OneUSDA Ecosystem | September 2019

Final Insights Report

Chapter 1: Introduction and Overview

Background

The Customer Experience (CX) Center of Excellence (CoE), under the direction of the Office of the Chief Information Officer (OCIO), worked with the United States Department of Agriculture (USDA) to help jumpstart CX projects by providing access to qualified customer experience subject matter experts. Over the course of 2 years, the CX CoE carried out digitally focused projects across USDA mission areas in order to pilot and demonstrate the value of Human-Centered Design (HCD) strategy.

Project Overview

USDA is made up of 29 agencies and offices and offers hundreds of unique services across a multitude of program areas. U.S. citizens seeking assistance and benefiting from government services may not recognize the connections between USDA agencies and the programs and services within USDA. This lack of awareness makes it more difficult for customers to navigate USDA and find the services that meet their needs. The following question guided the research:

How might we **visually represent the USDA ecosystem**, including its services, customer archetypes, and experiences, in order to reveal overlaps, bring clarity to complex customer and employee interactions, and uncover opportunity areas within the department and its agencies?

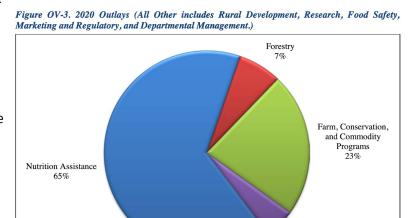
This initiative set out to address this challenge by exploring how USDA employees understand their customers, and how employees might collaborate within and across agencies to better deliver USDA services. The major deliverables of this effort are two complementary graphic visualizations of how USDA and its agencies serve customers. These visualizations lay the foundation for future USDA CX initiatives, serve as a minimum viable product (MVP) demonstrating how to collect and represent customer experiences, and identify opportunities to improve customer experience across USDA. In these ways, this initiative helps to further Secretary Perdue's OneUSDA mission to make the department more effective, efficient, customer-focused, and data-driven.

Chapter 2: Research

Secondary Research

Seeking to understand the breadth of USDA programs and services and gain initial insight into USDA's customers, the CX CoE team analyzed existing data sources and conducted secondary research activities, including:

- Communications Audit: We manually scraped all of USDA's publicly available web domains and created a comprehensive list of services they offered and their unique customer archetypes. The manual audit was multifaceted as it not only provided a quantitative representation of USDA programs and services, but also lent insight into the way that different USDA agencies brand their service offerings. Brand messaging, visuals, and perception are integral to mapping the customer experience and the manual audit shaped our understanding of how USDA agencies utilize or miss out on realizing the potential of those tools.
- 2. Previous Internal USDA CX Work: We validated the Communications Audit data against previous customer experience research conducted by USDA Customer Experience Champions.
- 3. Budget Data: Using USAspending.gov, public budget reports, and strategic planning documents (including Figure OV-3 showing 2020 outlays, seen at right, from



All Other

5%

USDA's FY2020 Budget Summary), the team evaluated USDA's budget to see where the department spends the most money and what its financial priorities are. The findings helped us narrow the scope and identify program areas to focus on.

4. **Tell Sonny Data:** We worked with the Voice of the Customer (VOC) CoE to gather customer input and sentiment data pulled from the Tell Sonny database.

Communications Audit

The Communications Audit was a manual scrape of all publicly available USDA web domains, where we identified a complete list of 748 services offered by USDA agencies, serving 903 unique customer archetypes and seen in Figure 2-1. (A customer archetype is a generalized example of a certain person or thing based on typical outcomes.) We defined the customer archetypes by looking at USDA agency websites and seeing how the agencies talked about the customers for their programs and services. In cases where USDA didn't identify a target customer, CX researchers made an educated assumption as to who the target customer would be based on the service description online. The top ten customer archetypes are a direct reflection of the way USDA communicates their customers and services. For more details, visit the appendix.



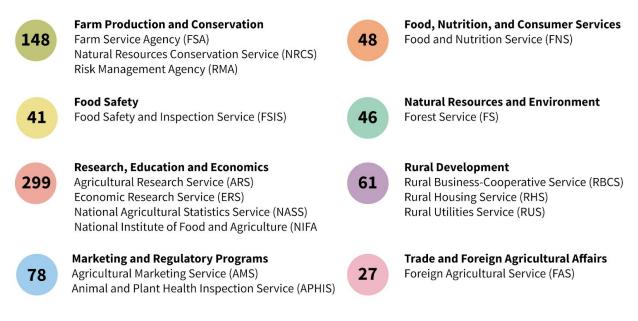


Figure 2-1: Number of Unique Services per Mission Area

Scope and Topic Focus

Preliminary research revealed that it's impossible to fully explore USDA's service offerings, discern meaningful insights, and visualize the agency intersections for every USDA program and service. There is simply too large a volume of service offerings, and not enough structural consistency to meaningfully compare the data.

Consequently, the team chose to focus on how USDA agencies work together throughout a single customer journey: **a customer accessing healthy food for her family**. The selection of this customer journey was based on several factors, including:

A. Budget Allotments suggested SNAP and WIC customers as a key focus area of USDA:

- a. The largest portion of USDA funding goes towards Nutrition Assistance programs.
- b. USDA Strategic Goal 7 is to "provide all Americans access to a safe, nutritious, and secure food supply." Of all the Strategic Goals, this has the most dedicated funding in FY2020, a total of \$100B.
- B. Customer Statistics suggested the relatability of the journey to access safe, healthy food:
 - a. 44M (1 in 7) people receive SNAP benefits in the U.S., while only 1 in 100 people consider themselves farmers in the U.S.
 - b. Annually, 1 in 6 Americans contract a foodborne illness.
- C. Alignment to Secretary Purdue's Motto to "Do Right, Feed Everyone."

