

Designing for Behavior and Culture in Local Food Systems – extended abstract, v2

extended abstract:

Designing for Behavior and Culture in Local Food Systems

primary contact:

JP Pellicciaro

co-authors:

Christiana Lackner, JP Pellicciaro
Carnegie Mellon School of Design

keywords:

design, local food, behavior, culture, community, interactions

Although food systems and design may seem like they do not have much in common, design is as essential to the human experience as food. Herbert Simon is quoted as saying, “Everyone designs who devises courses of action aimed at changing existing situations into preferred ones.”

This view positions design to help address current issues around behavior and culture in local food systems. In this paper, we analyze the approaches of various common and emerging models in the local food movement through several design lenses. We highlight opportunities for innovation in local food initiatives by using design-based thinking tools that can influence behavior and culture around food. Finally, we present two case studies and provide actionable takeaways that can be used by local constituents. With a view toward fostering interdisciplinary dialogue around pressing food systems issues, the authors feel design is an important and accessible practice in the formulation of culture and behavior that can bring valuable insights to this discussion.

The local food systems landscape has been evolving over the last thirty years, but the last ten years have shown significant increase in awareness and growth of these systems. Various models exist to distribute and sell local food, connecting producers with local consumers at the business and individual levels. Models such as farmers’ markets, food co-ops, community gardens, and local food hubs do not merely provide mechanisms for small-scale farmers to distribute their food locally. They enable purveyors and consumers to shift their purchasing behaviors, incorporating local food into their daily routines, and ultimately into local culture.

At the funding and policymaking levels, community food assessments and food policy councils are prevalent models for ascertaining community-level needs regarding food production, distribution and consumption in order to direct financial resources and inform policy and program decisions.

While all these models provide reliable infrastructure for both the flow of food and the flow of resources, new models frequently emerge in a continued effort to further local food. In some instances, they reclaim or redefine what food sovereignty means for local communities. In other instances, digital technology paves the way for communities to connect with local producers.

One of the authors observed several unique models in Denver’s local food system. Sprout City Farms, a one-acre urban farm on public school grounds, combines the farm-

to-school and garden-to-cafeteria models. The “farmer-in-chief” works with the school chef to incorporate produce into the meal plan, and students learn to appreciate the nutritious food growing on their school grounds. Gypsy Farm Bus (now in Madison) is a co-op of small family farmers who sell their produce in a school bus turned mobile farmers’ market. Growhaus and Revision International both coach low-income communities in becoming more self-sufficient by growing their own food.

Technology has influenced models of local food distribution, enabling more direct connection between producers and consumers based on real-time supply and demand. Online farmers markets and CSAs allow consumers to shop online and have food delivered (Business-to-Consumer). Similar businesses exist to connect restaurants or schools directly to local providers (Business-to-Business). Finally, applications have been developed to help people share excess food or cook meals for neighbors, another form of “local food” in a cultural sense (Consumer-to-Consumer).

Each model takes a different approach to connecting producer and consumer, designing for certain behaviors and creating value to varying degrees of success. The structure of these models, down to the quality of the interactions of people within the service, affects the ability of people to adapt to living within a culture of local food.

The following core principles of design provide useful perspectives for understanding behavior and culture in food systems.

‘Holistic’ view: Design attempts to reframe problems by looking at the network of people and things involved. Seemingly unrelated phenomena or actors may become central to understanding how to design for behavior and build a culture around local food systems.

User-centered focus: Design seeks to understand, respond to and sometimes adjust stakeholders’ motivations and goals to make people their focus so that the product or service being offered resonates and therefore is readily adopted by consumers.

Understanding context: Particularly important in designing for local, design seeks to understand and build upon the specific cultural, geographical and temporal contexts in which people live and act.

Power of story: Communication design, which encapsulates both visuals as well as narrative, understands first what moves people and next how to reach and engage people.

People as designers: By putting portions of the creative process in the hands of stakeholders or consumers, the value of a product or service is co-created by those whom it most directly affects.

Streamlining partnerships: By understanding the moving parts of a product or service ecosystem, including organizational goals, consumer motivations, and resources at hand, the partnerships necessary to create and deliver value to consumers can be forged more effectively and efficiently.

Design is a multifaceted field of practice with various perspectives for understanding and influencing people via technologies, products, and services. We discuss several branches here that provide valuable perspective to developing local food systems.

Information design and data visualization serve to craft a compelling and thought-provoking story by giving visual form to large sets of information or data. The visualizations often serve to create awareness and even incite behavioral change to specific audiences.

Design for human interaction takes an eye toward crafting things—both tangible and intangible—in such a way that people interact with objects and with each other in more humane, helpful, and enjoyable ways.

Service design seeks to guide and craft the activities and interactions of people involved in the production and consumption of services, ultimately leading to increased value to all stakeholders involved in the service. These interactions may occur between customer and service provider or between customer and digital and physical touch-points of the service.

Practice transition design understands human behavior as a series of practices that people enact via a combination of skills, meanings and things (the components of a practice). It seeks to shift these everyday practices toward more sustainable activity by designing products, services and systems that guide new combinations of these components.

Design for collaboration and dialogue provides a common language for people from different backgrounds to understand each other's values and perspectives. This enables collaborators to synthesize their individual understandings into composite shared understanding of a complex system.

Participatory design and co-design engage users in the process of designing a product or service, understanding that the user is the expert of their own experience and imagined future experiences. Designers empower people to imagine alternative ways of thinking and behaving, and then builds those into reality through products and services.

Experience design augments traditional branding schemes by crafting product and service ecosystems that consistently deliver specific value and qualities of experience to customers across time, space, and technology platforms.

Two case studies can illustrate how design applies to local food models in a way that affects culture and behavior:

Human Practice-Centered Design focuses design activities towards re-configuring everyday human practices (e.g. the practice of cooking). The case study explored the role of services in configuring practices, specifically using community supported agriculture as an example. The case study also tested a new design tool—service practice mapping—which visualizes the interrelation between human practices and the services that people interact with in day-to-day life. For community supported agriculture, service practice mapping revealed the complex system of factors that affect members' participation in CSAs. It provided direction for new approaches that CSAs can take to facilitate members' transition to *local* food-related practices, with the aim of ultimately improving retention rates for CSAs.

Community-centered governance design draws from information design and co-design to support the work of collective impact groups. Using Denver's local food system as a case study, it proposes a set of tools that equip members of food policy councils and community food assessments. By creating a container for productive dialogue, it enables team members to create a shared, holistic understanding of the food system, identify available and needed resources, devise new policies and programs, and create a strategic plan to coordinate action.

In our research, we have posed questions about behavior and culture in local food systems from a design perspective:

- To what degree are local food systems actors understanding the day-to-day contexts of the people whom they serve?
- How can they adjust their models to consider the daily interactions between people and the products and services that connect producer to consumer?
- How can they make the most of their limited capacity and resources in order to further the local food movement?

We believe that design can contribute to the multi-disciplinary discourse among the local food community and provide its constituents with tools that support this movement. To this end, we will present a set of questions that support conscious creation of interactions, programs, and policies that encourage behavior shifts towards adoption of local food as a cultural norm. We hope that these questions elucidate roles for design in the local food movement and provide points of action for fostering culture and shifting behavior.