ECOP Technology and Innovation Ad Hoc Committee Report
September 29, 2017

Extension plays a significant role in rural, urban, and suburban life with offices located in most of the nation's 3,000-plus counties. If we are to continue to provide solutions to problems and improve the quality of life in the 21st Century, we need to continually change and adjust. In other words, Extension must continue to innovate.

As a result of the *2016 ECOP Innovation Task Force Report*, ECOP (Extension Committee on Organization and Policy) charged the eXtension Foundation with leading a short-term committee to (1) examine the technology aspects of innovation, and (2) recommend ways to implement and use the *Horizon Report* along with any further ECOP actions. The Committee's objectives were to address the three recommendations from the ECOP Innovation Task Force addressing technology and innovation: (1) promote innovation in Extension leadership; (2) create a culture of innovation; and (3) innovate learner engagement.

The Committee used the definition of innovation from the *ECOP Innovation Task Force Report*: "Innovation is the process of improving, adapting, developing, or creating a new product, system, service, or process, large or small, to deliver better results, create value for people, or move an organization forward."

The primary conclusion of the Committee is that **technology does not result in innovation**. Adding technology without also changing organizational culture creates a "bolt-on" model of innovation that does not create the intended transformation, and ultimately increases costs with no return on investment. The Committee recommends four strategies for Extension leadership and the eXtension Foundation, and proposes one recommendation for ECOP action.

RECOMMENDATION #1: Extension Leaders: Foster and Reward Internal Innovation
RECOMMENDATION #2: Extension Leaders: Address Priority Cultural Barriers to Internal Innovation
RECOMMENDATION #3: Extension Leaders: Focus on Learner Engagement
RECOMMENDATION #4: eXtension Foundation: Strengthen the *Horizon Report*

RECOMMENDATION FOR ECOP ACTION: Charge eXtension with using its Impact Collaborative to help Extension leaders implement this report's recommendations.

The Committee's recommendations for Extension leaders, the eXtension Foundation, and ECOP are the result of deliberations on three objectives from the *2016 ECOP Innovation Task Force Report* addressing technology and innovation. The Committee met between June 2017 and September 2017 over the course of four virtual meetings with online collaboration on meeting notes and the final report.

Objective 1: Promote Innovation in Extension Leadership

What makes it difficult to innovate in Cooperative Extension?
Many of the barriers to innovation identified by the Committee are indicative of an **efficiency culture in Extension**. Tim Brown, in his book *Change by Design,* states that cultures of efficiency (which is what we currently have in Cooperative Extension) have a difficult time providing the time and the budget for exploration and creativity. As a result, our Extension system may only engage in incremental improvement on what is already being done. It is not enough to have a few creative people or innovators. Instead, devoting time and budget into activities across the organization that may, or may not, lead to doing things better should become a priority for Cooperative Extension Leadership. While new innovations may fail, failure should be viewed as an opportunity to learn from mistakes and build for the future even if it is not viewed as efficient. Clayton Christensen supports this view of the barriers within efficient organizations and recommends that innovation take place in separate business units, operating outside the core business model.

RECOMMENDATION #1: Extension Leaders: Foster and Reward Internal Innovation
Inside our organizational cultures of efficiency, the Committee's priority issue is that Extension Leadership foster and reward internal innovation. **We defined internal innovation as measureable change in the growth and learning of co-workers that fosters the desire and capacity for innovation and positively affects external impact. In other words, we must make innovation count internally.** Technology itself is not going to change out dated mindsets. The culture must change first, and that begins with both leadership and grassroots change. Visionary leaders must be the force to drive and encourage innovation and provide a broad, visionary framework in which Extension professionals are encouraged and rewarded for a variety of innovative actions. Vision involves being able to see "what's coming next" in the external environment and being able to adapt, change, and innovate.

Objective 2: Create a Culture of Innovation

RECOMMENDATION #2: Extension Leaders: Address Six Priority Cultural Barriers to Internal Innovation
We prioritized six Extension processes and values that are barriers to internal innovation and developed potential top down and bottom up solutions for overcoming each one:

1. **Performance Measures Rewarding Innovation**. Committee members shared a prevailing perception that innovation activities are not counted in Extension career advancement, promotion, and tenure. Suggestions for addressing this cultural barrier include:

- Making innovation activities count in career advancement, promotion, and tenure as part of existing activities, not as a stand-alone or add-on measures.
- Ensuring peer review recognizes digital scholarship. Digital scholarship is the use of digital evidence, methods of inquiry, research, publication and preservation to achieve scholarly and research goals.
- Integrating digital activities into reviews, such as social media metrics, and using reports from eXtension's Learn application to report on webinars delivered and taken.
- Defining "impact" to include innovation and finding new ways to measure impact that make innovation count.
- Encouraging innovation professional development at all phases of the career lifecycle.
- Including innovation in stakeholder evaluations of Extension, such as evaluations conducted by local Extension Advisory boards.