Primary Research

Methodology

The bulk of our primary research consisted of one-on-one interviews. Interviewees were asked open-ended, probing, and data-driven questions about the programs and services their agency offers, how their agency collaborates with other agencies, and the role of their agency in providing safe and healthy meals to Americans. The research team also conducted intercept interviews with visitors to a local farmers market that caters to SNAP recipients.

Research Participant Selection and Recruitment

The research team used a mixture of convenience sampling (selecting participants because they're easily available), voluntary sampling (using self-selected participants), and snowball sampling (where research participants recommend other participants) for selecting both USDA employees and USDA customers to interview. The team connected with USDA employees through pre-established connections from Phase I CX CoE work and referrals from USDA employees. Similarly, the team connected with customers through personal networks and professional connections. We prioritized interviews with agencies and USDA customers who directly or indirectly contribute to or experience firsthand the journey of someone providing her family safe and healthy meals. We selected agencies using the following criteria:

- A. FY2020 Budget Outlay's mention of an agency based on its contribution to Strategic Goal 7 ("Provide all Americans access to a safe, nutritious, and secure food supply").
- B. Results from the Communications Audit confirming that the agency offers services related to food safety and/or access.
- C. Input of research participants (e.g., when a USDA employee mentioned an agency who they believed to be involved in the selected customer journey).

Using Personas as a Research Tool

To facilitate the research conversations, the team created a persona named "Lydia the Loving Parent," shown in Figure 2-2. Typically created at the end of research, personas are fictionalized composites of typical customers, and are used to keep team decision-making customer-centric. In this case, Lydia is based on actual people we interviewed, as well as additional research data. We gave research participants a copy of this persona to review prior to the interview, and asked them to describe USDA programs and services that might help Lydia in her pursuit of healthy safe meals.

Lydia Persona



Lydia

Age: 32 Occupation: Cafeteria Worker Status: Single Location: Springville, AL Archetype: Loving Parent

Bio

A single mom who understands the importance of a healthy meal, but needs financial assistance to buy food in her rural town. She takes a lot of pride in providing for her family.

Lydia was the youngest of 6 children in her family growing up. She made her way through high school with stellar grades, but was unable to afford a college degree. She decided to become an apprentice with a local bakery and eventually landed a job with the high school's cafeteria. She lives in a single-family home with her 2 kids and aging parents.

Figure 2-2: Lydia Persona

Goal: Provide safe and nutritious meals for her family on a budget.

Likes

- Cooking and learning new recipes
- Making her money go further
 When school provides
- When school provides lunch for her kids

Dislikes

- When her food goes bad too quickly
- When food is too expensive
- Confusing food labels and instructions

The team also diagrammed the steps that Lydia might take to access safe and healthy food, as seen in Figure 2-3. We asked interviewees where USDA might provide a service that helps Lydia at each of Lydia's action points, from purchasing food, preparing meals, to storing and/or disposing of leftovers. The use of these tools prompted interviewees to shift more quickly towards identifying services aligned to food access and food safety.

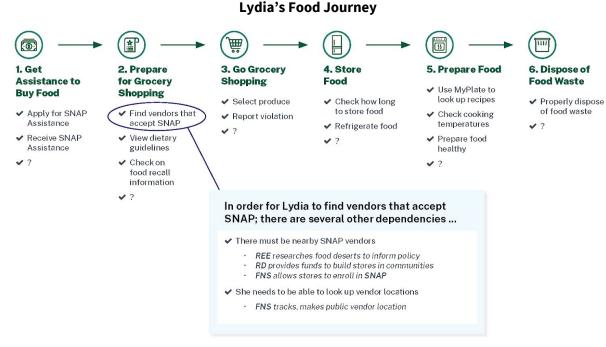


Figure 2-3: Lydia's Food Journey

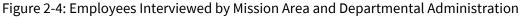
Primary Research Activities

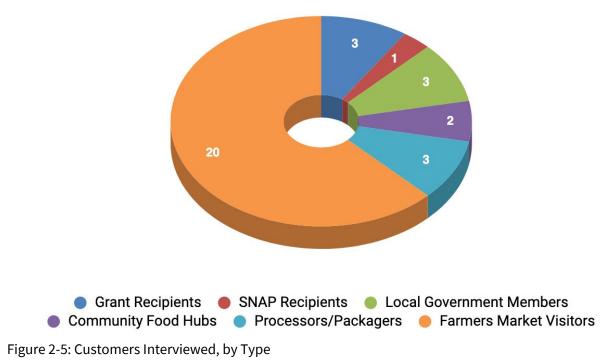
Throughout the course of the primary research phase, the team conducted a total of 50 interviews and 10 feedback sessions with 58 people, including:

- A. **18 Discovery Interviews with USDA Employees** (22 employees), both in-person and over the phone. Interviews were informal, lasted between 45 minutes and an hour, and consisted of open-ended questions. The breakout by mission area is shown in Figure 2-4.
- B. **12 Discovery Interviews with USDA Customers** (14 customers), both in-person and over the phone. Interviews were informal, lasted between 45 minutes and an hour, and consisted of open-ended questions. The breakout of customer types is shown in Figure 2-5.
- C. **20 Farmers Market Intercept Interviews (**20 customers**)** at a Maryland-based Farmers Market hosted by an interviewee's food recovery organization. Team members asked market customers to share their experiences receiving USDA services, about their approaches to healthy eating, and about their awareness of SNAP EBT being accepted at the Farmers Market.
 - a. Because of the brevity of intercept interviews, it is impossible to classify market visitors by a certain customer type. That being said, many of the market visitors self-identified as SNAP recipients.
- D. **10 Feedback Sessions with USDA Employees** (11 employees, including 9 of the employees that were interviewed during the discovery phase), to verify the content and visual design of both deliverables (OneUSDA Ecosystem Map and Lydia Service Blueprint).



Employees Interviewed By Mission Area and Departmental Administration





Customers Interviewed By Type

Chapter 3: Deliverables

During primary research, the team gathered 158 qualitative data points (direct quotes and observed behaviors). As the team began to analyze this data and realized how much information needed to be visualized, the need for two separate deliverables emerged. The two visuals presented as the main deliverables for the project are the OneUSDA Ecosystem Map and the Lydia Service Blueprint.

