

## Special Issue on Innovation 2018

### Jobs to Be Done: An Innovative Needs Assessment Method for Supporting Extension Product and Program Design

#### Abstract

Needs assessment in Extension is typically a quantitative process whereby the highest number of votes is deemed to indicate the greatest need. However, this process does not help specialists and county agents know the best response to carry out. A different process is needed to ensure that we in Extension are executing the right responses. In implementing the "jobs to be done" framework, an Extension professional conducts interviews with a small number of audience members to determine the content, kinds of media, and delivery model that will "do the job" for the audience. This article details three cases in which application of this tool supported information product development.

**Keywords:** [jobs to be done](#), [needs assessment](#), [educational publications](#), [information products](#)

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## Introduction

Extension is in direct competition with a growing number of information sources and education providers seeking to improve learners' lives with relevant, timely information backed by research. Information sources and education providers who do an effective job for their audiences will thrive; those who fail to do the job will struggle (Christensen, Hall, Dillon, & Duncan, 2016a).

So how can Extension maintain its position as the most relevant, trusted source of information for our core audiences? We in Extension must deliver the information and education products—websites, fact sheets, workshops, seminars, online courses, and so on—that do the jobs our audiences need them to do. Extension-provided information and educational products "do the job" for the many audiences we serve in varied ways, such as by helping families learn healthful eating behaviors via evidence-based programs (Kim, 2016), supporting job performance for pesticide applicators via continuing education (Young, 2017), supporting decision making among

young farmers and ranchers via curation of resources by agricultural economists and agronomists (Davis, Mark, & Shepherd, 2018), and increasing the volunteering capacities of master gardeners and master naturalists via competency-based training (Newberry & Israel, 2018).

One way to ensure the continued value of Extension programming is through well-designed needs assessments. Traditional means of transforming needs assessment data into program improvements involve Extension specialists' and county Extension agents' reviewing mostly quantitative data and selecting programs according to what amounts to popular vote (Carpenter & Dudensing, 2017). This method may identify prominent needs, but it does not identify the jobs our audiences most need Extension products to do.

To address this gap, I tested the "jobs to be done" (JTBD) framework. This innovative needs assessment tool complements and extends traditional needs assessment by identifying exactly what audiences need from Extension information products, allowing us to provide more effective products.

## The JTBD Framework

Innovation researcher Clayton Christensen explained that "successful innovations help consumers to solve problems—to make the progress they need to, while addressing any anxieties or inertia that might be holding them back" (Christensen, Hall, Dillon, & Duncan, 2016b, p. 58). The framework Christensen and his colleagues developed identifies the "job" customers need the product to do for them. Customers "hire" the product that does the job well and "fire" the product that does not.

The JTBD needs assessment process centers on interviewing a small number of representative audience members (who may be current product users). The interview protocol starts with the five questions listed below, but interviews are semistructured to allow for in-depth follow-up questions that get at the heart of what the audience members need an information product to do for them (Merriam & Tisdell, 2016). The starting-point interview questions are as follows:

- Do you have a job that needs to be done?
- Where are people not using existing solutions?
- What work-arounds have people invented?
- What tasks do people want to avoid?
- What surprising uses have customers invented for existing products? (Christensen et al., 2016b, p. 59)

## Applying the JTBD Framework to Information Product Design

I applied JTBD to three projects in 2017 with varying levels of success. Results were promising enough that my information product design teams will continue to implement this tool. Each project highlighted an aspect of using JTBD.

### Case 1: Shifting to a Jobs Mentality

With JTBD, program needs are determined by directly asking audience members to identify the most salient

program topics. This approach may require a mental shift on the part of Extension specialists, who are accustomed to preparing program content based on their interests and expertise and selecting program topics according to what they have done in the past. This mental shift requirement was revealed when I applied JTDB to a project involving products promoting pesticide safety for use in site coordinator trainings. When I proposed that my project team communicate directly with audience members, I was met with the specialist's suspicion, and no interviews were held. I adjusted the approach and asked the specialist to *envision* an audience member receiving and using her product. By applying the perspective of an audience member, the specialist understood that her existing approach was not meeting all the needs of her audience and that the planned project deliverable would not do the job for the audience. She had been providing the audience with adequate information for their own use, but the site coordinators needed to pass along information to cafeteria workers, the end users who were responsible for applying it. When the specialist identified this audience need, my team realized that a suite of materials would be required to do the job for the audience. A project that may have involved merely creation of a fact sheet resulted in creation of speaking notes to help site coordinators faithfully pass along content to end users, a poster that could be hung as a visual reminder of the lesson, and a handout for the end users.