2. **Modes of Thinking/Mindsets.** Organizational culture is made up in large part by mindsets, habits, and ways of thinking. The Committee observed that innovation is seen as an "add-on" activity in Extension organizations. Suggestions for changing this include:
   - Making innovation a stated value in the organization.
   - Promoting a work culture where professionals' failures are accepted as part of the learning process. Extension could consider models such as FailFests - day-long celebrations of failures built on the idea that innovation and success are possible because of our failures.
   - Making creative fun and play, which are part of innovative work cultures, a demonstrated value and a work outcome.
   - Making it a priority to spend time dabbling or exploring what's possible as part of a culture of innovation.
   - Hiring and rewarding motivated people who are not afraid to take risks.
   - Encouraging professionals to seek continuous learning opportunities rather than requesting training.

3. **Space and Reward for Working Collaboratively.** Organizations that value innovation also value collaborative work. We acknowledged that the prevailing way that work is done in Extension is individuals working alone in their home counties, not in collaboration with others. Suggested solutions to this include:
   - Hiring professionals with a demonstrated, effective ability to collaborate and work on teams, in person and virtually.
   - Providing organizational structures and evaluation that rely on effective collaboration and teamwork; not enabling isolated islands at the county level.
   - Investing in, and using, physical spaces and processes that co-locate and foster co-creation, and the blending of traditional roles and tasks with designers, innovators, leaders, researchers, specialists, and implementers. For example, project spaces and team rooms; spaces where project artifacts like flip charts and post-it notes can stay on

the walls until the project is finished; technologies such as virtual whiteboards that enable people at a distance to participate in the collaboration space.

- Creating virtual venues for collaboration to foster co-creation and the breaking down of silos. For example some are using Yammer, Slack, and Basecamp.com for small group discussion and collaboration. The Southern Region Information Technology group, the University of Florida and the University of Georgia use Zoom for collaboration, not just for presentations. Fort Valley State University Cooperative Extension agents use Google Docs for collaboration and document sharing. University of Wisconsin uses Google Hangouts for 400-500 hangouts per month. Purdue use Facebook groups and Facebook pages for internal communication to share ideas and ask questions, and schedules virtual sandbox sessions five times per month. This way faculty and staff can drop in and see what each other is doing related to new or existing technologies. Cornell University has a horticulture specialist available on Google Hangouts or on Zoom. Some of these platforms can be sources for process analysis for research and scholarship.
- Holding frequent informal and engaging events and interactions, other than traditional conferences, to encourage collaborative innovation. Examples include hackathons, designathons, unconferences, and demo days to promote and support social learning. University of Tennessee Extension hosts annual Family and Consumer Sciences (FCS)"showcases" across its three regions where FCS Agents and Specialists have opportunities to share how they're working in innovative ways.
- Utilizing processes that iteratively generate ideas, build consensus around them, and support implementation (and continuously repeat this process - not always in a linear fashion). For example, Kickbox and Innovate Extension events were piloted by the eXtension Foundation, The Ohio State University and Utah State University, and then were delivered to North Dakota State University, Oregon State University, and the University of Delaware.

4. **Shared Knowledge and Practices.** Innovative organizations make it easy to build on the shoulders of others by sharing ideas, successes and failures, new ways of working, promising models, and up-and-coming solutions. It is easier for something to catch on when there is a demonstration of impact that shows that the innovation can be successful and benefits community members. The Committee saw a need to overcome barriers to awareness and adoption of potential solutions and innovations by better sharing those that exist internally and across the Extension system. Solutions include:

- Promoting particular methods or resources once return on investment has been "validated" by early adopters. Later adopters would consider these a reliable source on which to base decisions about trying new methods. The forthcoming "Special Issue on Innovation" of the *Journal of Extension,* sponsored by the eXtension Foundation, is one example of using a formal publication to validate and share promising and proven practices. There may be a need for a new journal, such as an *Extension Journal of Innovation*, that would document innovation with peer-reviewed and published articles, recognize innovators, and provide incentive to continue to advance and to share with

others. In a regional example, Tuskegee University, Fort Valley State University, and North Carolina A&T, are in the process of piloting monthly technology innovations and tips for the 1890 Region beginning in 2018 to demonstrate innovative ways of incorporating technology in the workplace.