Throughout conversations and interviews, the team also captured important data concerning the state of collaboration within USDA. These data points were further synthesized and are presented in Chapter 4 of this report.

OneUSDA Ecosystem Map

USDA is made up of 29 agencies and offices with nearly 100,000 employees serving at more than 4,500 locations. The OneUSDA Ecosystem Map illustrates USDA's top 10 customers according to customer data analyzed from an in-depth audit of messaging on agency websites, budget reports, and employees' perspectives. It also shows 10 buildings that each correspond to a specific customer type and represent an industry or area that might benefit from USDA services. Listed beside each building are the agencies offering services in that space. The big picture view of the USDA can be used to rethink how agencies can work together to champion customer experiences that span multiple agencies and locations.

The Ecosystem Map presents a comprehensive view of USDA services and customers. It includes the "ecosystem" of USDA's agencies, how they overlap, and the major customers they serve. Its purpose is to represent the major customer archetypes, the services those customers use or interact with, and the agencies that correspond to those services. Any person looking at the map should be able to see where and how USDA agencies meet the needs of specific customers. Example scenarios are included to help frame the user stories.

The Ecosystem Map uses customer archetypes/personas as the main driver behind the connections between mission areas and agencies. Archetypes in this context are a generalized representation of a group of similar people, bound by common traits. These archetypes do not delve deeper into motivations, goals, or demographics in the way that a persona would; they only represent a facet of the archetype well enough to pair it with the corresponding services. The Ecosystem Map archetypes are derivations of the 24 customer archetypes identified in the USDA Communications Audit. As shown in Figure 3-1, we matched the 24 archetypes with employee-identified top customers, then overlaid them with USDA's top budgeted programs to identify the key 10 archetypes shown in the Ecosystem Map, including Lydia the Loving Parent.

Defining USDA's Top 10 Customers via a Communications Audit



Website audit of USDA programs and services by agency.



903 unique, specific customer types listed in program and service descriptions on USDA web pages.



Combined unique customers by key functions, themes, and duties to filter out very specific descriptors.



Customer types refined down to 213. These include more general and universal descriptors that pertain to a larger customer base.





Grouped remaining 213 customer types by goal and motivation into categories. These categories became the top 24 customer archetypes in which all 903 original unique customers fall into.



Overlayed the 24 archetypes with budget data to find the top 10 based on funding for FY2016-FY2018.



Top 10 USDA Customer Archetypes defined. They represent broadly who the USDA serves the most.

Figure 3-1: Defining USDA's Top 10 Customer Types

The customer archetypes/personas represented are:

- Adam the Academic
- Ava the Adventurer
- Caesar the Citizen
- Candice the Community Leader
- Ken the Kid
- Lydia the Loving Parent
- Oscar the Owner
- Patrick the Producer
- Preston the People's Advocate
- Sunali the Scientist

Visualizing USDA's Top 10 Customers



From left to right on top row: Sunali, Adam, Ava, Caesar, and Candice. From left to right on bottom row: Ken, Oscar, Patrick, Preston, Lydia.

Figure 3-2: Visualizing USDA's Top 10 Customers

Each building in the OneUSDA Ecosystem Map corresponds to a persona. The buildings represent the actions of the customer and the types of agencies they may cross paths with. Agencies that interact both directly and indirectly with the customer archetype are represented next to the buildings.

The buildings represented are:

- Community Centers
- Facilities and Offices
- Farms and Ranches
- Food Establishments
- Government Buildings and Public Utilities
- Homes
- Public Lands
- Processing Facilities
- Schools
- Universities

Visualizing Where USDA Serves Customers



From left to right on top row: Government Buildings & Public Utilities, Universities, Facilities and Offices, Community Centers, Schools. From left to right on bottom row: Food Establishments, Homes, Farms and Ranches, Processing Facilities, Public Lands.

Figure 3-3: Visualizing Where USDA Serves Customers

For more details on the customer archetypes and buildings, visit the Appendix.

Lydia Service Blueprint

The service blueprint shows viewers how USDA affects the journey of a particular customer (Lydia) as she tries to provide safe, healthy meals for her family. Viewers can see actions that Lydia performs where she directly interacts with USDA programs and services. Beneath each action are the various agencies that offer programs and services supporting it. The indirect or "behind-the-scenes" activities raise awareness of how large of a role USDA plays in the customer journey. Lydia may never see or even know these USDA actions are happening, but they're fundamental to her journey.

Service Blueprinting

Traditional service blueprints visualize the different service components that are tied to touchpoints in a specific customer journey. The customer touchpoints in a service blueprint are often referred to as "front-stage actions," while the service components are referred to as "backstage" or "behind-the-scenes" activities.

The front-stage actions in the Lydia Service Blueprint were drawn from interviews with employees and customers, with special consideration given to input from SNAP customers as to the actions they undertake to secure nutritious meals. Examples of front-stage actions include when Lydia receives

training directly from a USDA employee, uses an app or website maintained by USDA, or uses her SNAP card to purchase food. Unlike typical service blueprints, this diagram also lists USDA activities that Lydia does not see directly, but that still enable her journey (indirect or "behind-the-scenes" activities).

The "behind-the-scenes" activities connected to each of Lydia's actions were initially gathered through interviews with USDA employees who are experts in each of the agencies represented. We then cross-compared activities to the Communications Audit, connected them to specific programs and service names, and again verified with subject matter experts. Examples of behind-the-scenes activities include food sampling activities that ensure Lydia's groceries are free of disease, and funding broadband so Lydia can access the internet and search for recipes.

