EAT LOCAL FOOD!
CONNECTING VALUES AND ATTITUDES TO A COMMUNITY BASED FOOD SYSTEM

CREATIVE PROJECT
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INTRODUCTION

Myriad pastures of grazing animals and acres upon acres of golden corn lining its highways underpin Indiana’s reputation as a farming state. In smaller communities, residents must carefully share roads with ever larger farming machines driving between fields. These features of rural life popularize the idea that small farming communities in Indiana and other grain belt states have a role in feeding the country and keeping residents healthy.

Yet, this idyllic vision of Indiana as a rural, family-centered farming community that feeds our nation has changed dramatically over the last century, and in some ways was never accurate. An overwhelming majority of foodstuffs produced in Indiana are commodity items like corn and soybeans, intended for sale to interstate or international markets. Commodity crops are often refined into feed for livestock or a vast array of processed food and drinks, sometimes turning the wholesome product into highly refined packaged items. As for producing crops that feed nearby residents, that, too, has not been accurate since the early days of Hoosier statehood. Currently it is estimated that about 90 percent of food consumed by Indiana residents is imported from outside the state (Meter, 2012).

Food in this system is sourced by an abstract conglomerate of faraway producers, diverting money from local economies. Crops are often produced with unsustainable methods that use potentially harmful and environmentally damaging chemicals in their cultivation. Long transport routes and disconnectedness from a nearby food supply threaten food security in an emergency. This trend of disconnected food production and consumption of imported products, supported by a complicated network of contracts, public subsidies, and policies has resulted in momentous side effects for consumers, producer networks, and communities at large.
Disconnectedness from our food supply has been decried in recent years for its negative effects, yet a majority of consumers in Indiana and the United States continue to shop at commercial outlets and buy imported products. Many factors affect a consumer’s food buying behavior: shopping convenience, knowledge and attitudes toward local products, access to local products and information, and institutional policies that make less healthful, more highly processed foods easily available. Now, a growing sector of consumers has begun demanding healthier, more sustainably produced food items. The market responded by creating items marketed as “green” and “healthy,” but they still contain highly processed ingredients and keep consumers disconnected from their food supply.

By contrast, buying from local fresh food markets connects consumers with farmers who commonly practice sustainable or regenerative farming methods that simultaneously improve soil health while producing a healthier product for the end consumer. This means that, aside from creating a healthier ecosystem, consumer health also benefits because small-scale, diversified farmers often do not use unnatural or harmful chemicals on their products. Additionally, foods sold directly from producer to consumer (sometimes called “farm to table”) do not experience nutritional atrophy while on a long transport route like foods imported from California. The benefits of a local food system also extend to a community’s economy. Purchasing food directly from a producer returns money to circulate in the local economy, supporting community vitality.

In an effort to promote the sale and consumption of local food, many experts, including the Indiana State Department of Agriculture, advocate for the creation and support of local food hubs, operations that process, store, and facilitate the sale of locally or regionally produced goods. This paper investigates how a creative project might shift consumer attitudes to increase the sale of local food products through an outlet like a food hub. The tools and methods used to
research and develop this project were guided by the Design Thinking framework as taught at the Hasso Plattner Institute of Design at Stanford University. The research participants and intended audience for this project reside in East Central Indiana.
REVIEW OF LITERATURE

This project’s primary concern is to increase sales of local food. This will reasonably be achieved by influencing consumers’ buying behaviors to perform certain actions and adopt certain habits favoring local food. A person’s actions and patterns of behavior are products of deliberation upon values, consistent principles that help guide a person through life. Therefore, we must first explore the concept of an individual’s values and their relation to behavior.

Understanding consumer values allows marketers and activists to design their messaging and promotional efforts to be attractive to consumers. Institutions, activists, and social welfare groups exercise a framework of best practices in marketing called social marketing, which deals with the promotion of information and behavior aimed at benefiting public good. However, some groups who practice social marketing to promote ideals of public well-being are considered polarizing, like sex educators. In this case, efforts to disguise public service messaging in a more entertaining or trusted medium are sometimes used.

New technologies have created opportunities for infusing storytelling and social marketing into previously unforeseen situations. For example, transmedia activism blends entertainment, education, and diverse media platforms to create novel and varied access points to behavioral campaigns to increase potential participation. Using familiar, casual media enables user to easily see themselves as part of a social campaign. This literature review explores concepts and best practices for creating a project that influences consumers, with the intention that this understanding will guide the design of a project to promote increased sustainability and economic health through broadening local food consumption.
A personal value can be defined as “an enduring belief that a specific mode of conduct or end-state is personally preferable to its opposite” (Homer & Kahle, 1988). In other words, values are guiding principles that help an individual consistently achieve favorable end states as they navigate an environment. The study of personal value systems, the organization of personal values, which, in part, composes one’s personality, is especially relevant to product marketing because of its ability to predict human behavior (Beatty et al, 1985; Rokeach, 1968; Homer & Kahle, 1988). Every decision a person makes is subject to judgment against his or her system of values, including decisions about what to buy.

One method for qualifying and quantifying values is the Rokeach Value Survey (RVS), developed by Milton Rokeach. The RVS attempts to understand the prioritization of personal values through a ranking exercise. A selection of 18 instrumental values and 18 terminal values were chosen (the number 18, admittedly by Rokeach, was somewhat arbitrary) to be ordered by a respondent according to the values’ influences in their daily life (Rokeach, 1968). Terminal values concern ideologies that affect a person’s broader environment and final condition, such as world peace or religion. Instrumental values like bravery, help guide a person’s conduct. Responses to the RVS survey should enable researchers to predict behavior by assuming a person maintains certain attitudes.

However, the RVS is not entirely reliable for understanding values. Respondents can readily rank high priority values as being superior to others, but lower priority values are often muddled and difficult to quantify (Beatty et al., 1985). The RVS does not account for wide gaps in valuation, as the response choices are incremental and do not reflect the actual quantitative strength of a personal value. There is also no option to repeat rankings in the case of two or more
values holding identical significance for a respondent. Therefore, its ability to accurately predict behavior is questionable.

