; external policy leadership to support the development of U.S. foreign policy objectives for aid and international development and the remaining two functional groups of CDIE, POA and DIO. The function of setting internal policy to support the Agency, that is, developing the practices for running the business, is proposed to report to the other DAA in PPC. Since these two functions will report to different PPC DAAs, success will require integration through strong leadership and coordination.

2. CDIE Overview:

PPC/CDIE finds itself in an ideal point in time, where the confluence of some major factors would allow it to reinvent itself. These factors include a new emphasis on intellectual leadership within PPC, the reorganization of PPC with inclusion of the budget function under its responsibilities, and the Business Transformation efforts, driven by the M Bureau. Changes in external factors also provide CDIE with the opportunity to revisit its mandate and business practices. These include the evolution of a whole spectrum of Web Based system tools including portals, search engines and collaboration tools.

Based on the above factors, the Review Team found it very useful to think of PPC as a knowledge management organization and to view CDIE as a knowledge management service unit. In this paper we define knowledge management as the process of capturing and applying

the collective expertise of the Agency and its partners to fulfill its mission. Figure A describes the various components of this process that are key to effective knowledge management.

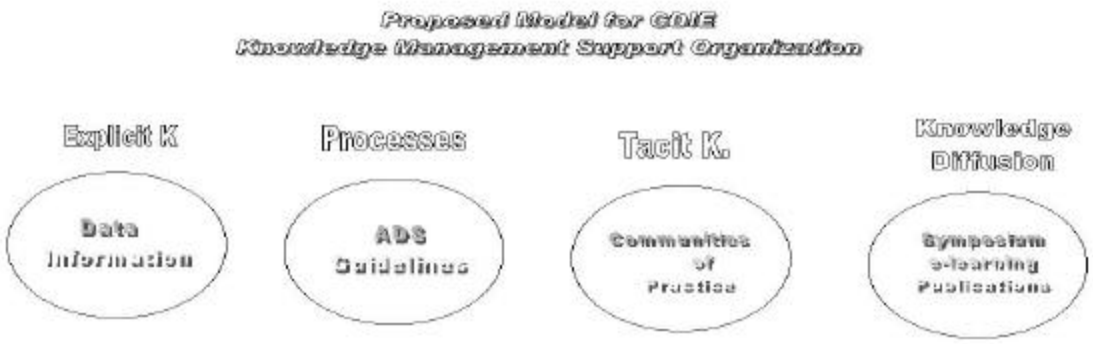

Figure 1A

CDIE in general does a very good job of cataloguing and making accessible explicit knowledge. The ESDS service is a good example of this function. Other sources of information (refer to Fig A) are not as well addressed by CDIE. Processes, which include the codified information about the business processes of an organization, its collection of guidelines, operating procedures etc., provide another source of knowledge within an organization. In the case of the Agency, the ADS and other management directives represent its codified business processes. Such processes are seldom recognized and leveraged as a "knowledge" resource.

Emerging best practices in the discipline of knowledge management have highlighted the fact that only a small portion of what we know is codifiable or "explicit", the vast majority of knowledge is "tacit" and uncodifiable, "stored" and "dispersed" in the staff and organization. By promoting collaboration, nurturing communities of practice and institutionalizing mentoring, PPC will be able to increase its ability to "harvest" some of the tacit knowledge residing in the collective experience of its staff and strengthen its intellectual capital.

Finally, the effort to package and disseminate knowledge, what in figure 1A, appears under knowledge diffusion, is a critical component of PPC's efforts to reaffirm USAID's intellectual leadership in international development. CDIE has experience in this area and it should be used as a key resource in the intellectual leadership agenda of the Agency.

CDIE and its various contract assets already provide a wide range of knowledge management services. They include:

- designing and carrying out sophisticated longitudinal evaluations of USAID programs,
- publishing and distribution of significant evaluation and policy documents,

- mining agency program documentation for significant lessons from experience,
- accessing a wide range of international and outside academic sources of information on social and economic development,
- responding to requests for information and preliminary analysis of specific topical issues,
- maintaining and accessing economic and social data from a variety of sources,
- maintaining and providing access to current information on agency results reporting on its portfolio,
- providing professional publication and editing services, and
- providing a means for acquiring specialized short term consulting services as needed by the Bureau.

The team assessed these existing assets to determine whether the existing infrastructure seemed adequate to support PPC's effort to exercise intellectual leadership for the Agency and host a "think tank" function designed to advance thinking within the U.S. on selected issues of economic development and foreign policy. The team's general conclusion is that the knowledge support infrastructure is healthy. The overall design and range of services available through CDIE direct hire and contract resources is comprehensive, oriented to the task of supporting policy level research and, perhaps within Bureaucratic limits, quite responsive. The acquisition instruments used to obtain outside contractor support are generally flexible, they provide "short order" channels to augment levels of service as needed for specific purposes, and they are generally of sufficient scale that contractors have an incentive to manage their CDIE relationship responsively.

At the same time, it should be noted that CDIE management decisions related to these resources is quite complex. Some of the complexity stems from agency legacy decisions. CDIE's contracts serve a variety of customers, both inside and outside the agency, and the contracts are receptacles of funds from other Agency operating units who acquire specific services through the PPC contract mechanisms.

While CDIE as a service organization excels and most of its users are happy and don't want any changes, we should note that PPC as an organization is perhaps less well served. A cursory examination indicates that while PPC provides more or less one third of CDIE funding, it consumes as little as 10% of its services.