CUSTOMER ACTIONS				
DIRECT	-			
INDIRECT				

Figure 3-4: Creating a Service Blueprint

Creating a Service Blueprint

- Interviews with 50+ USDA employees and customers, including SNAP recipients
- Interviews with USDA employees and civilian SMEs; cross-comparison with the Communications Audit

All verified by USDA employees across seven Mission Areas

A USDA employee viewing the blueprint should be able to find at which touchpoint(s) in Lydia's journey their agency plays a role, and whether this role is direct or indirect. Most importantly, viewers will also be able to see fellow agencies that are active in the same spaces, allowing them to brainstorm possible areas for collaboration. For example, AMS, FSIS, and ERS are working to promote and ensure that quality foods are being sold at superstores and markets around the country. How might they collaborate to share information more efficiently, reduce duplicate work, and work together to solve issues regarding poor quality foods?

Chapter 4: Insights on Collaboration

In conversations and interviews with USDA employees, the team asked employees to evaluate the state of collaboration within the USDA. Employee feedback on collaboration was synthesized into four key insights detailed below.



Insight 1: Discovering and connecting to USDA services is a burden often placed on the customer

To find information on USDA service offerings, customers must either have access to a computer (and the time and patience to navigate the website) or personal

connections to introduce them to programs. Citizens' lack of knowledge about USDA offerings contributes to the underutilization of programs and government funding opportunities (i.e., underused Rural Development funds or under-attended farmers markets that accept SNAP).

How might USDA redesign customer outreach and marketing activities to meet people where they are, and ensure that all customers have equal access and awareness to pertinent service information?

"I think people need to figure out ways to connect the outreach with the goals of the agency. And figure out how to identify groups that can help the agency reach those goals" - Rural Development, Employee

"Government programs are dense and hard to understand. What if you don't have time on your hands? How are you going to figure out something not obvious? Can a social service be an effective middle man?" - Rural Development, Customer



Insight 2: Without organizational knowledge, you can't help your customers

Employees admit to not knowing what other USDA agencies do, and because of this lack of knowledge, they're less able to redirect confused customers to the correct

USDA programs and services. This lack of cross-agency awareness also makes it difficult, if not impossible, to recognize opportunities to provide convenience and efficiency to customers by collaborating across agencies on similar service offerings.

How might we equip employees with enough awareness of fellow agencies so that they're (1) able to help customers navigate USDA, and (2) able to identify opportunities to simplify customer journeys by working with agencies that share similar customers?

"Other USDA agencies, I couldn't even name them probably... When you look on the USDA website, I don't really know anyone." - Food Safety, Employee

"Knowing where in the agency and who [people struggling with X] can go to, that's really important and meaningful customer service." - Food, Nutrition and Consumer Services, Employee

"When you talk to USDA folk from agency to agency, not everyone connects the dots; they see through their own lens. They don't see how agencies are interconnected." - Rural Development, Customer

Insight 3: More ways to learn



Tenure and personal connections are the primary way that employees learn about other agencies and realize opportunities for collaboration. Employees also note that it is difficult to see beyond their immediate purview and "connect the dots" between their role, other agency's roles, and the overall USDA mission.

With baby boomers retiring, and millenials yearning to relate to a mission, how might USDA equip employees with cross-agency awareness and a connection to mission?

"Baby boomers are rolling out now, [and] that's your institutional knowledge... they don't know how big of a hole they are leaving." - Food Safety, Employee

"[I learn about other agencies] pretty much the same way the public could do: Look at websites and their publications. It's definitely not easy." - Farm Production and Conservation, Employee



Insight 4: A lack of a collaboration culture and competing employee personalities can make work challenging

Employees agree that the first bottleneck to collaboration is failure to recognize synergies due to lacking knowledge of other agencies (Insight 2). Additional barriers include clashing personalities, narrow understanding of mission, and lack of time to spend on activities other than immediate tasking. Moreover, while employees agree that face-to-face interactions are fundamental to effective collaboration, they also caution against adding to already-full workloads with new "collaboration" events or workshops.

How might USDA integrate opportunities to collaborate face-to-face into daily workloads to cultivate a culture of cross-agency communication without increasing employee workload?

"The opportunity to meet our colleagues and get to know them on a personal level is crucial." - Rural Development, Employee

"FSIS and APHIS have different mission slants. FSIS is very safety-focused and human-focused, and APHIS is very animal-focused, so sometimes they can clash because they see things differently." - Marketing & Regulatory Programs, Employee "I think what restricts us is being overworked versus opportunities [...] Leverage the work that is already happening, versus creating more work to collaborate on." - Marketing & Regulatory Programs, Employee

Chapter 5: Gaps and Next Steps

This project is just the beginning of the development of a comprehensive and complex OneUSDA Ecosystem. The CX CoE team jump-started the project by doing the initial customer discovery and Communications Audit. The OneUSDA Ecosystem defines the key customers and service locations for USDA overall and lays the foundation for further work. The in-depth service blueprint and customer journey of Lydia have been laid out and can act as a template for what a service blueprint might look like for the remaining nine archetypes.

The research team recommends that USDA conduct additional primary research to glean insights about USDA's customers and how USDA services play a role in their journeys to accomplish their goals. Additionally, we recommend that the OneUSDA Ecosystem and the Service Blueprints be converted into an interactive digital format that can be viewed on USDA's website.

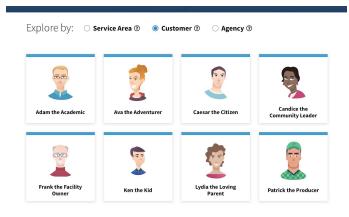
Digital Prototype

Although the final deliverables for this first iteration of the OneUSDA Ecosystem were in print format, we have developed a few prototype screens for what a digital version of this project may look like. Take a look through the screen flows below to understand what the OneUSDA Ecosystem could look like online.



Option 1: Service Area View

In Option 1, users can choose to explore information according to Service Area, Customer, or Agency. The Service Area view allows users to see information on services that might be relevant to that particular location. In this example, a user who has clicked on "Home" will see a short blurb on how USDA might benefit a home, and a key customer type who might be receiving these benefits. Users can scroll down to explore the agencies that offer services to this setting, and then follow links to the particular agency's homepage for more information.