To address shortcomings of the RVS, a group of researchers at the University of Michigan developed the List of Values (LOV) method (Beatty et al., 1985). The LOV comprises only nine values. Respondents are asked to assign a number to each of the values to show its importance and then prompted to choose one or two values that are the most important in their lives. The team was able to draw significant conclusions from having respondents rank only the top two values that had the greatest effect in their daily lives (Beatty et al., 1985). The LOV value options are generally considered more closely reflective of personal considerations, like close relationships, while RVS values include broader societal considerations (e.g., world peace).

Using these tools is especially important for advertisers and product marketers, as attitudes and values also influence an individual’s initial perception of his or her environment (Postman et al., 1948). A person will notice more quickly stimuli that he or she finds interesting or have personal significance, and those will hold his or her attention longer. Conversely, a person’s subconscious bars perception of stimuli that do not support their values or worldview. For example, marketers of “green” products emphasize messages that reinforce the environmental and societal benefits of a product that may cost more but will attract consumers who value social responsibility (Laroche, et. al, 2001). To encourage certain attitudes and behaviors, then, it is important to communicate through ideas and methods that are significant to an audience.

By understanding consumer values, researchers and marketers can form an aggregate profile of consumer attitudes that are directly linked to behaviors. Values are similar to attitudes in that both help an individual consistently seek and achieve favorable outcomes as he or she
goes about living, and both can change as a person gains knowledge and experience and adapts to their environment (Homer & Kahle, 1988). Values are considered more basic to behavior, and therefore more abstract, as they guide what situations a person will enter and how they act in an environment. Attitudes are generally consistent and develop through similar experiences over time, such as likes and dislikes (Homer & Kahle, 1988). Attitudes are useful to predict behavior in situations in which a consumer must make a choice in a controlled environment. Homer and Kahle (1988) call this the “value-attitude-behavior hierarchy,” describing the sequence of cognitive processes comprising a person’s actions. Influencing a person’s behavior can then be achieved by appealing to their attitudes, a tactic preferred by marketers since consumer values are inherent and somewhat obscure and attitudes are more binary.

The hierarchy also suggests that consumers display their values through buying behavior and patterns of consumption. For example, Homer and Kahle (1988) found that people who expressed stronger attitudes about nutrition also valued more internal concepts such as self-respect and accomplishment, as opposed to people who valued external concepts like a sense of belonging in a group. Strong nutritional attitudes positively predicted consumer behavior to buy from health food stores. The researchers inferred that, because the selected respondents prioritized internal values related to their personal well-being and self-efficacy, they would also prioritize the nutritional capacity of their food, wanting to have full control over the food sustaining their bodies.

Of course, others have researched consumer priorities specific to food buying, including attitudes about purchasing local food. A 1998 study (Glanz, et al.) asked consumers to rank characteristics of food in order of importance as in the RSV model. Consistently, taste was ranked as the most important factor to determine buying behavior, followed by cost, nutrition,
and convenience (Glanz, et al., 1998). Consumers also said they would hesitate to buy food labeled as “healthy” if they doubted it would taste good. Consumers who valued convenience also reported eating more fast food, as it was considered more convenient than preparing fresh food at home.

Social Marketing

One technique communicators use to try to affect consumer or citizen attitudes and priorities is with social marketing. Social marketing, as summarized in 1971 by Kotler and Zaltman, supposes that social efforts to change a behavior, attitude, belief, ideal, or social norm will be more successful if they emulate successful commodity product marketing campaigns. They build on the work of Wiebe, Lazarsfeld and Merton from the early 1950s, who noted some similarities between marketing campaigns and social efforts which led to positive results. Kotler and Zaltman, both experts in marketing, then applied the conventional “four P’s” model, first described by McCarthy (1968), of product, promotion, place, and price to reframe the social marketing strategy. Product refers to the behavior being marketed. Promotion is the sum of persuasive communication efforts to encourage the behavior. Place is the availability of channels through which the behavior can be enacted. Price is the potential cost in time, opportunity, and personal comfort resulting from adopting the behavior (Kotler & Zaltman, 1971).

Top-down social marketing is employed most often around issues related to personal and public health, like family planning, anti-smoking campaigns, or promoting healthy eating. Governments use these campaigns to promote citizen health. It has also been used as countermarketing when a particularly strong marketing campaign promotes unhealthy behaviors, like those of the food, candy, and beverage industries. According to Wymer (2010), children are
exposed to 40,000 advertisements annually for fast food, high-sugar cereals, and candy, influencing food choice preferences. Furthermore, in 2005 commodity food and drink companies outspent the U.S. government’s health initiatives in marketing dollars.

Although social marketing efforts as described by Kotler and Zaltman (1971) use significant market research, they typically employ a top-down approach to social change. Top-down communications, such as those issued by government and authority agencies, can be useful for disseminating important information about laws, health, and safety. However, efforts to affect individual behavior are often better served by bottom-up or mixed methods, using many trusted communication channels that intimately connect with a smaller number of people. Top-down campaigns have been criticized for generalizing an audience and misunderstanding needs and perceptions, while communication efforts tailored to a smaller, more targeted audience have the potential to address attitudes and barriers specific to that group. Furthermore, in generalizing a problem to be solved, mass media campaigns may exaggerate the depth of individual action to be taken. Haq, et al. give the example of UK media coverage of climate change to show where top-down campaigns fail: “The disparity between the enormity of the problem of climate change as it is currently portrayed and the effectiveness of small individual actions can result in apathy” (Haq, et al., 2008, p. 553).

Mackenzie-Mohr (2011) adapted the social marketing model specifically for the purpose of fostering more sustainable behaviors. He calls this approach “community-based social marketing” (CBSM) and identifies similar parameters for promoting behaviors that reduce environmental impact. CBSM touts a strategy more akin to bottom-up communication efforts and emphasizes the importance of selecting specific, non-divisible behaviors to promote, chosen through diligent scientific research (Mackenzie-Mohr, 2011). Additional community-based
research is then required to determine the benefits and barriers to adopting the chosen behavior. By front-loading research for a project, designers ensure that they are selecting a behavior that will have the greatest impact on consumption reduction and a higher probability of adoption while addressing the needs of a specific audience. CBSM also encourages using incentives to promote the desired behavior, such as free travel vouchers to encourage use of public transportation. Because these efforts require significant investments of time and resources, designers aim to work with audiences who already express some interest in the target behavior (Haq, et al., 2008). This will increase the likelihood that an audience will adopt the suggested behavior change.