In the year 2001 the average number of pages/month delivered by the system were:

- ***Basis (A DBMS system)*** (Agency Document) ranged from 10,000 to 25,000pages/month
- ***SAS*** **(Statistical Analysis System**) (ESDB data) ranged from 1,300 to 12,000 downloads/month
- ***SIRSI*** **(Library system)** ranged from 5,600 to 8,000 queries/month

Key services broken down by customer are as follows:

SERVICE	Customer PPC	USAIDCustomer	Outsiders	Totals
R&D > 1 Hr.	1160	3640		4700
R&D < 1 Hr.	770	7640		8400
Clearing House	500	18500	28000	47000
Library Circulation	400	2300		2700
Library Walk-ins	300	2200	500	3000

The average number of Mission sessions ranged from 200 to 900 per month.

FY2001 Cost of the above services (in thousands) was as follows:

SERVICE	**PPC FUNDING**	**Other USAID Funding**	LPA	Total
R&D	230	1040	80	1350
Statistic	640	387	255	1282
Library	380	400		780
Training	250			250
USAID Results	90			90

Despite the general health of CDIE as a decision support unit, it is not without some serious problems. From an IT point of view, while the present set of technologies is adequate, it will need to be expanded to properly support the proposed role of CDIE as a knowledge management support unit. These issues are more fully discussed in Section 6 of this report.

More to the point, CDIE's efforts to come to grips with this new environment have been hamstrung by the Agency's and the Bureau's own inability to think through the best uses of CDIE resources. CDIE has become an organization with poorly defined priorities with inadequate processes in place to establish priorities. Without clear directions, individual agendas became the basic modus operandi. The impact on CDIE contractors has been similar to that of the CDIE staff. Little effort has been made to maximize this resource, prioritize the work and ensure they focus on the right stakeholders.

Recent PPC efforts to place clear priority on policy research and intellectual capital represent an excellent opportunity to provide clear definition regarding CDIE's roles and priorities. To get the greatest returns from resources available to CDIE, however, will require ongoing front office involvement in setting the agenda for CDIE and ensuring institutionalization of this agenda in the work culture of the Bureau.

3. Development Information and Outreach (DIO) Review:

CDIE/DIO is responsible for providing a wide range of products and services for USAID staff and development partners. The division manages the USAID library; acquires, catalogues and makes available all USAID development experience reports; provides qualitative reference and research services; provides quantitative statistical data and research regarding economic and social measures of development. Its principal products include CDIE Online that provides desktop access to a broad range of PPC/CDIE information, products, and services. DEXS - The Development Experience System; USAID's desktop institutional memory database containing nearly 100,000 USAID-funded documents. Development Information Services - Statistics: Country level statistical data from international organizations across all development sectors as well as statistical measures of country development indicators of performance.

There are only two full-time staff in DIO so the majority of these services and products are provided by contractors. Because the complexity of the contract mechanisms, specifically the DIS – Development Information Services - (Academy for Educational Development - prime) and the DEC – Development Experience Clearinghouse – (LTS prime), presents both challenges and opportunities for PPC management, it is useful to sketch its nature.

In FY 2001, there were 10 Bureau buy-ins to the DIS/AED contract for a total of nearly $4.0 million of specific services. This is in addition to the negotiated level of services provided to 8 Agency operating units, totaling about $2.0 million, funded under the PPC core contribution of nearly $4.5 million.

Both DEC and DIS deal with a variety of customers from inside the Agency to other U.S. agencies, private and academic institutions, international organizations and private citizens. Examples of the services include library acquisition and management, web site design and maintenance, and tailored social and economic research services. The range is very broad. Those services can be and have been augmented by additional buy-ins for specific tasks, including academic symposia, etc.

Procurement Office backstopping for the PPC contracts is supportive at the management level. There is conceptual acceptance of PPC's need for the range of services now being provided and the need for a quick response mechanism to support the policy process. At the operational level, the PPC procurement backstopping (from M) suffers from a lack of continuity. The PPC contracts also are quite complex. They generally provide for buy-ins from Bureaus other than PPC. PPC core budget funded contracts provide services to other agency operating units and to a wide variety of customers outside of the agency. The two major contract mechanisms also have been awarded to a lead contractor and one or more sub-contractors. As a result, the procurement staff faces some internal dissonance between the merits of doing fewer, larger procurement actions, thus conserving their scarce staff resources and the difficulty of analyzing the bundling of services within PPC contracts that facilitate certification of "reasonableness of costs" as

part of contract awards. As key contracts come up for re-bid, PPC will want to work with the procurement professionals to minimize these tensions.

Effectiveness of the DIS reference services is dependent on access to USAID development experience information and data held and maintained by the DEC. IT compatibility is essential between the two contracts. Discipline in web site appearance and access routines also is a high priority since both contractors service many of the same customers. CDIE management has to be careful to integrate work in these areas and others (data quality etc.).

Within some of the limitations implicit in the complexities outlined, PPC management has the ability to augment the services that it receives from the CDIE knowledge management/decision support resources – even within current resource levels. There is some claim to additional services simply on the basis of comparison of the proportion of contract costs paid by PPC and the proportion of various services provided to PPC. While PPC finances around 25% of the AED total contract, it uses from 10 to 25 percent of the various services. But, the potential to command the time of contractor resources simply by setting policy research support priorities and tasks clearly should be explicitly managed.

4. Programs and Operations Assessment Division (POA) Review:

CDIE/POA is the central evaluation unit of the Agency. During the review process, the team asked members of CDIE and POA to describe their "system" including functions, processes and stakeholders and what their vision of the future would look like. During this activity, the team learned a great deal about the organization. The following section reflects much of the thinking that emerged from that session.