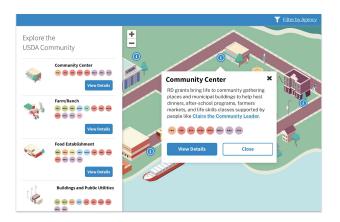
Option 1: Customer View

The Customer view allows users to browse information organized according to customer type, and provides users with a glimpse into their customers. In this example, users can see Lydia the Loving Parent's backstory, her likes and dislikes, and can follow her on her journey to feed her family. At each step in her journey, users can click into accordion-style content windows for detailed information on how USDA directly and indirectly supports Lydia.



Option 1: Agency View

In the Agency View, users can explore each agency to learn what services each agency offers. The user can either follow the link to the agency's website to learn more, or scroll down to see the Service Areas that benefit from this agency's services.

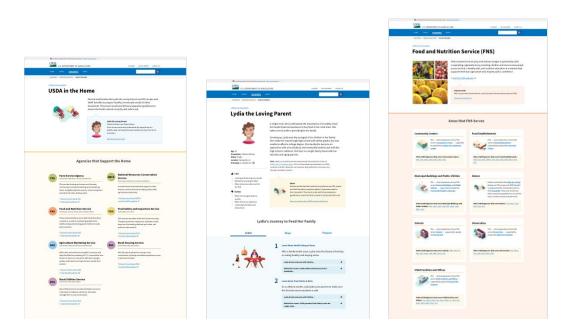


Option 2: Ecosystem View

In Option 2, users can interact with the entire ecosystem view by clicking on each location for a quick description of what USDA services might be supporting that location type. Users can also filter by agency type to see specifically where that agency serves.

Additional Views: Detailed Information Pages

Users can dive deeper through detailed views of areas of service, persona archetypes, and USDA agencies.



How To Use Our Deliverables

If taken through to its logical conclusion and completed for all ten customer personas, the service blueprint and ecosystem map can provide immense value and help USDA employees to identify opportunity areas to improve customer experiences. See the following scenarios to spark your imagination about how you can use the service blueprint and ecosystem map on your team:

- **Scenario 1:** A Webmaster reviews the service blueprint and makes sure the communications material on USDA's webpages align well with customer journey portrayed.
- Scenario 2: USDA staff conduct a content audit and make sure the way they market to and describe their target customers is aligned well with the top 10 USDA customer archetypes.
- Scenario 3: A Field Officer views the ecosystem map and better understands how their role in a processing facility is interconnected with the work of other USDA agencies. They understand how their agency fits within USDA and where there are opportunities to collaborate with other agencies.
- Scenario 4: A USDA Director sees the ecosystem map and directs funding to a research team to conduct more field research to create a new service blueprint for a customer action.
- Scenario 5: The service blueprint and ecosystem map are displayed in USDA offices at the Washington Office and out in the field to raise awareness of who USDA customers are, where they are served, why they are served, and how many agencies serve them.

Key Contacts for Success

The following people were instrumental in the creation of the first iterations of this project. Contact them for guidance and additional information.

- Gary Washington, Chief Information Officer
- Rachel Erlebacher, OBPA
- USDA CX Champions, Office of Customer Experience
- Simchah Suveyke-Bogin, GSA CX CoE Co-Lead
- Tamieca Hamlin, USDA Detailee CX CoE Co-Lead

Conclusion

The OneUSDA Ecosystem and Lydia Service Blueprint as "finished" by the CX CoE team are just the beginning of the CX work around OneUSDA. By following our recommendations for further research, blueprint creation, and collaboration, USDA will be able to improve its ability department-wide, to understand its customers and improve its ability to collaborate to deliver better solutions for them.

Appendix

The appendix includes a deeper dive into the research the team conducted.

Communications Audit Customer Data

Below are the top 24 customer groupings gleaned from the communications audit. To produce this list, the team manually scraped all USDA public-facing websites and recorded each instance in which an agency described or characterized customers. This list was then reduced to 24 groupings following the process depicted in Figure 3-1: Defining USDA's Top 10 Customer Types on page 8.

Academia ~10% of website mentions Includes: colleges & universities (and faculty), researchers, research fellows, students, academics, and more	Advocates ~1% of website mentions Includes: Stewards, advocates, protectors, volunteers, and more	Agricultural Experts and Scientists ~3% of website mentions Includes: biologists, geneticists, pedologists, biotechnologists, taxonomists, and more
Businesses ~7% of website mentions Includes: agribusinesses, sole-proprietorships, firms, subsidiaries, companies, sectors, and more	Areas ~3% of website mentions Includes: villages, towns, communities, rural areas, cities	Citizens ~ 9% of website mentions Includes: taxpayers, American citizens, consumers, participants, individuals, and more
Facilities ~3% of website mentions Includes: offices, stockyards, owners, housing facilities, experiment stations, and more	Funding Professionals and Grant Seekers ~2% of website mentions Includes: grant seekers, re-lenders, bankers, trustees, credit lenders, and more	Food Production Facilities ~2% of website mentions Includes: refiners, handlers, packagers, food service establishments, and more
Future Customers ~1% of website mentions Includes: all people on earth	Governing Bodies and Stakeholders ~11% of website mentions Includes: politicians, policymakers, legislators, states, diplomats, and more	Groups ~8% of website mentions Includes: partnerships, extensions, foundations, institutes, and more
Land and Property Managers and Users ~2% of website mentions Includes: homeowners, landowners, lessors, landlords,	Leisurely Individuals ~1% of website mentions Includes: travelers, agri-tourists, recreators, and more	Media/Publishing Outlets ~1% of website mentions Includes: newspapers, journalists, journals, media, and more