CBSM projects encourage behaviors as solutions instead of focusing on the larger problem the behavior aims to solve, which may overwhelm the target audience. This method touts the importance of environmental support for the desired change; consumers cannot be asked to perform a specific action without access to the means to do so (Mackenzie-Mohr, 2011; Haq, et al., 2008). Those means include knowledge, as perceived access or perceived ability to perform an action are predictors of behavior. For studies that encouraged increased fruit and vegetable consumption, participants who perceived they had greater access reported more change in the desired behavior, increased consumption of produce (Caldwell, et al., 2008). Providing adequate information and support is, therefore, important to increasing the likelihood that consumers will adopt a desired behavior. Publicly-distributed maps that show where fresh produce is available and transportation options for accessing it could increase perceived access to the product.

Additional environmental factors that can encourage or inhibit behavior include social, institutional, and lifestyle elements. In a study of Greek college students, participants reported
that they trusted information disseminated by scientists, but they were more likely to be
influenced by information from their family and friends (Kapetanaki, 2014). They also cited not
wanting to feel stressed-out by pressure to develop healthy habits; if the information is too broad,
apathy could result (Haq, et al., 2008). Because of their busy schedules, the students wanted to
see greater efforts by their institutions and government to make healthy food options more
available (Kapetanaki, 2014).

Kotler and Zaltman (1971) stress the importance of thorough empathy research to ensure
the best chances of success when communicating with an audience. Community-based and
individualized efforts, which are usually implemented on smaller scales with lesser budgets,
often target people who show interest in adopting the desired behavior instead of wasting funds
marketing to people who are likely to reject it (Haq, et al., 2008). Significant market research is
important for understanding the attitudes and cultural beliefs of an audience, as well as their
ability to access channels for behavior change (Mackenzie-Mohr, 2011). For example, audiences
in industrialized countries often have access to transportation and information to help them
achieve a desired behavior, but lack the motivation to adopt new habits that may be less
convenient. In this case, the primary function of a social marketing campaign is to move an
audience from intention to action by emphasizing the benefits of change or by offering incentives
(Fox & Kotler, 1980). However, if an audience lacks access to information and the channels to
achieve change, social marketing should focus on providing information and creating
partnerships that will facilitate access for an audience.
Transmedia Activism

Social marketing campaigns – even when implemented at local levels – rely on the dissemination of information and inculcation of knowledge to influence attitudes and behavior. One obstacle to this approach is overcoming barriers of personal bias, as people will intentionally ignore information that does not conform with their current values (Postman, et al., 1948). This problem can be mitigated by infusing a campaign with storytelling, which makes it easier to attract audience members through interest in a narrative. Stories allow audiences to visualize themselves in the world of the narrative (Pratten, 2015) and empathize with its characters (Keen, 2006; Manny, 2008; Zak, 2015). Transmedia storytelling, which unfolds across various media platforms (Jenkins, 2006), can be especially effective for exposing an audience to new ideas and messages by creating a dispersed network of entry points, “providing a comprehensive and coordinated experience of a complex story” (Srivastava, 2009). Fragmenting a narrative across digital and even physical spaces results in a traceable storyworld, demanding greater effort and participation from its audience. This results in deep immersion and connectedness to the story and characters.

Capitalizing on various entry points allows a transmedia franchise to reach users that a single platform might not. For example, the audience for comic books is much narrower than that of network television, but engaging content can drive an audience from a television series to expand its understanding and enjoyment of the characters and story through a comic book, mobile app, or website. Diverse points of entry also allow an audience to prolong its exposure to a franchise by facilitating a chase for all pieces of the storyworld. “In the ideal form of transmedia storytelling, each medium does what it does best - so that a story might be introduced in a film, expanded through television, novels, and comics” (Jenkins, 2006, p. 96). Still, Jenkins,
who first coined the term “transmedia,” maintains that each entry to the franchise or campaign should be self-contained so that users can have a thorough understanding and enjoyment of the experience through one exposure.

Distributing content across social platforms opens opportunities for audience engagement through commenting, discussion, or even submitting an extension of the narrative. This is especially important to *transmedia activism*, first coined by Lina Srivastava to describe transmedia’s potential for connecting people to a social cause “by exposing them to a variety of media properties over various distribution channels - which opens up avenues for dialogue and provides an audience an educational experience about workable solutions” (Srivastava, 2009, para. 4). She cites three components of successful transmedia activism projects: cohesive narrative, shared goals, and an articulated common identity (Srivastava, 2013). A compelling narrative serves as an initial hook to get an audience interested in an issue. In moving an audience between platforms, actionable elements are incorporated so the audience can contribute to the overall goals for the transmedia experience. This participatory culture results in an audience of activist-minded supporters, who are invited to affect social change by contributing to the storyworld. Open sharing of knowledge and discussion creates an educational environment where users learn from each other, augmenting the group’s common understanding (McGinn, n.d.). Srivastava encourages professional producers to use her model to tell the stories of marginalized groups. Although the stories are authentic and told by the characters themselves, the people are not in control of the content; it is owned by a third party and monetized, although funds are often used to support the associated cause.

Costanza-Chock (2013) examines how marginalized groups leverage transmedia technologies to take ownership of an activist movement through *transmedia mobilization*, “a
mash-up of the concept of *transmedia storytelling*, popularized by the media scholar Henry Jenkins, and ideas from social movement studies about the ways that social movements use networked communication to support mobilization efforts” (Costanza-Chock, 2013, p. 99). Just like social marketing, in which top-down efforts fail because they misunderstand the needs of a particular community, transmedia mobilization and activism use bottom-up strategies to document authentic stories from those affected by a particular issue. Costanza-Chock emphasizes that, as mainstream media commodifies and stratifies its audience by lumping them into generalized social groups, it is especially important for cultural groups to represent themselves with personally produced content (Costanza-Chock, 2008; Jenkins, 2006). Using transmedia tools and a group’s community network, their stories can be “pushed into wider circulation to produce multimodal narratives that reach and involve diverse audiences, strengthening cultural, mobilization and policy outcomes” (Costanza-Chock, 2013, p. 97).