The current POA organization conducts evaluations to derive lessons learned from cross-cutting field and USAID/W development experience. POA then disseminates lessons learned to customers and partners through materials, workshops, conferences, and programming guidelines. The evaluations identify implications for the Agency policies and provide applicable guidance on the strategic plans and approaches for senior managers and operating units. The evaluations look at the impact and results of USAID programming in areas such as education, health, agriculture, democracy, environment, etc. They also evaluate the results of Agency operations such as in-country presence and cross-sectoral linkages.

The process that POA uses to determine which studies to conduct begins with the development of an annual evaluation agenda in consultation with USAID/W and field unit managers. The agenda includes issues of importance to senior managers or operating unit managers for improving Agency programs and operations. As one of the CDIE team wrote,

"Topics may address:

- The effectiveness and efficiency of Agency programs in contributing to Agency goals
- The effectiveness of operating unit strategies in achieving strategic objectives
- Positive, negative or unintended consequences or impact of activities or programs; and
- High-priority or 'state of the art' issues of concern to key managers and customers."

This is the process that must be redefined and led by PPC leadership.

Like CDIE/DIO, POA has several different kinds of customers. The first set includes USAID managers at *all* levels who allocate resources among competing demands within the Agency. Another set of customers includes operational and technical staff, who design and implement activities within the Agency. The last set of customers includes the broader development community such as donors, the academic community in particular areas, PVOs and partners with whom CDIE shares USAID's development experience.

The diversity of customers served by POA makes it difficult to assess the overall effectiveness of its studies. This diversity leads to a diffuse agenda with only loose relationships to other things underway in PPC. Even when the relevancy to other PPC efforts is high, there too often appears to be a "disconnect" between POA and, for example, the Policy Office that should link lessons learned from POA studies to changes in policy. Moreover, excellent research and evaluation work is now being done by the technical Pillar Bureaus.

Due to the above factors, it is hard to say what benefits would be gained by providing additional staff or program resources to POA. Thus, for more than a decade the resources to conduct the evaluations have steadily declined so that the number and utility of evaluations has also declined. Although the quality and integrity of the research has remained high, the timeliness of the research has diminished. Without a reduction in the quality of the work, each project has begun to take a very long time. Some projects now take as long as a couple of years. When a policy question needs to be addressed, there is rarely the luxury of waiting for the outcome of such an evaluation. Best guesses are made, and the quality of a policy recommendation may therefore be diminished since it may or may not be based on data.

Evaluation results play a key role in many policy issues and are a critical component of the Agency strategic planning process. However, over the last decade, the capability of the CDIE evaluation staff (POA) to plan, coordinate and carry out a substantial body of evaluation work has declined significantly. PPC/CDIE adjustment of the vision/mission for evaluation, in reaction to the decline of resources, has been minimal. The staff continues to try to manage an Agency-wide evaluation agenda, adheres to a labor-intensive model for conducting individual evaluations but is perceived to be less relevant to the PPC policy agenda.

The Review Team believes that the gap between Agency and PPC expectations for the evaluation function and the resources available to CDIE to meet those expectations is not sustainable. Expectations have to be reviewed, functions revised and resources adjusted to match. Within the Agency, technical offices seem to be taking the lead to meet a continuing demand for evaluation/lessons learned information. For example, a number of offices within the current Pillar Bureaus increasingly are publishing substantive lessons learned guidance and handbooks for their technical areas. In other cases, USAID is supporting partner institutions that are producing current assessments of USAID and other donor experience. (EGAT support for IRIS research, for example).

In the teams' view, the CDIE evaluation activities should support PPC's policy agenda and multi-sectoral linkages between the Agency strategic plan and program results. Responsibility for evaluation within technical sectors should be assigned to the Pillar Bureaus. CDIE may want to monitor results to ensure that significant findings are included in agency processes and guidance.

With a reduced set of expectations for the CDIE evaluation function, the Review Team believes that additional resources might be required to ensure that the evaluation function is responsive to and produces timely products for the PPC policy and strategic planning units. Resource increments could be in the form of additional staff and travel money to expand POA capacity or by adding funds to intensify the outsourcing of evaluation services. The management orientation and type of human resources needed for CDIE would differ depending on the chosen option.

5. Performance Measurement and Evaluation Division (PME) Review:

CDIE/PME works to strengthen and institutionalize strategic planning, performance measurement, and evaluation systems in the Agency through direct-hire and contract services and resources. Services include: technical assistance for Missions to develop indicators and refine results frameworks; and training in strategic planning, performance monitoring, and evaluation. Products include: the USAID Annual Performance Report (APR), Resources in Performance Measurement (available through CDIE Online or by direct request), TIPS, best practices, and other "how to" guidance, and the USAIDResults.org web site with tools and a discussion forum on MFR policy and implementation.

The CDIE knowledge management support services can and should serve all Bureau functions. The PME division of CDIE has unique assets that should be integrated with the Strategic Planning and Budget side of the Bureau. The longitudinal database on Agency results at the detailed level (R4) is housed and maintained in the DEC. The Price Waterhouse contract in PME has provided agency advice and assistance on benchmarks, trained hundreds of agency staff in results measurement and reporting and has significant experience in sorting and manipulating the Agency's data for various planning and reporting purposes. The potential for improved support of the Agency strategic planning

and budget processes by closer alignment of existing CDIE knowledge management support resources with the new planning and budget functions should be maximized.

In addition, the PME division, through the existing contract with Price Waterhouse Coopers (PWC), provides critical institutional support to the programming sections of the automated directives system. Maintenance of the procedures for how the Agency carries out assistance will continue to be a key PPC function, housed in the strategic planning and budget unit. CDIE, through the PWC contract, should continue to support this process. The PME division, through PWC, also has capacity to acquire short term assistance in support of overall PPC needs. The contract flexibility is a useful complement to existing capabilities in the DIS and DEC units.

