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Making Rapid Change: Leaning 4-H

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Making Rapid Change: Leaning 4-H

Abstract

Nationwide, Extension is restructuring and searching for efficiencies due to reduced funding. When American Recovery and Reinvestment Act funds became available, the Iowa 4-H program used the funding allocated to support training the administrative team and key staff to improve 4-H statewide processes. Building a "lean" culture of streamlining processes and eliminating waste through the use of kaizen events helped redirect funding for priority work, as well as create team spirit.

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Nationwide, Extension systems are restructuring and searching for efficiencies due to reduced funding. An important action to help organizations grow capacity and thrive during change is to encourage employees to take active roles in the change process (Smith & Torppa, 2010; Lyons, O'Neill, Polanin, Mickel, & Hlubik, 2008). These active roles have generally been associated with assisting the organization with increasing revenues and planning processes. Lean is a practice that assists organizations with reducing waste and inefficiencies, and it appears unexplored in the Extension system literature. Building a Lean Team, as Iowa 4-H has done, streamlines processes and eliminates waste, but, more important, generates team spirit committed to continuous improvement through empowerment and ownership of new solutions.

Lean, a system of rapid continuous process improvement, was developed in post-World War II Japan (Wolmack & Jones, 2005). Lean methods include Six Sigma, the 5-S method, value stream mapping, and kaizen events (Wolmack & Jones, 2003). A kaizen is a carefully designed 2-5 day event that begins with pre-event preparation and ends with system change (Melnyk, Calantone, Montabon, & Smith, 1998). It is a rapid change event with selected staff helping make decisions to benefit the organization and committing to implement changes (Martin & Osterling, 2007).

The Kaizen for Leaning Iowa 4-H

Extension in Iowa was restructured due to reduced funding, and 4-H embarked on creating a lean culture. American Recovery and Reinvestment Act funds supported this process. Administrative 4-H staff worked with a consultant to learn about lean and specifically the kaizen process.

Iowa 4-H adopted kaizen events to improve statewide organizational processes. The processes chosen for improvement were perceived as burdensome, confusing for clients, requiring unnecessary paperwork, or a detriment to program growth. Iowa has "leaned" five processes: statewide livestock paperwork, project material purchase and selection, state fair classes, volunteer training, and state scholarships.

The Iowa 4-H Kaizen Process

A successful kaizen starts with a careful and thorough review of the process and planning the event. Questions answered during discussion are:

- What process appears wasteful?
- What issues could result from the process?
- What issues could pull the group off track?
- Who should attend the event?
- What is within and outside of the scope of the Kaizen event?

These items are discussed by the facilitator (either an external or internal consultant) and a 4-H unit champion, prior to the event. The champion has decision-making authority for the process being leaned and understands and supports the kaizen process.

The last question sets boundaries for the process so it does not become cumbersome. Seven to 10 clients and stakeholders are invited to the kaizen event. Selection is based on who is affected by the process, dislikes or likes the current process, has new ideas, and has history with the current system and who will have to support or use the new process. The process requires people who can analyze information but not become paralyzed by needing more information to make a decision. Action-oriented people are included but not at the expense of making change solely for the sake of change.

4-H kaizen members consist of campus staff, field staff, county staff, volunteers, and youth closest to the process.

A process holder is designated to assist with the kaizen. This staff member is responsible for the current organizational process being examined and must be committed to following through with group decisions. Every member of the kaizen team has an equal voice, so the facilitator and champion closely monitor dissension and balance participant power and voice. Usually the kaizen agenda includes:

- Defining lean and what constitutes waste
- · Setting boundaries
- Identifying affected clients

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- Mapping the current process
- Brainstorming potential solutions
- Reaching consensus on solutions
- Developing procedures and documents to operationalize solutions
- Developing communication plans to share with clients and stakeholders

The pre-event work ends with gathering data. This includes costs, statistics, time use, survey data, or compiling other evidence to represent client perspectives.

Midway through the kaizen event, waste in the process under examination is identified, and a solution revealed. This may include financial costs, over-processing information, unnecessary transportation and handling, waiting time, confusion from missing or misinformation, or underutilized human potential. The waste discovered during the kaizen event adds up quickly and results in either cost or time savings.

A crucial contributor to a successful event is the commitment of 4-H decision-makers to share decision-making equally with all participants. The principles and values of the organization, including 4-H outcomes, are the foundation of the kaizen process, so actions and processes are aligned with outcomes. Other factors that contribute to success include detailed pre-event planning, expert facilitation, and participant commitment.

Kaizen Results

In lowa during the project materials kaizen event, solutions resulted in savings of \$100,000 a year. During the event, over \$700,000 in publications inventory, excess transportation of materials, and unacceptable wait time for clients were identified. Ordering materials stopped, and current inventory was distributed across the state. Substantial staff time was saved by creating a brochure and webpages for clients to order curriculum directly from the original source. The scholarship process event revealed that \$30,000 of resources was spent to distribute \$75,000 in scholarships. New processes were developed to better use existing technology and to engage volunteers, significantly reducing staff time, printing costs, as well as applicant time. The livestock kaizen resulted in on-line animal identification, state fair entry, and FSQA certification, with a goal of saving at least 50% of the staff time managing these processes and eliminating all paper and wait times.

Summary

Benefits of kaizen events to Iowa 4-H include saved time, teamwork, and more efficient practices. Kaizen events are conducted in a very short time, and changes often save both staff and client time. Teamwork results because participants work on important tasks that benefit the whole system, and they are empowered to make changes. More efficient practices result in increased opportunity for staff to engage in core mission. Adding lean and specifically kaizen events to help redesign current processes holds great promise for 4-H programs.

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References

Lyons, R., O'Neill, B., Polanin, N., Mickel, R., & Hlubik, W. (2008). Proactive planning to address budget shortfalls: The Rutgers Cooperative Extension experience. *Journal of Extension*, [On-line], 46(4) Article 4FEA2. Available at: http://www.joe.org/joe/2008august/a2.php

Martin, K., & Osterling, M. (2007). *The Kaizen event planner: Achieving rapid improvement in office, service, and technical environments.* New York, NY: Productivity Press.

Melnyk, S. A., Calantone, R. J. Montabon, F. L. & Smith, R. T. (1998). Short-term action in pursuit of long-term improvements: Introducing kaizen events. *Production and Inventory Management Journal*, 39(4), 69-76.

Smith, K. L., & Torppa, C. B. (2010). Creating the capacity for organizational change: Personnel participation and receptivity to change. *Journal of Extension* [On-line], 48(4) Article 4FEA1. Available at: http://www.joe.org/joe/2010august/a1.php

Wolmack, J. P., & Jones, D.T. (2005). *Lean solutions: How companies and customers can create value and wealth together.* New York, NY: Free Press.

Womack, J. P., & Jones, D. T. (2003). Lean thinking. New York, NY: Free Press.

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