In this case, the specialist had performed program-level needs assessment in the past that included conducting a survey to determine the statutory requirements for pesticide applicators and exploring other needs through conversation with county agents. This traditional approach identified macrolevel program needs. Shifting to the audience perspective using the JTBD framework allowed us to identify the audience's microlevel need for a suite of educational materials.

## Case 2: Addressing Information Nonconsumption

The JTBD process can shed light on nonconsumption of an information product and thereby highlight opportunities to create a more attractive, useful, or meaningful option. This feature of JTBD was valuable in another case. The team of county agents and specialists who provide programs at our state fair observed that many people attending the fair missed opportunities to learn agricultural information if volunteers were not at exhibits. These fairgoers were not consuming the information and education offered at the exhibits. As a result, my group was asked to develop a screen-based interactive game that would provide fairgoers an opportunity to consume agricultural information even in the absence of volunteers. As we developed successive versions of the game, we applied JTBD by interviewing a group of six children who were from large urban schools and matched the state fair team's description of the exhibit's audience. The children provided feedback on the kinds of information they found interesting, and we noted whether they preferred video- or text-based information in the game design. On the basis of the children's feedback, we resequenced the user experience, simplified the language, included optional in-depth videos, and added customizable graphics. The children reported that the game was "fun" and "a good lesson" that provided them with new information.

In this case, the state fair team members were seasoned agents familiar with needs assessment data in the urban counties they served. Through repeated observation, they identified the additional need for an engaging experience for fairgoers. Using JTBD, we engaged prospective audience members in the product development process to generate a product that would do the job of providing fairgoers with agricultural information they would consume.

## Case 3: Identifying Work-Arounds and Tasks to Avoid

The JTBD process can identify potential for designing an information product that bridges a gap when a task should be avoided. This circumstance became clear as my group carried out a project on an emerging plant disease. Specifically, we were asked to perform a formal needs assessment to elicit gaps in knowledge. We distributed a survey to approximately 100 master gardeners and interviewed county agents in five counties. Ultimately the project would involve developing educational materials and a website with up-to-date reference information for students who would complete an online course on the topic. During JTBD interviews with the county agents, we discovered that the agents did not want the educational materials to direct people with questions back to them and that they intended to direct people with questions to the website rather than answer questions directly. This response was surprising; including a statement pointing readers to a local county agent for more information is part of our standard practice for publications on emerging issues. The job of the county agent is to provide people with reliable, research-based information, and we recognized that the online course could facilitate county agents' doing their job by helping them avoid the task of redirecting people with questions to the website. Consequently, we modified the online course content to point people with questions directly to the website for more information.

The aim of the JTBD framework is to help people get the job done, and, in this case, we identified a job that county agents did not want to do. In response, we adjusted materials to help audience members skip the county agent, thus helping the audience member do the job of connecting directly with the most up-to-date information.

## Reflection and Future Direction

The JTBD framework challenged me and my teams to rethink our reactive role in creating Extension information products. Traditionally, we have shaped content for audiences while considering guidance from authors, typically Extension specialists. Now we have a growing tool kit to support our commitment to providing relevant, trusted, and effective information products that involves audience feedback in the creation process.

To help ensure that Extension information products improve audience members' lives with relevant, timely information backed by research, Extension specialists can shift to a jobs mind-set, imagining the uses their audiences have for the information they are providing. Also, they should involve audience members in the development process, seeking feedback about how the information product can be more useful. Finally, media developers can design information products that provide a comprehensive information presence to help county agents be more efficient in their work.

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