The team found substantial agreement within CDIE that the training components of the PME/ PWC contract should be migrated to M/HR.

6. Information and IT Findings:

The team recommends that the Bureau transform CDIE from the present "soft" institutional memory/library/clearinghouse and "gentle" evaluation service image into a "hard" decision support and R&D support function. The new discipline of knowledge management diagrammed in section 2 (CDIE Overview) provides a framework for this transition.

In general, most of the information technology architecture presently supporting CDIE needs is adequate and in some cases excellent. The statistical package, SAS, used to house the economic and social database is an excellent and mature decision support tool. The library system, SIRSI, is a mature library system quite adequate for the library services.

Basis, the database engine, storing the Agency technical and program information is adequate to store CDIE information for the present time. However, its performance is less than optimal, and its functionality to support future and proposed new additional CDIE functions as a decision support service is less that optimal. In the long run, CDIE may need to migrate to a different database engine such as Oracle.

The only instance of the wrong tool is the use of Lotus Notes, a dated collaboration tool, now being used in a closed environment to maintain basically a Q&A service, with less than 200 users. In its new role, CDIE should leverage existing communities of practice, and nurture new ones in support of the R&D Agenda. CDIE knowledge workers would in some cases become the catalyst, knowledge brokers, and content managers for some of the new communities. More sophisticated collaboration tools are essential to carry out this new function.

While the present set of IT technologies is adequate, it will need to be expanded to properly support the proposed role of CDIE as a Decision Support Center. IT related recommendations are listed below. Most of the following recommendations will have to

be implemented in close coordination with IRM, the CIO, and the Business Transformation efforts being directed under the guidance of the Business Transformation Executive Council (BTEC).

- Migrate most of the CDIE servers to the198 network (the network that houses and supports the Agency public Internet site and Extranet sites.) Only 5% of CDIE data is Sensitive But Unclassified (SBU), 80% should be on Extranet (an Internet site that allows an enterprise to work with trusted partners - not open to the public) and the rest on the Public Internet.

- Convert the CDIE web page in the Intranet (165) into a portal to support Agency KM needs, as well as decision support needs.

- Convert the CDIE/DEC sites into KM "portal(s)."

- Use and adopt a powerful search engine, e.g. Autonomy, that will allow CDIE to search for information residing in internal servers as well as external information. This assumes a document management system will also be implemented.

- Adopt and implement a collaboration tool to support internal as well as external communities of interest and communities of practice. This would be a critical tool to capture "tacit" information.

Another set of changes in the information base from which CDIE works will also be required. Basically, the team recommends that the Bureau consider CDIE the focal point of all information support required by PPC. The following list represents a first cut at the kinds of new data CDIE will manage.

- Budget, associated financial data, and performance data should become a part of the domain of data CDIE will need to "nurture". A budget data mart (mini data warehouse) should be developed to allow linking budget, financial and performance data.

- CDIE should support HR to develop, deploy and maintain an internal inventory of DH expertise.

- Because the ADS is organized information defining all business processes of the organization, and hence an important source of knowledge, CDIE must continue to play a *significant* role in the management of the ADS process, including all issues related to metadata, standards and formatting.

Critical to the ability of CDIE to gather information, the Agency must implement a documents management system.

Critical to the ability of CDIE to succeed as a Decision Support Center and PPC to implement a rational and credible results budgeting system is the immediate need to

design and implement a well-defined process that will replace the R4. Even more important is the need to define a rational unit of observation that can be aggregated to satisfy most of the reporting requirements that the many stakeholders expect or demand. Without it, any attempt to normalize and correlate data becomes impossible. Once this new system is in place, CDIE should help establish a registry for all "units of observation".

7. Systemic Issues of the Agency Reflected in CDIE:

There are several human resources issues within CDIE that should be considered as the organization takes on its new role.

The defining characteristic of the Agency's human resource legacy over the past five to ten years has been the dramatic cutback in the number of staff. The downsizing of USAID has had a substantial effect on the Agency and how it goes about conducting its business. Reduced staff size in the first instance has resulted in a significant burden on those remaining to simply "keep the ship afloat." Adhering to changing internal procedures and ensuring adequate contractual oversight of program-funded activities have become the major focus of most USAID staff. Core functions of the Agency such as strategy development are often contracted out and other "less critical" functions, such as evaluation, are frequently dropped from an officer's busy agenda.

These human resource trends have impacted CDIE in ways similar to the overall Agency. In the past ten years, CDIE's staff levels have dropped significantly. The decline in staff size and corresponding reduction in funding has resulted in cutbacks in the scope and number of CDIE evaluations.

The reduction in both staff and budget has understandably led to some problems of *raison d'être* at CDIE, especially for POA. These problems have been exacerbated by a diminished role for evaluations in the Agency as more time and attention was given to performance monitoring and by the emergence of the technical units (formerly Centers of Excellence in the Global Bureau and now Pillar Bureaus) as major actors in Agency evaluations.

CDIE needs to take into account the significant evaluation efforts underway in other parts of the Agency in the development of its new agenda. POA work needs to be more policy driven and the more technical issues that can benefit from evaluation handed over to the Pillar Bureaus. The policy versus technical split is not a very neat one for the most part. One way to look at the comparative advantage of POA's evaluation work would be to have it focus on cross cutting issues, i.e., issues such as water or personal security that cut across the work of two or more Pillar Bureaus.