Many of the populations that might benefit from transmedia promotion are victims of the “digital divide” (Hargittai, 2008), which refers to unequal access to technological tools that more affluent or privileged populations enjoy. Especially for those populations, transmedia opens opportunities to build a detailed storyworld using whatever tools they have available. Cell phone videos, podcasting, social media posts, and free website platforms are accessible to anyone who can access the Internet. Still, understanding how to use those tools is another problem associated with digital divide, as populations without regular access to complex technology also lack individuals who can teach those skills.

Costanza-Chock (2011) highlights efforts by U.S. immigrant workers and their descendents to show how networked communication strengthens a movements’ power by fortifying individuals with knowledge and skills. Supporters of the DREAM Act, which would
offer a way for undocumented immigrant teenagers to obtain permanent U.S. residence, formed a network of mostly students to educate others about the bill. The organizers also “share media making and communication skills across their network in both formal and informal workshops and online venues” (Costanza-Chock, 2011, p. 31) so that other members of the movement can share information with the group. Another movement among the Latino population that used relatively low-tech communication was the Basta Dobbs movement, which used SMS messaging to call its supporters to sign petitions, phone radio and television stations, and attend public rallies (Costanza-Chock, 2011).

Making use of the tools an audience already has and uses regularly cuts down on the cost of organizing a campaign. It also allows more storytellers to join the experience by offering diverse platforms for expression. Including diverse perspectives and first-hand accounts from the communities in question ensures that all information is authentic so that an audience is inclined to trust the information and will develop greater empathy for the cause (Srivastava, 2013; Zak, 2011). Furthermore, a collective culture which encourages contribution from all community and audience members lightens the content burden for producers (Jenkins, 2006). Although some community leaders usually emerge, the message is augmented by the contributions of many instead of just the perspective of a few people.

**Similar Cases**

**Food Hero**

The Food Hero nutrition education campaign is designed to promote healthy behavior among Oregon low-income residents by educating them about healthful eating and food safety best practices. It was developed by the Oregon State University Extension Nutrition Education
Program in 2009. The main target audience is lower-income mothers who have young children living at home (Tobey & Manore, 2014). The female audience was divided into two segments: those who frequently used social media and online resources for food and health information and those who used other resources not online. A secondary audience was their children, as the mothers reported including their children in the food preparation process (Tobey, et al., 2016).

The team first conducted a needs assessment by collecting data from over 1,500 people. This helped determine the target audience and informed their choice to use print materials and three social media platforms for communicating their message: Facebook, Twitter, and Pinterest. Facebook was chosen because it is the most widely used social media network; Twitter was targeted for use by Oregon education practitioners to share with targeted networks of people; Pinterest was used because of its heavy emphasis on photos and simple, visual messages (Tobey & Manore, 2014). Print materials were distributed as community media kits including a monthly magazine and grocery store flyers. The needs assessment also revealed that the target audience wanted simple recipes that did not require much time to prepare. The social media component was necessary because of the popularity of online resources for seeking nutrition and health information. Furthermore, social media channels “empower the targeted audience to share information and champion Food Hero messages within their networks of family and friends” (Tobey & Manore, 2014, p. 129).

Fish Fight

The Fish Fight campaign was a transmedia campaign hosted by BBC4 in the United Kingdom (Gambarto & Medvedev, 2015) starring celebrity chef Hugh Fearnley-Whittingstall in a documentary-style series exposing the harmful environmental consequences of fish discarding
policies set by the European Union (EU). Under fish discarding rules, fisherman had to dump dead fish back into the ocean if they did not meet regulatory standards or exceeded quota limits.

The campaign had two goals: to get people to care about wasteful fish discarding and to get them to affect regulatory change by signing a petition sent to the EU. The petition gained 87,000 signatures during the Fish Fight television show’s two seasons. The campaign also featured an interactive website, an iOS mobile app, Twitter, and other social media pages. The audience was mobilized to sign official petitions and send messages to its political representatives and successfully affected political change regarding fish discarding policies.

The project started with a series of YouTube videos to create interest in discarding and give a preview for the upcoming BBC4 series. The audience was able to share the early videos and engage in conversations about discarding before the TV series, which was the primary intellectual property for the campaign, even debuted. Social media platforms provided an outlet for the audience to contribute to the campaign’s text and add more followers early on. Because the main political action was driven by audience participation, the audience became a main character in the transmedia experience.

The campaign also served the audience by providing accessible content through the iOS mobile app. The app highlighted UK restaurants where users could purchase sustainably caught fish. The app also listed recipes for fish that may be thrown back and wasted under the discard policy, so the audience could be part of a solution increasing demand for discarded fish. In providing these incentives, the campaign empowered users to take action for themselves and contribute to the content by posting on social media about their interactions with the campaign.
PROJECT DESIGN

Empathy Research and Problem Definition

To learn about consumers’ attitudes toward food buying, local consumers were gathered at the public library for two focus group sessions. To recruit participants for focus groups, an email blast was sent to adult faculty and staff of the researcher’s university, and flyers were hung at local grocery outlets and on community bulletin boards. A total of 31 people (21 females, 10 males) attended the focus groups. Additionally, nine participants (5 female, 4 male) answered the same questions about their food buying habits via email. Participants were offered gift certificates in exchange for sharing their opinions. See Appendix A for a complete list of questions asked during focus groups and surveys.

To learn about the environments and sentiments of people where local food is bought and sold, key informants were also interviewed at locations where local food is sold. Interviewees included a local farmer, a chef who sources local ingredients, and customers at a farmers market. Interview questions can be found in Appendix B. Developing a clear definition of the problem space helps a project designer create effective solutions that focus on targeted elements of the problem space. The problem space in this project was defined by analyzing data collected from focus groups and interview transcripts.