- Creating short-forms for sharing such as Tip of the Day; a 15-minute coffee break webinar series offered by the American Evaluation Association; and 3-Bullet Thursdays like the Ed Tech Learning Network offers.
- Showcasing innovative practices that are in the early phases: sparks and "a-ha moments" that others can build upon.
- Promoting "living out loud," inspired by John Stepper's book *Working Out Loud,* which is learned through 12-week Learning Circles fostered through the eXtension Foundation.
- Passively capturing what is done repeatedly and turning it into a resource that can be discovered and used. One example is the collection of answered questions in eXtension's Ask an Expert application. Another example is the University of Tennessee's archived webinars on its internal website for commonly requested content such as mental health resources and parenting resources.
- Encouraging and rewarding faculty and staff to document their processes, not just their results.
- Curating digital collections of resources, such as Cornell University's one-stop website for FCS people with recorded webinars, program documentation and agenda-planning; University of Maryland's one-stop shop on a wiki for agents; the resource toolkit on the web created by the ECOP Rapid Response Team for Civil Dialogue; the University of Tennessee Extension's digital asset database of crowdsourced royalty-free images and related content. These web resources can also provide data on usage.
- Considering new roles, activities, and partnerships or collaborations for professional associations in promoting innovation.
- Partnering to learn and implement new ways of doing things with people and organizations outside of Extension.

5. **Daily Work that Fosters a Culture of Internal Innovation.** The Committee acknowledged that habits and norms of how work gets done on a daily basis limits innovation processes in Extension. Solutions include all those listed above, and these additional items:
    - Using meeting structures that are open-ended around a shared focus or outcome, or that enable collaborative work and "thinking outside the box" rather than a task-oriented agenda. Meeting facilitation training may be needed, particularly for doing this in virtual environments.
    - Allowing and rewarding time for reflection, exploration, and creative thinking. For example inner-life teaching cohorts where three hours each month are spent reflecting with colleagues; accountability-partner check-ins, including meeting with those that work outside of a person's field of expertise.
    - Allowing and rewarding time to experiment and time to implement an innovation. Time has to be invested in professional development and training. Mini-sabbaticals of two weeks are just one example of what can be offered to accelerate the adoption of innovations.

- Promoting a culture of learning, instead of a culture of training. Creating a culture of individual responsibility for seeking out new information, learning opportunities, and formal professional development, rather than asking for system-created resources, and promotes both continuous learning and divergent thinking. Both are critical aspects of a culture of innovation and place less burden on organizational development units.
- Utilizing people and organizations outside of Extension, and outside of colleges and universities, for new thinking and for professional development. For example, attending the annual Consumer Electronics Show for ideas and new products.

6. **Financial Investment and Commitment from Leadership**. The Committee recognizes that financial investment and social "lifting up" by leadership is a strong signal for what an organization truly values. Potential ways to use this to promote internal innovation include lifting up the previous solutions and these additional items:
   - Funding dedicated to innovation-support personnel (this can be a shared resource across institutions, or an internal investment).
   - Funding a design thinker to serve on the leadership and administrative team.
   - Busting through the barriers of existing workload and human capital constraints.
   - Officially communicating internally and externally about innovation processes and innovative work, failures and success stories, using the failures to illustrate how learning is expanded.
   - Being strategic and politically savvy in keeping traditional clientele happy, while also bringing in new audiences and innovations.
   - Using innovation instruments to determine meaningful progress on innovation indicators (for example, the IDEO Creative Difference instrument or the Innovation Strengths Preferences Indicator (ISPI)).
   - Investing in innovative ideas. For example, the North Carolina Cooperative Extension Service offers Innovative Grants each year on a competitive basis, allowing selected innovative proposals to be realized on the county level. This permits bottom-up innovation to be funded and implemented that likely would not be accepted or practical to attempt on an organizational level without first being piloted. One such grant in the mid-1990's permitted development of the first documented Extension Distance Diagnostic Lab with Internet microscopy. This is an application of technology that has now become a standard practice in counties and Extension systems nationwide, and has had significant, wide-spread impact on Extension plant pathology and entomology in many states.

