ECOS’ Skills Exchange Program Builds State Capacity for Business Process Improvement

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Executive Summary: In 2016, ECOS established a program to support state environmental agencies in offering peer-to-peer training and mentorship on Business Process Improvement (BPI) through short, in-person staff details. This program was modeled off of a successful independent mentoring arrangement offered by the Arizona Department of Environmental Quality. The first round of this program consisted of three staff exchanges taking place between September 2016 and February 2017. This report discusses the program’s design and implementation, and examines various aspects and potential applications of the peer-to-peer model for BPI capacity building.

Background

State environmental agencies have adopted a variety of business process improvement methodologies to help them improve services, cope with tight budgets, and perform their functions of protecting our states’ natural environment more efficiently and effectively.

ECOS uses the term “business process improvement” (BPI) to refer to a suite of business-oriented methodologies designed to streamline a given enterprise’s operations and achieve efficiencies in order to reduce costs and maximize shareholder value. Business process improvement includes a number of similar methodologies including Lean, Six Sigma, Kaizen, 5s, Kanban, Value Stream Mapping, etc. The term “Lean” is sometimes used as shorthand to refer to business process improvement in general. The majority of...
these methodologies have arisen and evolved over the course of the last 30 years, and have been applied throughout the private sector as well as in government.

With support from a 2016 cooperative agreement with the U.S. EPA Office of Policy, ECOS’ Innovation and Productivity Committee has conducted a number of programs and activities aimed at building state environmental agencies’ capacity to implement BPI. A major component of this work has been the development and testing of a skills exchange program blending BPI training and knowledge sharing components in the context of an individual, state-to-state partnership. The first iteration of this program paired BPI experts from experienced state agencies with staff from less experienced state agencies in a short (three-day) extra-agency training detail.

This concept was modeled off of an independent 2015 training visit between the Arizona Department of Environmental Quality (DEQ) and the Missouri Department of Natural Resources (DNR). Prior to establishing the Skills Exchange Program, ECOS had been notified by representatives from both of those agencies of the success of this arrangement. Prior to the establishment of this program, Arizona DEQ had also participated in mentorship and training activities with other state agencies, including the Arkansas Department of Environmental Quality.

**Application Process**

In the summer of 2016, ECOS posted a call for applications to the program. Nine states applied to be paired with a state “mentor.” Five lean facilitators and staff members from experienced state environmental agencies applied to participate in the program as mentors. ECOS reviewed the applications and selected three pairs of states based on compatibility in a number of factors including geography/EPA region, agency structure, the respective BPI experience or aspiration of the mentor or mentee, etc. When ECOS notified the selected states in late August of 2016, all three pairs accepted and began coordinating their respective exchanges within several weeks.

The preparation stage consisted of several calls between the facilitator, recipient-state coordinator, and occasionally ECOS staff. Each state pair began this stage by determining the needs and aspirations of the recipient state, and then used that definition to form a full, three-day agenda for the exchange. The duration of this stage varied, from one to five months, depending on the participants’ schedules and the needs of the recipient agency.

The below chart contains some basic information about the focus and timing of the three exchanges:
<table>
<thead>
<tr>
<th>Mentor State  (Staff + Projects Completed)*</th>
<th>Mentee State (Staff + Projects Completed)*</th>
<th>Dates of Staff Exchange</th>
<th>Background</th>
</tr>
</thead>
<tbody>
<tr>
<td>CO (Heather Weir – 42 Projects)</td>
<td>MT (Peggy MacEwan – 0 Projects)</td>
<td>September 21-23, 2016</td>
<td>MT has limited past experience with BPI and is looking to restart their engagement. CO has offered to mentor MT staff. Both states are in Region 8.</td>
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<tr>
<td>VT (Justin Kenney – 28 projects)</td>
<td>TN (Elaine Boyd – 14 Projects)</td>
<td>October 25-57, 2016</td>
<td>TN seeks to institutionalize its BPI culture through strategic planning and furtherance of BPI program implementation. VT expressed interest in supporting strategic planning and specifically referenced the cultural aspect.</td>
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<tr>
<td>IA (Jerah Sheets – 22 projects)</td>
<td>DE (Carla Cassel-Carter - 0 Projects)</td>
<td>February 7-9, 2017</td>
<td>DE wants general and department-specific BPI training and early BPI program development assistance. Jerah is an experienced (10+ years) BPI trainer and facilitator.</td>
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*Between 2010-2016 per ECOS BPI Survey Response

State Experiences

There were many common elements among the agendas that states developed during the preparation phase of the project: primarily general training and capacity-building activities for which the facilitators already had presentation materials. However, each program also contained activities that were customized to the needs of the recipient agency, often reflecting the specific topical focuses selected by the state pairs. The following paragraphs contain some specific highlights from the staff exchange programming.