Data from focus groups were arranged in an affinity diagram, which grouped similar responses to show trends and relative frequency of ideas. Notes from key informant interviews were analyzed for trends and summarized. Full affinity diagram results are provided in Appendix C. Responses from focus groups, interviews, and findings from the literature were carefully reviewed to establish key objectives for how this project might make a novel and valuable
contribution, resulting in the project statement: *To boost the sales of local food with a communication campaign that has three objectives: impart care for local food and producers, increase access to local food by providing information and convenience opportunities, and inspire people to use local food through strong visual communication.* This project statement guided solution exploration and project development.

**Ideation: Exploring Potential Solutions**

After determining the project goals and cultivating a clear understanding of the problem space, investigation commenced regarding how a creative project might address the objectives outlined in the project statement. Since user-centered design incorporates the stakeholders in the process of creating solutions, stakeholders in the problem space are again consulted to help generate and offer insight about the desirability of those solutions. The process of brainstorming solutions is sometimes called *ideation* in user-centered design, and there are several techniques a designer can use to generate a broad range of possible solutions. The ideation technique employed for this project is called “saturate and group,” which was combined with “how might we” questions that prompt users to offer innovative ideas to improve an aspect of the problem space.

In this exercise, a group of three adults (2 females, 1 male) who are advocates for the local food economy met for a guided brainstorm. Each question prompted participants to offer solutions to boost sales and awareness of local food. Participants were allotted a short period of time to generate their responses, writing each idea on separate pieces of paper that would eventually be grouped by their similarities. Full results and questions for the exercise are provided in Appendix D.
Low-Fidelity Prototype and Feedback

Considering the ideation results along with information learned from literature and dialogue with users in the problem space, a prototype for an exhibition about local farmers and the benefits of buying local food was created and showcased for feedback at a farmers market, a location where locally-produced food is bought and sold. The exhibit location was chosen because best practices in social marketing states that it’s best to work with an audience that is already interested in some way (Haq, et al., 2008) or who have some connection to local food. The physical prototype consisted of a walk-in exhibit, which included a pop-up canopy and large cardboard “walls” covered with information about local food and farmers.

To curate information for the prototype, seven vendors who regularly sell at the farmers market answered a set of questions and agreed to submit photos for the prototype. Seven profile pages, one for each vendor, showcased their answers from a phone interview. A portrait of the vendor and their business logo were also included. A regional map that showed each of the featured vendors’ locations, information about the health and economic benefits of local food, and some information about common myths associated with organic and local food were also displayed on the walls of the exhibit. Images and transcripts from the prototype are in Appendix E.

The prototype was displayed at the last Saturday farmers market of September in Muncie, Indiana. During this time of the season, crops are near their peak production and attendance is moderate to high at the market, despite cool weather. A $10 booth space was rented, and visitors were observed as they viewed the exhibit.
Image 1. Patrons at the farmers market.

Image 2. A visitor in the prototype viewing information about local farmers. Each page with a grey photo features information about one local vendor including quotes about their philosophy pulled from a phone interview and their farm’s location. After becoming acquainted with farmers through the information, a photo helps guests recognize vendors while shopping at the market.
A chair was provided in the exhibit so patrons could sit and read the information. Many people visit the market with family and friends, so they entered the exhibit together. In addition to photo profiles featuring local farmers, the exhibit included a map showing where the farms were located (behind the visitors here) and articles delineating the economic, health, and environmental benefits of buying local products.

Some visitors allowed their pictures to be taken and provided a quote about local food.
By understanding more about visitor attitudes after they became better acquainted with local farmers featured in the exhibit, valuable insight was gained about the effect of personal connection and relationship for promoting local food. Visitors were also invited to have their portrait taken to accompany a quote answering the question, “What does local food mean to you?” Findings from the farmers market prototype yielded the final ethnographic insight before the body of the final project was designed.

Feedback and Summarized Findings

From this body of research, a composite understanding of the problem space surrounding selling local food to consumers was developed. Conversations and interviews with more than 40 consumers yielded these key findings about people’s food buying and usage behavior. People buy and consume food for the obvious reason of nourishment, but they are also motivated by obscure ideas like providing enjoyment or caring for someone. Some participants reported cooking for a hobby and would buy specific ingredients to create a new recipe, or to make a dish they had been craving. Imparting care by sharing a meal with someone is a universal and effective gesture that shows affection. Care also influenced participants at the point of sale as participants who were enrolled in a grocery delivery service reported that they enjoy having contact with the seller. One female participant said, “I feel like a friend is shopping for me.”

When choosing foods to buy, consumers cited some common principles that guide their selections. The relative weights of these principles are highly variable as they depend on mood and many other factors in a consumer's life at the time of a purchase decision. Cost is a common consideration because most consumers have budget constraints. They also consider the economy of food, whether it is versatile and can be used in more than one meal. An overarching maxim
expressed by all participants is the desire to avoid food waste. They often make buying decisions based on what they already have on-hand at home so that they can make complementary dishes and avoid wasting food they already purchased. Some participants planned meals and shopping lists to ensure they could use all of their resources efficiently.

Meal planning is also motivated by time constraints. Participants would not buy foods they do not think they have time to cook or that could spoil before being used. Creating a weekly meal schedule ensured they would buy the proper items and amounts so there would not be leftovers to deal with. For busy consumers, convenience is a high priority that can override other considerations. Some participants enrolled in grocery delivery services so they did not have to spend time shopping or planning meals and instead cooked and ate the food they received each week.

Meal planning alleviated some time constraints for participants who could make extra food in advance and save or freeze individual meals. But, variety was a priority for all participants to some degree, and some could handle meal monotony better than others. Besides avoiding monotony for taste, one reason participants planned variety in their meals was for nutrition considerations. Some had specific nutrition priorities such as lean protein, low sodium, or low fat, and some had dietary restrictions like gluten free. To help ensure their nutrition priorities and personal preferences were satisfied, participants researched food through various media. Some subscribed to a few trusted sources like magazines or blogs, while other researched topics sporadically.

At the point of purchase decision, freshness can be an influential factor, which is mostly determined by sight. If food "looks good" or "looks fresh" participants believed it would be healthier, tastier, and more worth their money. They reported that if something was visually
appealing they could be convinced to try it for the first time or to make an impulsive purchase decision. Conversely, if something does not look fresh, participants said they would not buy it. This underscores the idea that visual messaging is very important and persuasive when communicating about food. Participants also reported finding inspiration for dishes to cook and try by looking at friends’ Pinterest and Snapchat, or by trying to recreate meals they had enjoyed previously.