households, and more		
Military ~0.5% of website mentions Includes: military and veterans	Non-Agricultural Scientists ~2% of website mentions Includes: epidemiologists, entomologists, veterinarians, nutritionists, and more	Non-Producer Agricultural Professionals ~2% of website mentions Includes: breeders, growers, inspectors, laborers, graders, foresters, and more
Other Professionals ~12% of website mentions Includes: circuit riders, miners, social workers, manufacturers, conservationists, and more	Producers ~14% of website mentions Includes: turkey hatcheries, farmers, fishermen, vineyards, egg hatcheries, and more	Trade/Commerce Professionals ~1% of website mentions Includes: traders, borrowers, exporters, sellers, buyers, retailers, and more
Utilities ~0.5% of website mentions Includes: telecommunications companies, broadband suppliers, and more	Vulnerable Populations ~2% of website mentions Includes: seniors, SNAP recipients, patients, infants, minorities, and more	Youth ~2% of website mentions Includes: young adults (18-26 y.o.), children, adolescents, and more

Table A-1: Communications Audit Customer Data

Personas (Top 10 USDA Customers)

The following are the 10 personas and their descriptions that we created to represent USDA top 10 customers. These are fictionalized representations of USDA customers based on real customer data gathered in interviews and through secondary research.

- Lydia the Loving Parent: Cafeteria Worker and Single Mother
 - Bio: A single mom who understands the importance of a healthy meal, but needs financial assistance to buy food in her rural town. She takes a lot of pride in providing for her family. Lydia was the youngest of six children in her family growing up. She made her way through high school with stellar grades, but was unable to afford a college degree. She decided to become an apprentice with a local bakery and eventually landed a job with the high school's cafeteria. She lives in a single-family home with her two kids and aging parents.
 - Likes:
 - Cooking and learning new recipes
 - Making her money go further
 - When school provides lunch for her kids
 - Dislikes:
 - When her food goes bad too quickly

- When food is too expensive
- Confusing food labels and instructions
- Needs:
 - Help applying for SNAP
 - To provide her two children with healthy and nutritious meals at home and at school.
 - Submit food recalls at work
 - Apply for WIC
 - Find SNAP compliant farmer's markets
- Adam the Academic: Land-Grant University Professor and Researcher
 - USDA grants help fund his research. His findings enable producer decisions and inform globally used agricultural statistics and yield forecasts.
 - Needs:
 - Receive Rural Development grant funding focused on improving formal, postsecondary agricultural sciences education.
 - Help target families, youth, and financially vulnerable populations to increase the diversity of researchers at the institution.
 - Share data with producers who will innovate new technology to better their yields.
- Sunali the Scientist: Environmental Scientist
 - As a scientist in the private sector, her foodborne pathogen research helps keep the food system safe. Producers, manufacturers, and USDA use her findings to drive quality innovation and maintain high safety standards.
 - \circ Needs:
 - Access the most up-to-date research
 - Access facilities to test samples
 - Provide risk management information and tools to enable land managers
 - Conduct research that helps protect and improve the quality of water resources
- Ken the Kid: Fourth-Grade Student at a Public Elementary School
 - A student who dreams of being a veterinarian. Learns about healthy eating at school through the lunch program. He wants to help out at home by cooking more.
 - Needs:
 - To be enrolled in the Free School Lunch program
 - Backpack meals to have food over the weekend and on school holidays
 - Team Nutrition
 - The Summer Food Program
 - To learn what makes a healthy meal
- Patrick the Producer: Producer and Family Farm Owner

- A family man and second-generation farmer in rural America. He needs a farm loan so that he can keep his business up and running while keeping food on the table.
- Needs:
 - Farm loan information from USDA
 - SNAP information (discreetly)
 - Help financing a larger house (rural development)
 - Current trade and market information for his product
- Candice the Community Leader: Small Business Owner and Nonprofit Leader
 - A strong advocate for self-sufficiency and an empathetic and involved leader, she fights for equity in her community. She is involved in managing community events, and she teaches a home gardening class at the community center.
 - Needs:
 - View the most recent Census of Agriculture to predict how much of each crop to plant in her community garden plot
 - Volunteer for her local 4-H chapter
 - Make sure the local food hub has enough food to feed its local food-insecure community members
 - Distribute SNAP-Ed materials
 - Attend town hall meetings
- Caesar the Citizen: Designer and Urban Resident
 - A second-generation American who has developed an interest in high quality, locally sourced food after recently losing weight. An avid technology user.
 - Needs:
 - Clear food guidelines from the USDA
 - Help making weekly meal plans and making shopping lists
 - To know where to get the right foods in his urban neighborhood
 - To know when and where to buy local food straight from farmers
 - To know how to read food labels and food certifications to eat the best food available (organic, fair trade, free range, etc.)
- Frank the Facility Owner: Processing Facility Owner
 - Owns a facility that imports and processes poultry. Works with producers and USDA to ensure his processing methods are safe, effective, and humane.
 - Needs:
 - Processing/slaughter inspection
 - Producer product guarantees
 - Trade information
 - Transport regulations
 - Poultry pricing
 - Packaging regulations
 - Recall information

- Ava the Adventurer: Recreator and Adventurer
 - A conservation-conscious college student who hikes in National Forests to escape the hustle of her demanding curriculum and experience nature. Shares her adventures online.
 - Needs:
 - Access marked lands and trails for hikes
 - Learn about her environment and local species
 - Camp with her friends and family
 - Buy a permit to cut down her Christmas tree
 - Take photos to share with her social media followers
 - Ski on National Forest land
- Preston the People's Advocate: Local Government and Community Member
 - A savvy people-person who left his corporate job to be the people's champion in his local government. He fights for rural farmers' rights and health care access.
 - Needs:
 - Make sure his community has access to safe and healthy food
 - Work with local utilities providers to provide clean water, energy efficient electricity, and proper waste management systems
 - Advocate for better community places to recreate
 - Work with small businesses to promote the local economy
 - Protect local farmers from big businesses
 - Interact with the local community at farmers markets

The complete list of the top 24 UDSA Customer Archetypes determined through the Communications Audit can be found in the Appendix.