The DI division faces a different sort of challenge resulting from the rapid increase in internet use and the number of search engines that facilitate the kind of work the DI contractors have done in the past. On top of this, many of the technical units referred to above funded their own or their partners' websites to provide experts in the area up to

date and easily accessed information on their programs. In a similar way to what occurred in POA, these new developments resulted in some confusion of the mandate of this division. Here too, future priorities need to reflect the changed environment in which DI's core functions are carried out.

With all the work trying to design and implement "learning organizations," in the Peter Senge sense, the truth is that many organizations' cultures do not value learning or the knowledge it brings. Most of these organizations have not developed formal processes to share and use new knowledge acquired. Knowledge management can assist in this process, but only if senior leadership is willing to learn and use that knowledge. This requires an attitude that there is a need for new knowledge; that, no one has all the answers. It's what Senge's group calls getting out of "knowing" and into "learning."

Another barrier to CDIE's transformation is the "poverty" culture that pervades the organization. It can be quite dysfunctional. For example, there is the perception that communicating to the various audiences should never be too "slick." It is important that publications look professional. And, "the medium is the message." This attitude does not serve the Agency well. Somehow, it is considered appropriate that the Agency offices should reside in some of the most expensive real estate in Washington while at the same time there is physically not enough team space when team playing is considered a priority and most team conference rooms are ill equipped by any standards, e.g. no white boards with markers, electronic equipment, not even waste baskets!

There is a major crisis facing CDIE and the Agency, in general. As the keeper of the Agency's core knowledge, CDIE needs to creatively solve the problem that most of the Agency's tacit knowledge is in the heads of the people in the Agency and over the next five years, about half of that core knowledge will be retired from the Agency. The potential to conduct the business of the Agency may be jeopardized. This is an Agency-wide issue that must be addressed as soon as possible.

An organization's core competencies and knowledge are usually protected and ensured through intergenerational education and training within an organization. That is not necessarily the case with CDIE. Much of its knowledge is contained in the contractor's organizations. This situation can potentially be a problem if, due to downsizing or other pressures, these contractors are lost.

8. Findings and Recommendations:

Based on its review, the team's principal findings are as follows:

Finding No. 1 The New PPC: PPC is undergoing a major transformation. Some of the more important changes include the reorganization of the Bureau, the inclusion of the budget function in its mandate, a new emphasis on intellectual leadership, and more broadly the Business Transformation efforts which include a reexamination of the Agency's IT architecture.

Recommendation No.1: In order for PPC to fulfill its new mandate, CDIE will need to become more focused on PPC priorities. For example, CDIE's work plan should be policy driven and focus on themes directly related to PPC's research needs. CDIE should also be charged with providing a similar array of support services for the Strategic Planning and Budget Office. In order to carry out this later function, CDIE should be charged with the responsibility for serving as the IT overseer for the Bureau.

Finding No. 2: Leadership: The lack of clear directions has had several adverse impacts on CDIE. In the absence of such, competing individual interests became the defining principle for selecting areas of focus.

Recommendation No.2: The key to a more effective CDIE is providing the office with clear directions in terms of how it can best support the Bureau's core functions of policy research, strategic planning and budgeting. After reaching agreement on these directions a work plan should also be developed that clearly describes expectations related to progress on agreed to themes.

Finding No. 3 CDIE's Legacy: The three divisions of CDIE all serve multiple customers. The demands of its various customers and the value they place on CDIE services have made it difficult for CDIE to move beyond its role as a library, clearing house, institutional memory, data search and impact evaluation service. However, the external environment has changed dramatically since CDIE first began operations. The main differences include: the rapid rise in internet usage and ease of access to data; a shift in emphasis to performance monitoring to measure program results; the new role that the technical centers now play in identifying lessons learned and best practices to maximize investments in their respective fields.

Recommendation No. 3: CDIE needs to reinvent itself focusing on its role as a knowledge management service unit equipped with the tools of today's technology. CDIE has in place the basic foundation for this transition – high quality IT skills, a large body of qualified researchers and quick access to presentation expertise. PPC should establish CDIE as its knowledge resource center. In this capacity CDIE should have responsibility for enabling all parts of PPC to access relevant data. This role should be viewed not only in terms of the policy function of the Bureau but in terms of its role in the development and oversight of specific ADS chapters as well as its development and oversight of financial and results data. Enabling these various database systems to "speak" with one another will provide a new e-platform that should result in significantly increased efficiencies and greater collaboration within the Bureau.

Finding No. 4 Evaluation: Evaluation results play a key role in many policy issues and are a critical component of the Agency strategic planning process. The Review Team believes that the gap between Agency and PPC expectations for the evaluation function and the resources available to CDIE to meet those expectations is not sustainable.

Recommendation No.4: CDIE evaluation activities should be focused on supporting PPC's policy agenda and multi-sectoral linkages between the Agency strategic plan and program results. Responsibility for evaluation within technical sectors should be assigned to the Pillar Bureaus. CDIE may want to monitor results to ensure that significant findings are included in agency processes and guidance.

Finding No. 5 IT Infrastructure: CDIE's existing infrastructure provides, with minor modifications, a solid basis to support PPC's role as the Agency's new "think tank". In general, most of the information technology architecture presently supporting CDIE needs is adequate and in some cases excellent. In the long run, CDIE may need to migrate to a different database engine such as Oracle. The only instance of the wrong tool applied the wrong way, is the use of Lotus Notes.

Recommendation No. 5: The Bureau should prepare a plan for upgrading its IT infrastructure. A key component of this plan will be to provide training opportunities for CDIE staff to become more effective knowledge workers.