Finally, participants expressed their attitudes toward local food. They viewed local food as less convenient or inaccessible because of limited business hours and few local vendors from whom they could purchase. For a majority of consumers, convenience is more important than ensuring food is locally or ethically sourced. They also view local food as being more expensive than buying from a conventional grocery store. Furthermore, large stores offer a wide selection and variety that enables shoppers to buy all their items in one stop instead of travelling between stores to get the items they need. Local food does not provide an equal variety of products, and participants generally feel reassured when they can buy products labeled “local” at a large grocery. Overall, participants believe that buying local is a more sustainable behavior, but often their priorities conflict with the effort required to purchase local food regularly.

In addition to these findings from interview and focus groups, the physical prototype at the farmers market solicited feedback that informed further project development. The exhibit offered an opportunity for people to contribute their own stories about local food (see Image 4.), but this was not a successful feature. A live encounter at a popup exhibit on a cold day is perhaps not ideal for collecting user content; digital tools that users can access on their own time may be better for curating this information. It also appeared that guests liked to visit the booth when the researcher was not standing near it. At market, vendors want to sell something, so it may have
appeared that a product was being sold at the exhibit. A few times when the booth was unattended, guests were seen entering the exhibit themselves, pointing to the information and sharing it with others in their group. This again shows that people may like to access information at their own pace.

Visitors also commented on the information. They enjoyed learning more about vendors who were selling at market. Many of them recognized or had personal connections with some of the vendors, but were introduced to others through the exhibit. One of the most frequent comments related a desire to access the information online, again, so that users could access the information on their own time.

Throughout the literature and empathy research, a ubiquitous theme emerged across all platforms and situations: personal connection is a very powerful inspiration that can influence attitudes and behavior. Therefore, facilitating and maintaining relationships between consumers and vendors, and between consumers and other local food supporters is instrumental to fostering sustainability in the local food economy consumer base. These findings, combined with understanding cultivated from the literature, led to the development of a transmedia communication campaign called *Locavore*. This project is intended to encourage consumption of local food by providing information about buying opportunities, education about nutrition and preparation, and facilitating a personal connection between consumers and the community of local food producers and users.
BODY OF THE PROJECT

*Locavore: A project to increase consumption of local food*

The *Locavore* project exists across four platforms: an informational website, a mobile app that supports customers as they make buying decisions, social media that will help acquaint consumers with the local food community, and live interactions including opportunities to buy local food. Participation in *Locavore* can be divided into two levels of engagement through those platforms: Level I engagement provides an easy way to engage for all users in a community, especially those who are not familiar with the local food network who may be introduced through social media, a chance meeting at a market, or a digital link from a friend. Level II engagement includes activities and interactions that require more effort and familiarity, such as posting in online communities or attending weekend tasting events. All of these platforms are connected to create easy opportunities for users to move through different elements in the experience, encouraging them to become more involved as they are inspired to do so. By providing access to information, inspiration, and current news about what products are available and tips for using them, people will be empowered to use local food more habitually. Specific objectives for the *Locavore* project are threefold: 1. impart care for local food and producers, 2. increase access to local food by providing information and convenience opportunities, and 3. inspire people to use local food through strong visual communication.
Level I Project Elements

Live encounters

The easiest point of access for users who are not familiar with local food will be through live interactions at a farmers market or other place where local food and products are exchanged. Live encounters include buying local products at a market or retail outlet, face-to-face meetings with a farmer, attending events promoting local products and vendors, or being introduced to Locavore content from a friend or acquaintance. There are also myriad opportunities to promote entry points to other parts of the experience. Live interactions create an ideal opportunity for displaying signage with a QR code that links directly to the Locavore app, business cards promoting the experience website, distributing educational material about local food and farmers, and sharing recipes that inspire and empower consumers to use the foods for sale.

Image 5. As part of their display, many vendors use signage to attract and communicate quick messages to customers. Displaying a Locavore icon could show customers that vendor coupons and information are available through Locavore platforms.
Customers at a farmers market often ask questions of the vendor as they shop. Vendors take care to make their product displays visually appealing to attract customers and set a good first impression for new buyers. This makes live encounters an ideal environment to solicit new customers.

As explained in the literature, consumers who visit local food access points of their own volition are more receptive to messages promoting local food and will be more motivated to adopt locally oriented habits. Because this manner of engagement occurs in public through interactions with people, the experience is highly adaptable to ensure positive outcomes for consumers. This makes casual live encounters an optimal entry point for consumers who have some interest in food, health, the local economy, or learning more about farmers in their communities.

**Website**

A free website, muncielocavore.com, provides the most comprehensive information hub in the Locavore project. Users can browse the range of information on the website for self-guided exploration and use a search feature to access specific resources. The deepest learning can take place through a website because users have access to full-length articles about a singular
topic and can also reference tangential information through hyperlinks within an article, clicking related content on the website, or by visiting external sites for more information. The project website can also host the most diverse and expansive body of information, ideally serving as a mainframe for guiding users through different parts of the experience. A search feature is built into the top-level navigation so visitors can quickly reference specific information on the website.

Although the website can host the greatest wealth of information, it is likely that consumers will require motivation to get there, especially consumers who are not very familiar with local food. For those users, a live encounter will direct them to seek further information online, such as attending a farmers market and looking online for more information about a product they discovered or attending an annual Local Food Summit and seeking information to become more involved in the local food movement. They could also find online motivation from seeing a friend’s or page’s social media posting directing them to the website.
Image 7. Homepage of the Locavore website. Top-level navigation guides visitors through other pages of the site. The welcome page displays featured content that encourages visitors to explore deeper by learning about a featured local farmer or seeing what fresh products are in season. Featured blurbs will rotate based weekly or monthly depending on local activity. A slider of most recent blog posts and news (not pictured) also rotates on the homepage.