Where Customers Are Located:

The following are the 10 buildings that we created to represent where USDA serves its customers in the community.

- Universities
 - Students, fellows, professors, and researchers like Adam the Academic get grants to conduct cutting-edge research at colleges/universities and publish their findings for the agriculture sector to use in their work.
 - Agencies: FSA, NRCS, FNS, FSIS, ARS, ERS, NASS, NIFA
- Food Establishments
 - American consumers trust that the food sold at local grocery stores, farmers markets, and restaurants is safe. Some consumers like Caesar the Citizen check for special certifications like organic, free range, or antibiotic-free.

• Agencies: RMA, FNS, FSIS, AMS, APHIS, ARS, ERS, NASS, NIFA, RBCS, RHS, RUS

• Processing Facilities

- Laborers, scientists, packers, and business people like Frank the Facility Owner keep domestic and international animal and plant products free of diseases and pests.
 Top-tier facilities like Frank's aim for AMS quality certifications.
- Agencies: FSIS, AMS, APHIS, ARS, ERS, NASS, NIFA, FAS

• Homes

- Parents like Lydia the Loving Parent use SNAP benefits to purchase food and use FNS and FSIS resources to safely prepare homemade meals. They might use RHD, RUS, and NRCS resources to own and maintain their home and land.
- Agencies: FSA, NRCS, FNS, FSIS, AMS, RHS, RUS

• Community Centers

- Rural Development grants help to build municipal buildings that can be used as community gathering places. People like Candice the Community Leader use these spaces to host after-school programs, farmers markets, and life skills classes.
- Agencies: FNS, ARS, ERS, NASS, NIFA, RBCS, RHS, RUS
- Schools
 - Children like Ken the Kid get consistent hot meals, learn about balanced diets through MyPlate, discover nature with Smokey Bear, and enjoy a variety of vegetables from the school garden.
 - Agencies: RMA, FNS, AMS, FS, ARS, ERS, NASS, NIFA, RBCS, RUS, FAS

• Farms and Ranches

- Through crop insurance, loans, pricing data, and more, USDA provides wraparound support to help farmers, ranchers, and land stewards like Patrick the Producer expand their operations and stay profitable.
- Agencies: FSA, NRCS, RMA, AMS, APHIS, FS, ARS, ERS, NASS, NIFA, RBCS, RUS, FAS

• Public Lands

- FS works to prevent damage to natural resources and the environment, implement conservation initiatives, and promote good land management. This enables Ava the Adventurer to connect with nature.
- Agencies: FSA, RMA, AMS, FS, ARS, ERS, NASS, NIFA

• Municipal Buildings and Public Utilities

- Federal and local government champions like Preston the People's Advocate use USDA data to inform their policies, and help their communities get access to reliable utilities and broadband, food, and government-funded services.
- Agencies: FSA, NRCS, FNS, AMS, ARS, ERS, NASS, NIFA, RBCS, RUS

- USDA Facilities and Offices
 - Through research and analysis, scientists in the public and private sectors like Sunali the Scientist work with USDA to ensure a safe, sustainable, competitive U.S. food and fiber system, strengthening communities, families, and youth.
 - Agencies: FSA, NRCS, RMA, FNS, FSIS, AMS, APHIS, FS, ARS, ERS, NASS, NIFA, RBCS, RUS, FAS

Key Numbers and Facts Sorted By Building

Through the course of conducting secondary research for the OneUSDA Ecosystem Map, the team uncovered several quantitative data points that complement the connections between agencies and services that were illuminated through qualitative research. These statistics were originally included on the OneUSDA Ecosystem Map, but removed after feedback that data like this is constantly going-out-of date; inclusion of data points that expire after a couple months' time would limit the shelf life of the Ecosystem Map.

Notable USDA Statistics [Statistics that speak to USDA's impact according to Service Area]

- Universities
 - REE: Through ARS, 690 Research projects in 90 locations¹
 - REE: Through NIFA, at the post-secondary level, AFRI supported about 940 undergraduates, 995 graduates, and 617 postdoctoral students.
 - REE: NIFA-funded programs supported 104,149 students through recruitment/ retention, curriculum development, and faculty development.²
- Food Establishments
 - FS: FSIS, 6,400 slaughter/processing establishments
 - FPAC: FSA, \$192B of livestock, poultry, and specialty crops protected³
 - REE: The National Animal Nutrition Program makes data on more than 1.5 million feed ingredients openly accessible in an up-to-date, downloadable system for use by research and extension personnel, producers, regulators, and industry professionals.⁴
- Processing Facilities
 - FSIS, 6400 slaughter/processing establishments
 - FPAC: FSA, \$192B of livestock, poultry, and specialty crops protected⁵

¹ FY2020 USDA Budget Summary

² <u>NIFA Annual Report FY2018</u>

³ <u>FY2020 USDA Budget Summary</u>

⁴ Research, Education, and Economics Action Plan Progress Report, 2016

⁵ <u>FY2020 USDA Budget Summary</u>

- REE: The National Animal Nutrition Program makes data on more than 1.5 million feed ingredients openly accessible in an up-to-date, downloadable system for use by research and extension personnel, producers, regulators, and industry professionals.⁶
- FAS: \$12.8B of trade preserved

• Homes

- Parents and families like Lydia the Loving Parent use FNS recipes and SNAP benefits to prepare healthy, homemade meals for their household. They track recalls and follow preparation guidelines to ensure the food is stored correctly and safe to eat.
- Agencies: RUS, RHD, FNS, FSIS, FSA, NRCS, AMS
- In 2020, participation in SNAP is estimated to be an average level of 37.75 million participants per month⁷

• Community Centers

• Between 2009 and 2016, USDA Rural Development has funded nearly 9,200 community facilities such as schools, public safety, and health care facilities