9. Implementing the Recommendations:

The evolution of CDIE as a PPC knowledge management support office will have to be actively managed. It will take time. Setting clear expectations that the knowledge management support role is the objective is an important first step. Clearly communicating the role and expectations to the CDIE staff will trigger latent energy and ideas among the staff and facilitate essential staff "buy-in". If experience is any guide, the most important and creative ideas for realizing the full potential of CDIE in the knowledge management support role will come from the staff.

To help begin the process, the team has identified certain actions under each of its recommendations that can be taken. Where specific actions will require additional analysis and justifications, we have tried to identify them.

Improving CDIE knowledge management infrastructure

The technical evolution of web based search and professional collaboration tools, which vastly expands the range of access of professionals to information, provides an opportunity for CDIE to begin to adjust its service model to customers. Over time, CDIE services, especially the library, clearing house and economic and social data, should be accessible directly by USAID professionals and other customers, requiring less facilitation from CDIE funded intermediaries.

CDIE staff should be charged with developing a strategy for the evolution of its service model.

The team identified several steps that we believe are consistent with the recommended direction of change in this area: For example:

- Move the server(s) that houses the DIS development experience files and other material to the (198) network, outside of the USAID firewalls defining the USAID intranet. This will facilitate customer access and, eventually direct searches of the material as well as facilitate maintenance of the databases by the Development Exchange Clearing house staff (DEC). Work with IRM staff to confirm feasibility and costs.

- Conversion of unique, paper-based, USAID Library collection of historical strategy, budget, congressional presentation, program and organizational documents into machine readable form to provide backup and broader CDIE/DIO and staff access to these materials to service research requests. (estimated costs: $200-250,000) As a corollary and offset, consider closing the physical library and giving up the mezzanine space in RRB. (Savings to be estimated) The new agency "virtual library" could be supplemented by more active use of the existing contract with the Library of Congress for hard copy books or, if necessary, with the Dept. of State Library. An additional list of improvements is attached in Annex C.

- Use the decision to scan the USAID library collection to drive a decision on standardization of document storage technology for the Agency, e.g. Adobe Acrobat.

- Within the next several months, CDIE should be tasked to develop and coordinate, within the Bureau, a detailed plan for the evolution of its IT architecture and business practices. The plan should be designed to enhance CDIE knowledge management and decision support services for the PPC policy and strategic planning and budget agenda. PPC management should carefully review the plan and present it to the BTEC. Such a plan will help balance the current focus on administrative and financial systems improvements with requirements for technological investments that will improve the Agency's policy and program processes.

- While investments in new search engines and "portal" programs that would facilitate user access to current information and the use of web based "communities of practice" techniques with partners outside as well as inside the Agency will have to be planned with IRM to meet corporate needs and will take time and training to be fully useful, CDIE should expand its efforts to pilot these techniques.

Support for Strategic Planning and Budget

- Establish a strategic planning and budget and CDIE team to review the CDIE program results database (R-4 data) and set requirements for manipulating the performance information as input into the strategic planning process. Revise tasking under the PWC contract to reflect new requirements.

- Review PWC performance and function in producing "Green Book" (U.S. Overseas Loans and Grants). Define budget office needs for historical information for presentations, education and public information.

- Review how existing PWC contract can support those requirements. Review needs for information support for current budget management tasks, especially presentation support. Analyze whether there is a role for contractor support of current needs.

- Strategic Planning and Budget should organize a working group to review the CBJ/ Annual Report process. Analyze the GPRA reporting structure and the database on agency results. Review current role of PWC in supporting the process and, based on recommendations of the working group, revise the support requirements as needed.

- Transfer the PME training function to HR.

- Merge contractor supported maintenance of the ADS chapters on program management into the strategic planning and budget office. Review role and need for continued contractor support.

Improved support for policy research and studies

- To help focus CDIE on the Bureau's agenda, PPC management should work with CDIE and the policy office to define the policy agenda in terms of specific research activities or analyses that CDIE management and contract managers can use to set priorities for core funded research analysis staff.

- As a model, CDIE – through its contracts – should be expected to establish virtual (research and data analyst) resources for new policy initiatives. This virtual resource could play a variety of roles, such as research assistance, community facilitator, new information resource/service promoter, resource librarian, activity coordinator, etc. This would also change the traditional researcher role from a solely on-demand resource to a pro-active participant/resource within a task group of value to the Agency. Within the contractor staff, this active node could serve to mobilize a variety of skills on behalf of the specific task.

Re-orienting the Evaluation Function

Expectations for the CDIE evaluation function need to be reduced. PPC should propose a reorientation of responsibilities for evaluation within the Agency. Pillar Bureaus should be responsible for technical evaluations designed to develop best practices within a sector to assess the outcomes of pilot programs. Regional Bureaus should be responsible for evaluation studies within countries that are intended to inform new strategies with lessons learned. CDIE's evaluation mandate should be focussed on cross cutting evaluations that are designed to inform the Bureau policy and/or strategic planning processes. Depending on the Bureau choice of adding staff to buttress CDIE evaluation capacity or adding

money to outsource evaluation production, CDIE management will have to assess staff skills and needs to effectively carry out the revised POA mission.

The Review Team would envision a change in operating style for the evaluation function. While some new evaluation exercises would be designed to respond to specific policy development needs, a CDIE knowledge worker would be part of each policy development team. They would mine existing Agency lessons learned, pull upon evaluation findings from other donors, from the Pillar Bureaus and from Regional Bureaus and Missions to help ensure that the lessons of experience are reflected in current policy work. New evaluation efforts, when warranted, would be carried out in relevant time periods, i.e. short. The normal modality would be to contract for the evaluation work with CDIE managing the contracts closely to ensure comparable results, produced in a timely fashion, which adhere to appropriate professional methodological standards.