Heather Weir (CO) worked with staff from the Montana Department of Environmental Quality (DEQ) to produce a high-level strategic plan to establish the agency’s BPI program. The plan included a timeline and performance tracking measures. Montana’s Deputy Director George Mathieus said of that experience, “Heather explained the information and helped us develop a process in a way that I could visualize success.” Four months after the staff exchange event, Montana DEQ reported that they are pursuing BPI projects focused on agency centralized services and select programs, and building expertise and resources to institutionalize BPI.
Justin Kenney (VT) gave a presentation to a small group from Tennessee’s cross-agency Customer-Focused Government Office during which he discussed the potential for IT solutions to work hand-in-hand with Lean business process improvements. Dr. Emily Passino, a member of this group, said that in past Tennessee lean events, “the focus for the teams was on the “$50” solution - how the processes could be improved in and of themselves without depending on an IT solution. By contrast, Vermont seems to… straighten out a convoluted process… [before] improving the IT program/infrastructure.”

In Delaware, Jerah Sheets (Iowa Department of Natural Resources) gave a three-day training event focused on Lean Applications in Government and Building a Lean Tool Box for a diverse group of staff representing all divisions of the Delaware Department of Natural Resources and Environmental Control (DNREC). Participants agreed that the
diverse content of Jerah’s practical training was helpful to them as new practitioners.

In post-event survey responses submitted by 75% of the DNREC participants, a majority rated the training as “excellent,” and every respondent said that they would recommend the Department offer this training to other staff as a way to build internal Lean capacity and support. “I now feel I can better assess areas within my Division to target for process improvements in a scalable fashion,” said one participant, “Not everything has to be a full Kaizen event.” Within a month after the event, several DNREC staff members who attended the training had set up Value Stream Mapping events for inefficient processes within their offices.

Analysis

The ECOS Skills Exchange program represents an effective avenue for BPI capacity building among state government agencies. The most common way for states to invest in their BPI activity is to hire a consultant, but the peer-to-peer model offers several advantages over this approach. The elements of trust and partnership afforded by the peer-based aspect of the program promotes enhanced outcomes from each engagement event, and the in-kind nature of the exchange opens up new and strategic opportunities for BPI promotion.

The peer-to-peer model promotes enhanced outcomes by leveraging the fact that when an agency provides a service to its peer, both sides benefit. Of course, all the states that applied to participate in the program as recipients did so because their leadership wanted to increase the agency’s capacity and/or activity with respect to BPI. From that perspective, any BPI training or strategic planning activity would satisfy a baseline level of value to the recipient state. The advantages of the peer-to-peer model for the recipient state, however, are as follows:

- **Accessible capacity-building assistance:** This program makes BPI planning assistance and training accessible to agencies that want to increase their investment in efficiency programs but are constrained by tight budgets or other considerations. Even if a state decides to set up a peer exchange outside the ECOS...
program (which is encouraged), this would still be much cheaper than hiring a consultant as the peer mentor is still donating her time.

- **Greater customization of shared BPI knowledge:** The state mentors in the ECOS program possess many years of experience as staffers at their respective agencies. In addition to their facilitator/trainer roles, some of them currently have responsibilities, or have previously held positions, in other program areas. The recipient states definitely view this long-term experience within the environmental regulatory field as an advantage unavailable with other facilitators.

- **Greater adoption of shared BPI knowledge:** As the recipient states have attested, their staff were more responsive and receptive to a staffer from a sister agency volunteering her time than they would be to a paid consultant. Staff-level skepticism is a significant, known obstacle to BPI culture change, so this feature combats an established challenge.

In exchange for its donated staff time, the experienced state agency often receives valuable information through the dialogue with a sister agency. ECOS’ hope in selecting organizationally compatible and geographically proximate state pairs was that the engagement from this program will develop into longer-term collaborative relationships around BPI. There is precedent for this type of relationship: several years ago, the EPA Region 7 states established a robust, region-wide “Lean network,” through which the various state agencies and EPA regional office share facilitators, lessons learned and other resources. Several of the states involved in this program have already expressed interest in future collaboration, irrespective of the continued availability of ECOS support.

Beyond the direct value to participant states, the peer-to-peer model offers strategic advantages to any stakeholder- US EPA, regulated community, or other- interested in promoting efficiency and responsiveness in the nation’s environmental agencies. The relatively small amount of financial support for state travel and program activities can drive larger state investment in efficiency and performance where it is most needed—among agencies that would not otherwise be making these investments, either because of tight budgets, organizational culture, or other concerns.

**Conclusion**

Based on feedback from participants and multifaceted engagement with state leaders, ECOS is attempting to refine and develop the peer-to-peer model. ECOS is preparing to initiate a second round of exchanges, some of which may be used to evaluate other potential niche applications to maximize stakeholder value. Possibilities in this vein include establishment of a regional state BPI network modeled after the EPA Region 7 states’ arrangement, mentor facilitation of a specific mentee-state BPI event, exploration of novel ways to complement BPI contractor support with peer-to-peer engagement, and
incorporation of tribal or EPA regional office personnel in a peer-to-peer event.

ECOS believes that this program occupies a very valuable place in its portfolio of BPI support to its state members, along with ECOS’ online database of completed state projects, webinars and published reports, and national meeting BPI programming for state environmental commissioners and BPI program directors. ECOS also hopes to grow the BPI Skills Exchange program as long as demand among our member agencies continues.

Acknowledgements

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For more information on the state peer-to-peer event, including requests for participant state contacts and application forms, please contact Owen McAleer at ECOS (omcaleer@ecos.org).