• Schools

- RD: Between 2009 and 2016, USDA Rural Development has funded nearly 9,200 community facilities such as schools, public safety, and health care facilities⁸
- REE: NIFA-supported Agriculture in the Classroom's K-12 curriculum website had over 336,000 visitors (an increase of 26 percent over 2017), 30 percent of whom accessed 405 standards-based lesson plans and 785 companion resources
- REE: NIFA, the AFRI-funded Professional Development Opportunities for Secondary School Teachers Program awarded \$3.1 million to train 950 educators, which will impact up to 70,000 K-14 students over the next three years⁹
- FNCS (FNS):
 - 30.4 million children participated in National School Lunch Program in 2016¹⁰
 - School Breakfast Program operations in more than 78,000 schools and institutions¹¹

• Farms and Ranches

- FPAC: FSA
 - \$7.7B in farm loans supporting 48,800 farmers
 - The requested loan levels will serve an estimated 34,737 farmers, 28,070 of whom will receive direct loans and 6,667 will receive guaranteed loans.
 - For farm ownership loans, the Budget includes funding to support \$1.5 billion in direct loans and \$2.8 billion for guaranteed loans. These loan levels will

⁶ <u>Research, Education, and Economics Action Plan Progress Report, 2016</u>

⁷ <u>FY2020 USDA Budget Summary</u>

⁸ Rural Development Newsroom Article, 2016

⁹ NIFA Impacts Report, Education & Multicultural Alliances

¹⁰ <u>School Lunch Program Fact Sheet</u>

¹¹ <u>School Breakfast Program Fact Sheet</u>

provide 14,130 people with the opportunity to either acquire their own farm or keep an existing one¹²

- NRCS
 - 33.3 million acres treated with conservation practices to improve water quality
 - 27.1 million acres of grazing and forest lands conservation
 - 9.0 million acres of wildlife habitat improvement
 - 12.6 million acres of conservation applied on the ground to improve soil quality (FY2020)
 - In 2017, USDA and its partners helped more than 680,000 land managers invest in their operations. This work resulted in conservation plans for 27 million acres of working lands—an area the size of Tennessee.
- RMA
 - For the 2018 crop year, the Federal crop insurance program provided about \$106B in risk protection or about \$76.8B in (normalized) risk protection.
 - Through this organization, USDA supported an effective safety net to the more than two million agricultural producers who provide food and fiber to over 300 million Americans, and millions more around the globe.
 - Approximately 1.8 million farms are enrolled in the Agriculture Risk Coverage (ARC) and Price Loss Coverage (PLC) programs, which are helping cushion the financial strain felt by producers due to continued low prices for many commodities.
 - The Budget provides \$8.9 billion for the Federal crop insurance program, enough to provide crop insurance coverage for more than \$100 billion in crop value. Crop insurance provides farmers and ranchers a means to effectively manage their risk through difficult periods, helping to maintain America's safe and affordable food supply.¹³

• Public Lands

- NRE: Forest Service
 - 13 billion dollars contributed to the U.S. economy by visitor spending each year
 - 500 million approximate acres of private, state and tribal forests on which the Forest Service supports sustainable management
 - 193 million acres managed by the Forest Service
 - 27 million annual visits to ski areas on national forests
 - 36.6 million acres of wilderness
 - 400,000 acres of lakes
 - 277,000 heritage sites
 - 10,000 professional wildland firefighters
 - 4,300 campgrounds
 - 154 national forests

¹² FY2020 USDA Budget Summary

¹³ FY2020 USDA Budget Summary

- 98% of wildfires are suppressed within the first 24 hours they are detected¹⁴
- The agency will accomplish a timber output of 3.7 billion board feet while improving more than 1.1 million acres of National Forest System lands to mitigate wildfire risk.
- In 2016, over 23M full- and part-time jobs, or 15 % of total U.S. employment, were related to agriculture and forestry.¹⁵

• Municipal Buildings and Public Utilities

- RD: 5.7M in 2018 borrowers' customers received new and/or improved electric facilities in 2018
 - Number of borrowers' subscribers/grantees receiving new and/ or improved telecommunication services -45,000¹⁶
 - 7M citizens got electricity upgrades
 - Since 2009, USDA also invested \$38.6 billion in 1,057 electric projects that have financed more than 198,000 miles of transmission and distribution lines serving 4.6 million rural residents; and helped bring high-speed Internet access to nearly 6 million rural residents and businesses.
 - We built 14,500 miles of electric transmission and distribution lines to benefit more than 7 million rural customers; we partnered with cooperatives and communities to deliver rural broadband service to 45,000 homes and businesses
- RD: 3M citizens got water & wastewater upgrades
 - Invested nearly \$3 billion to provide new or improved water and wastewater services to nearly 3 million rural Americans
- RD: Water and Waste Disposal Funding was \$2.055B¹⁷
- NRE (FS): 20% of America's clean water supply provided by the national forests and grasslands¹⁸

• USDA Facilities and Offices

- REE:
 - 405 Patents Issued (since 2009)
 - 1,151 Inventions (since 2009)
 - 26,750 Peer-Reviewed Publications (2016)
 - \$121 million to support Minority-serving Institutions (2016)
 - \$2.5 billion Leveraged in Partner Projects (2016)¹⁹
- REE: Through NIFA, in FY 2018 Congress appropriated \$400 million for the AFRI program. During FY 2018, NIFA received approximately 2,707 proposals for AFRI grants and, after a peer-review process, made 686 awards.²⁰

¹⁴ Forest Service by the Numbers

¹⁵ FY2020 USDA Budget Summary

¹⁶ FY2020 USDA Budget Summary

¹⁷ <u>USDA Rural Development 2018 Performance Report</u>

¹⁸ Forests & America's Water Supply

¹⁹ <u>Research, Education, and Economics Action Plan Progress Report, 2016</u>

²⁰ <u>NIFA Annual Report FY2018</u>

Process Photos



Process Photos