Coordinating knowledge management support within PPC

Coordination of CDIE's knowledge management support capabilities with the users of their services will be very important as PPC seeks to improve CDIE services. PPC should establish a Bureau knowledge management team, chaired by CDIE, which would be composed of representatives of the policy, strategic planning and budget units and a front office representative. The objective of the group would be to focus on the demand for knowledge management support services and the capabilities, current and potential, within CDIE. The team would be expected to recommend improvements which could encompass Bureau operating modalities, CDIE investments in IT, defining knowledge management issues that require attention beyond PPC (perhaps through BTEC), etc.

10. Next Steps

There are five additional steps the team recommends the leadership of PPC consider:

- Commission the development of a strategy that outlines what the USAID "intellectual leadership" brand is and how to make it real. This first requires the development of an operational plan to create the PPC "think tank" and agreement on its initial agenda for research and policy studies. Section One of this report discusses in more detail suggestions for this initial agenda.

- Development of a communications strategy to support the creation of the USAID "intellectual leadership" brand. Knowledge diffusion tools such as symposia should form the basis of this strategy.

- Development of a process that formally links the external policy-making function to internal policy. As part of this effort focus on translating lessons learned from AID experience into internal practice recommendations.

- Ask each Mission librarian to forward the titles of major studies (not to exceed twenty) that have shaped the Mission's thinking on country development issues and priorities. These should be scanned into the CDIE repository, the Development Exchange Clearinghouse (DEC) database.

- Consider creating a transition team that meets twice a month to oversee how the changes PPC leadership is creating are working and ways to facilitate those changes as they come up. Consider having the Review Team meet with the transition team as facilitators and to offer suggestions.

Annex A

Organizational Action Plan Regarding Knowledge Management:

Knowledge Management is defined as the process of capturing and applying the collective expertise of the Agency and its partners to fulfill its mission. We describe CDIE as a knowledge management service unit and its main functions as supporting decision-making.

The power of knowledge lies in its role as a basis for action within an organization. The foundation of the organization is neither its physical assets nor the shape of its organization chart. Its foundation is an open system of information and a free flow of knowledge shared across functions by individual employees who use common processes and systems and communities of practice. Making decisions in an atmosphere or culture of shared knowledge (e.g., going from existing organizational knowledge to improved organizational knowledge) is to provide USAID better decisions regarding policy.

Knowledge Management is designed and dedicated to the learning process, to the development and distribution of information and knowledge, and to helping administrators move beyond facts and analysis to decision-making that incorporates broader understanding of the relevant environment.

Operational Definitions

The team has defined **Knowledge Management (KM)** as the process of capturing and applying the collective expertise of the Agency and its partners to fulfill its mission. This requires a learning, open culture.

In O'Dell and Grayson's *If Only We Knew What We Know*, **culture** is defined as "the combination of shared history, expectations, unwritten rules, and social mores that affects the behavior of everyone, from managers to mailroom clerks. It's the set of underlying beliefs that, while never exactly articulated, are always there to color the perception of actions and communications." They argue that of all the enablers of a KM organization, the culture is the most potent.

One of the most powerful ways that KM works is through **communities of practice**. This is because the most important knowledge in organizations tends not to go from top to bottom or from bottom to top. It moves laterally. Chris Turner, in Peter Senge's critical work on learning organizations, *The Dance of Change*, says, "By definition, communities of practice are not defined. They have no names, no formal memberships, and no status (in the organization.) But they move information." Organizational theorists call these loosely tied groups of people who have developed working relationships to accomplish their work the "informal organization." They frequently act as support networks for one another. They frequently mentor one another. Most

organizations rely on them to get the job done regardless of how the organization is structured or what its formal processes might look like. More importantly, most knowledge in organizations is transferred through communities of practice because each one builds their own "web of relationships."

According to Senge, **information** can be defined as "data with relevance to the receiver's situation, or in Gregory Bateson's well-known definition, 'any difference that makes a difference…' **knowledge** is the capacity for effective action."

Sharing knowledge implies that it is *diffused* through an organization and then used. In Everett Rogers' *Diffusion of Innovations*, he describes the sharing of new knowledge and innovations as fundamentally a social, intellectual process. That social process benefits by having available a competent IT infrastructure that facilitates the communications process.

The collegial culture of CDIE and PPC promote communities of practice and these need to be nurtured by leadership.

In order to utilize Knowledge Management, PPC leadership needs to:

- Develop a strong vision that is ennobling for PPC in its role for the Agency that creates a collective sense of purpose

- Establish a set of values that can guide behaviors

- Reinforce positive leadership elements:

    - trust
    - empowerment
    - personal responsibility
    - openness
    - focus on Agency-wide issues; not just functional issues

- Focus on operations and policy development simultaneously by developing collaborative relationships and cross functional teams

- Encourage current "communities of practice" to continue; understand they represent much of the informal organization and frequently share the most knowledge

- Believe people want to share their knowledge and experience – reward them for sharing

- Stress that collaboration replaces competition

- Teamwork replaces the individual; zero sum games are out

- In “right-sizing” the Agency

    - focus on core knowledge
    - focus on leverage
    - focus on value-added activities

- Reinforce the need to recognize PPC’s interdependence as a part of the “whole” Agency -- do not be compartmentalized by function when dealing with the whole

- Strive for both a strategic focus in addition to tactical focus – create processes that relate the one to the other

- Know that this is a journey requiring patience, courage, hope, constancy of purpose, and commitment

The O’Dell and Grayson work outlines five organizational capabilities that “set the stage for a successful culture of sharing, transfer, and change. These include:

- A process improvement orientation

- A common methodology for improvement and change

- The ability to work effectively in teams

- Ability to capture learning

- Technology to support cataloguing and collaboration”

The Review Team believes that most of these capabilities are already resident in CDIE, and in the Agency, in general in many places. Leadership needs to encourage and grow these capabilities.