Objective 3: Innovate in Learner Engagement

RECOMMENDATION #3: Extension Leaders: Strengthen Focus on Learner Engagement

In addition to the six priority cultural barriers to innovation, are barriers to product and service innovation. The Committee focused on learner engagement as its top priority to address changing and diverse audience needs and rapid-expansion of digital learning venues. It suggests these solutions:

1. Defining engagement, developing appropriate metrics, and evaluating for true engagement. University of Maryland, for example, plans to have a new "counting" system in place in 2018 to measure engagement and reach through many of the social media platforms.
2. Inviting co-creation and collaboration, and client contributions, not just expert-to-novice interactions. Examples include Utah State University's Founders Weekend event and Oregon State University's Global Campus.
3. Utilizing models like Implementation Science and Community Based Participatory Research. An example is the University of Tennessee's work with the Center for Disease Control 1415 grants translating community-based participatory research into practice via meaningfully-engaged community coalitions.
4. Listening deeply to existing and to new audiences, and engaging them in planning; not presuming that they don't use or don't want to use technology, or that they don't have access to technology.
5. Enabling new forms of engagement that go beyond what is possible by one person with no support. For example, online learning and mobile learning can be huge opportunities but we need people dedicated to producing learning for these platforms. Developing online courses (and for mobile formats) takes time and money for the appropriate talent, and/or creative team designs to staff the variety of roles. University of Maryland Extension, for example, is now using the tools and support that the University offers its for-credit students.
6. Speeding up decisions on choices for platforms. Waiting for a consensus-based campus decision delays innovation in Extension. Enable piloting and testing while the campus decisions are being made. eXtension Innovation Fellowships and Innovation Projects are venues to consider for exploring new technology applications and shortening the development timeline.

RECOMMENDATION #4: eXtension Foundation: Strengthen the *Horizon Report*
We recognize the first *Horizon Report for Cooperative Extension* as valuable to the Extension system and we believe it can be made even stronger with the following additions:

1. Increasing awareness that the *Horizon Report* exists.
2. Helping readers see the path forward for each of the Horizon technology items:
    a. Finding and including more examples in Cooperative Extension and beyond so the trends are more actionable.
    b. Adding a readiness section to each of the Horizon items. Some of the technologies are perceived as "too far out."
    c. Adding resources that support the how-to process to encourage trying and adopting these new ways of working.
    d. Identifying new skills and talents needed to implement the Horizon items along with recommendations as to where and how to develop these skills.

Conclusion

RECOMMENDATION FOR ECOP ACTION: Charge eXtension with using its Impact Collaborative to help address this report's four recommendations for Extension Leaders.

Over fifteen years ago, eXtension was created by Cooperative Extension directors and administrators for the system to build its own innovation capacity. In the early 2000's, the focus was on tools for digital publishing and collaboration through Communities of Practice. Today, the eXtension Foundation facilitates innovation through its new model - the Impact Collaborative. This unique flagship program includes innovation fellows, innovation projects, and learning networks, while also developing new resources and partnerships. The eXtension Foundation's most important role today is successfully fostering working differently to achieve local impact through the Impact Collaborative. Extension leadership at all levels can leverage this unique system-wide capacity even more by using the Impact Collaborative process to foster the values, processes, and grassroots changes needed to accelerate innovation in their organizations. As a separate business unit with a different business model embedded within the Cooperative Education System, the eXtension Foundation can serve an even stronger capacity-building role for the system as [Clayton Christensen's research](#) suggests.

This report is respectfully submitted by the ECOP Ad Hoc Technology and Innovation Committee

Co-Chairs:
Barbara Petty, University of Idaho
Christine Geith, eXtension Foundation

Members:
Patricia Dawson, Oregon State University, JCEP
Thomas Dyson, North Carolina State University
Greg Johll, University of Wisconsin
Teresa McCoy, University of Maryland
Nancy Ooki, University of Hawaii
Daphne Richards, Texas A&M
Vonda Richardson, Florida A&M University, ECOP Personnel Committee
Jamie Seger, Ohio State University
Jeff Sherman, Oregon State University
Jamila Simon, Cornell University
Heather Wallace, University of Tennessee
Terrence Wolfork, Fort Valley State University
Ryan Wynkoop, Purdue University