Image 8. FRESH navigation page. FRESH showcases local foods that are currently in season and available for purchase, as well as a library for produce identification and links to external recipes and nutrition information.
Image 9. Local Producers navigation page. The featured photos are local farmers in East Central Indiana. More details via a about each farmer can be accessed through the buttons with blue text that lead to profiles of local vendors and information about their farm and products to facilitate a personal connection between consumers and vendors. Each vendor listed currently has a standard profile page, which is the same as the information used in the farmers market prototype.

Image 10. Farmer Profile page for Abbott Garlic & Poultry. A similar entry is available for each farmer listed on the Local Producers page.

Locavore is dedicated to food education and the consumption of fresh, local foods to benefit a local economy, global environment, and individual health.

The project objectives of locavore are: impart care for local food and farmers; increase accessibility of local food by providing education about food use, preparation, and buying opportunities; inspire consumers through gorgeous visual communication.

Social Media

Social media is a particularly useful medium because of its low barriers to access, its ability to easily link to the other two digital arms of this project, and its preformed networks and myriad spreadable applications. It is ideal for audiences of all local food familiarity levels as different users will access it from different social entry points. Users who are more inclined to buy local will access the experience from related groups such as a regional food security initiative. Users who are not familiar but have an acquaintance connected to the project’s network could encounter the project by association. Finally, if a user spontaneously learns of the Muncie local food project they can quickly get acquainted with its objectives, offerings, and network to gain a broader, socially oriented introduction to the project.

For purposes of network and resource sharing, this project used the Muncie Food Hub Partnership (MFHP) Facebook page to distribute social media content. Because Locavore is a

**Image 13.** About navigation page. About features information about the Locavore project and its objectives, links to other interactive Locavore elements, and a contact page.
new project and the MFHP is more established, content that could one day be used on independent *Locavore* social media channels was posted on the MFHP page to gain insight from an extant social network.

**Image 14.** Muncie Food Hub Partnership Facebook photos. Visual communication through Facebook photos is an effective way to show the freshness of local food and also provide precise details about the vendor and where it is available. Showcasing photos of recognizable faces is a popular way to engage with local consumers.
Images 15 - 17. Popular Facebook posts on the MFHP page. Typical posts received 15-25 views. The post featuring MFHP admins (top right) was among the most engaging, with nine reactions. This demonstrates the effectiveness of personal connection to drive engagement with a local food project. The post receiving the most views (top left) was an event tagging Two Cats Cafe, a local restaurant. Performers from the event reacted to this post, which widened its exposure to the performers’ social network.
Mobile App

The final Level I engagement opportunity is through a digital app, which can provide the most effective access opportunities because it offers quick updates and notifications that can be tailored to a users’ preferences. Users may subscribe to vendors and businesses who are registered with Locavore so they automatically receive news, coupons, and event information from those agents. This is the most convenient way for a user to access information because of the subscription opportunities and because, unlike the website, information in an app is formatted to be easily digestible and impart quick updates about current issues. The home screen of the app includes a feed that displays current information and notifications from the vendors and businesses to whom the user subscribes, so the most timely information is always the first thing a user sees. It is not an ideal platform for researching, but it is an ideal platform to accompany users as they make decisions about buying and using local food. The app also includes a calendar of events, access to exclusive coupons, and pages for current FRESH products listed on the Locavore website. Sample screens from the app are available in Appendix F.

An app also includes a social network that is different from the Facebook social media network. The information users share through an app is less open ended than that shared through social media; app users would be connected for more task-based purposes, and all of them would be connected because of a shared interest in local food. Because of this intentional sentiment, an app is an ideal platform to increase access to local food through community connections, like a ride sharing virtual bulletin board or opportunities to share tools and educate other users about preparing local foods.
Images 18 - 20. Locavore app prototype sign in page (left), sample calendar (center), and main screen news feed (right). To access exclusive coupons and subscription features users would be required to register. A rotating calendar of local food and business events reminds users of upcoming opportunities they may add to their phone’s calendar.

Interestingly, the app requires significant motivation on the part of a user to initially download it but could potentially provide the most effective motivation to follow through with buying local food. Because of the succinct, timely nature of app information, users can expect news about flash sales, last-minute product list updates, sudden closures, or reminders about an event or purchase opportunity. These last-minute notifications may convince a consumer to purchase a local product in the moment. Finally, since most adults in the United States access apps with smartphones and carry their phones with them at all times, this is the most consistent, direct platform for delivering new information to users. Newsfeed and calendar information will also be stored for viewing offline so users may reference upcoming events and information from anywhere, at any time.
Level II Project Elements

Social Media II

Users that become actively involved in the local food movement and Muncie local food project may also adopt the role of an advocate. Social media is a unique tool because it provides opportunities for engagement with Locavore and related content for both novice users who may want to acquaint themselves with local food as well as opportunities for deeper engagement for those who want to go further into the project and actually contribute to its body of content. Users who choose to become leaders in the Muncie local food project via social media can use the tool in myriad ways to share their own content and introduce new users, including:

- Posting photos of their local food creations or encounters with vendors
- Creating events that showcase local foods or vendors
- Sharing narrative testimony of their own research and experience with local food
- Sharing content created by local vendors
- Inviting friends to like local pages or attend events

Images 21 - 22. Users submitted their own local food and business content to be shared on the MHFP or Locavore social media pages. Showing what a local consumer purchased at the farmers market (left) shows people exactly what they could get when they also visit the market. Including user reviews of local businesses like Payne’s Restaurant (right) educates social media viewers about local food outlets while empowering users to take on an admin role for the project.
Live experiences

Level II live experiences provide opportunities for the deepest engagement for those who want to go beyond buying and using local food to having a reciprocal relationship with their food and farmer. Although this platform for engagement is the most exclusive, it provides the most intimate connection among consumers, food, and vendors or farmers. Live experiences include value added events like group dinners, prix fixe events, farm tours, or casual meetups. Users who relish the communal aspect of sharing food will be attracted by the idea of coming together over food through *Locavore* opportunities. By gathering together to celebrate local food with other local food patrons, consumers can become an active part of the local food experience instead of just supporters of passive *Locavore* elements, helping to strengthen the local food network and economy.