Annex B

Selected Bibliography for Knowledge Management and Learning Organizations

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ANNEX C

Recommended IT Next steps (Short term 3- 6 months each)

The CDIE chaired PPC knowledge management committee should be charged with prioritizing these improvements.

A.1 The Challenge: CDIE's library has a large collection of paper based documents containing project information and, in some cases lessons learned, which is not searchable at the present time. Furthermore, there is a recommendation to close the library, because the number of visitors and users does not justify the cost.

The Solution: Scan and convert to computer based, searchable format, all key project and program related paper documents now being held in the library. Cost about $200K

A.2 The Challenge: Presently the servers containing CDIE data are within the Agency Intranet. Most of the users, and contractors working with that data are outside the Agency.

The Solution: CDIE should leverage the Agency Extranet. Its servers should be moved to the 198 network. Only 5% of CDIE data (budget related should remain within the Intranet (please note this is not a recommendation to move CDIE servers to contractor premises). Cost about $50K

A.3 The Challenge: At the present time only the CDIE contractors have access to USAID financed subscription services, to respond to queries within the Agency. Agency staff should be able to query directly a subscription service; there is no need to use contractor resources to formulate a query.

The solution: Negotiate site license access with key subscription services (e.g. Nexis-Lexis, Westlaw etc.) Cost about $200K

A.4 The Challenge: The Agency has no defined standards when dealing with the capture of document images. In some cases, the images are taking too much storage or transmission bandwidth. In some cases the document image cannot be read.

The Solution: Work with IRM, and AS, but take the leadership in defining and adopting an Agency wide standard document imaging protocol (Prototype $50K), and Adobe configurations at the desktop.

A.5 The Challenge: PPC/CDIE Management does not have a system to track ad-hoc requests for services.

The Solution: Adopt the present system IRM uses (Remedy) to track trouble reporting ticket to manage ad-hoc and walking demands for services. Develop a metric and reporting system to measure work time on each action or work unit. Cost about $50-100K

A.6 The Challenge: Too many CDIE resources are consumed in satisfying queries from users.

The Solution: Explore expanding self service by users in AID/W as well as the field (both time coverage as well as types). Cost cannot be estimated at this point.

A.7 The Challenge: One of the recommendations of this study is for CDIE to provide IT support to the new Strategic Planning and Budget Office. Not all of the NMS functionality was replaced by the Phoenix system; one of them was the Budget Module. Without a Budget system it is doubtful CDIE can provide meaning support to the new Budget Office.

The Solution: CDIE in close coordination with the Budget Office should start at least the requirements phase and analysis for a budget/performance system. Cost about $80K

A.8. **The Challenge:** A cacophony of models, attitudes and solutions exist in the collection of web sites comprising many of Agency Internet, Extranet, and Intranet, making the implementation of some Knowledge Management solutions a challenge.

The Solution: CDIE should work with IRM, LPA and the Pillar Bureaus to establish a working group to take a more synergetic approach to information content, and other design issues on all Agency Web centered activities on the Internet, Extranet, Intranet. No dollar resources.

A.9 The Challenge: For CDIE to properly support the Knowledge Diffusion activities of the new Policy Office within PPC, a tactical plan needs to be defined.

The Solution: Develop a tactical plan (1-2 years horizon) on recommended Knowledge diffusion initiatives (e.g. symposium, multimedia communications, workshops publications). Cost about $50K

A.10 The Challenge: The information about most of the Agency business processes is encapsulated in the Agency ADS. The ADS are “KM objects”. In general with few

exceptions (ADS 200) the ADS is being managed as "paper" that is stored on a CD-ROM. It is difficult to search and more difficult to use as a "knowledge" tool.

The Solution CDIE should take a leadership role in expanding the present "format" of the ADS. Pilot one instance of a 21st Century ADS, with hyperlinks, e-training modules etc. Transform the ADS into a source of learning about Agency business processes. (Reprogram $200K of the funds presently used for training)

A.11 The Challenge: It is a challenge today for the Agency to "know what it knows".

The Solution As part of the solution, CDIE should create a quick map of present Data/Information resources, including Agency sponsored websites, dedicated to the themes of the new R&D agenda (Failed States, Conflict, etc.). Cost cannot be determined at this point.

A.12 The Challenge: For many reasons the Agency is not ready to commit at this point in time to a well-defined solution for collaboration tools. However PPC will need to quickly "initiate" some communities of practice around some the themes reflected in their R&D Agenda.

The Solution: CDIE should develop quickly (explore service providers or the World Bank Global Knowledge Partnership solution) two or three prototype communities of practice dedicated to two or three PPC R&D themes. (Failed States and Conflict). A pilot attempt to use this technology to include a wide variety of interested professionals in an active policy discussion might require a maximum of 300-400 seats by subject at about $15-25/seat per month. The hardware/software cost for the GKP solution is about $70K.

Please note this would be a stop gap solution until the Agency defines its Architecture for portals and collaboration tools.

A.13 The Challenge: An inventory of expertise within the Agency is a critical success factor in the implementation of a knowledge management organization. The Agency lacks such an inventory.

The Solution: Use a modified staffing pattern report to start building in coordination with HR and Agency inventory of skills and practical knowledge, which individuals could maintain on their own through the Web (at the start self maintained). KM best practices are indicating that the ROI on investments made to create and maintain directories of expertise in particular in R&D related fields are quite meaningful. Cost about $100-150K