![Image 23](image.png) Patrons of Christopher Farm enjoying a potluck dinner at a summer farm tour. Wendy Carpenter serves several communities around Richmond, IN and this event provides an opportunity for all of her customers to meet one another.
Farmer Wendy Carpenter of Christopher Farm explaining to guests at her annual farm tour about some of the products she grows to sell at markets and through her community supported agriculture (CSA) program. This live experience facilitates an extremely intimate opportunity for customers to see their food as it grows, boosting their trust and connection to the food supply and the farmer who supplies it.

Image 24.
RESULTS, DISCUSSION, FUTURE WORK, AND EXPERT FEEDBACK

This project was created to promote consumption of local food by consumers in a small central Indiana city. First, an understanding of consumer behaviors and preferences was cultivated through research with consumers and stakeholders. This research led to the identification of a project guiding statement: To boost the sales of local food with a communication campaign that has three objectives: impart care for local food and producers, increase access to local food by providing information and convenience opportunities, and inspire people to use local food through strong visual communication. The result was the four-tiered Locavore communication campaign. The four Locavore elements work together to create a unified experience that fosters community between consumers and producers, helping to shorten the food supply chain and boosting the economic vitality of local food businesses and independent agents.

The easiest access points to Locavore that require the lowest initial buy-in are live encounters and social media content. Users will be organically exposed to those elements in their daily interactions with social media or curiosity about local food opportunities. In the sample user journey below, an example of two users encountering Locavore for the first time do so from each of the simplest access points. For both, the app is one of the elements they engage with during the latter half of the journey because it requires more commitment from the user to sign up for the customizable app. They both also end with a live encounter, assuming that the Locavore user becomes a repeat customer at a place where local food is sold.
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Table 1. Sample user journey through Level I project elements. One user becomes introduced to Locavore through a live encounter where local food is bought and/or sold; the second receives an introduction to Locavore through their social media network.

After their introduction to Locavore, both users have the opportunity to explore other digital elements on their own. In both cases, the user looks up Locavore on social media before pursuing information on the website. Social media provides a more casual introduction to a brand and can easily feature photos or videos through a feed so the user gets a more personal, current, and immersive experience without having to leave home or wherever they access the content from. After exploring social media, if the user wants to learn more, they can explore the website for deeper learning. Once they cultivate an understanding of Locavore and an appreciation for local food, they will be encouraged to buy local food again at a local encounter.

Because the project was designed around human behavior and events, Locavore’s preliminary success as a unified campaign strategy was somewhat reserved. Locavore was initiated after the growing season had concluded, resulting in limited opportunities for interaction with consumers. Farmers are very busy and some were reluctant to contribute content directly to the campaign, but they did create content independently that the Locavore could then share using digital tools. There were also measurable outcomes from social media interactions, as well as attendance at live events.
Between January 1 and February 28, 2018, Facebook followers increased from 106 to 119, a 12% increase. It was also helpful to learn what kinds of posts were most effective in attracting attention to posts about local food. Personal connection was the biggest determinant of post interaction; people enjoyed seeing familiar faces in the posts about local food and posts the tagged other businesses and groups received more views. Social media was also used to promote the Christopher Farm summer tours more extensively than it had been in years previous. As a result, four guests attended who had never been to the farm before and the event resulted in shareable media through a photobooth and a group mural to generate excitement for future Christopher Farm events and opportunities for interaction.

Future work in the Locavore project will include creation and testing of a functional mobile app. The upcoming farmers market season will provide ample opportunity for using the events calendar, coupons, and circulating current news and buying opportunities. Because consumers value personal connection and transparency, more content should be created that features individual vendors and farmers and details their production practices. This includes YouTube and live videos that are easily shareable, photos and editorials featuring local vendors, and social media presence on more platforms. Instagram and Twitter are the first priority because of their emphasis on easily spreadable visual communication and low-barriers to entry. Consumers at the focused groups mentioned that they like to “eat with their eyes” so increasing the use of strong, colorful visuals will encourage people to pursue attractive-looking local food. This will boost consumer confidence in local products and help them overcome barriers that have prevented them from prioritizing local.

Other community groups such as MFHP, Harvesting Hope, the Muncie Urban Garden Coalition and others have similar objectives to the Locavore project. Collaboration with those
groups would increase exposure to Locavore content by connecting with those groups’ social networks, encouraging more consumers to access and buy local food. Locavore’s ultimate success will be measured by increased sales and consumption of local food resulting in economic support and longevity for local food producers, increased local food security, and healthier residents who are empowered to access and consume fresh, local products.

**External Reviewer Feedback**

Two external reviewers provided feedback about the quality and execution of this project. Their feedback forms are provided in Appendix G. Brief biographical summaries for the reviewers are provided below. Their feedback about the project were somewhat conflicting as they have divergent backgrounds. Dr. Gruver, a scientific researcher, commented that the consumer research results were not articulated categorically as would be required for a scientific publication. However, for a journalistic creative project, the research and results were reported adequately to guide the project design. Both experts commented the literature and project background were outlined adequately to demonstrate a command over the problem space.

Visual elements of the *Locavore* website should be continually improved and updated, as well as the website’s content. Both reviewers agree that the project makes a significant contribution and could help the local food movement take hold in the East Central Indiana community. As such, both practitioners expressed excitement at the project’s potential to broaden local food consumption and that they would like to work with the *Locavore* project as it develops. Kate Elliott, curator of the Harvesting Hope project, oversees a related project that also highlights the relationship aspect between food consumers and producers. As an expert in this
field as well as a local resident, her endorsement of the project speaks to its legitimacy and worthiness of further development.

Kate Elliott is an instructor of Journalism at Ball State University. She and her students created the Harvesting Hope project which aims to boost food security in Muncie through sharing food access resources and recipes. It also empowers residents through education on topics such as gardening, canning, and composting and uplifting the stories of individuals who are touched by regional food insecurity.

Dr. Joshua Gruver is a professor of Natural Resources and Environmental Management at Ball State University. He is an executive administrator of the Muncie Food Hub Partnership and specializes in human dimensions of natural resources. As a leader for the food hub project, Dr. Gruver is an expert on local food resources as well as its implications for economic and environmental sustainability. Support from the MHFP has been essential to the development of this project.
WORKS CITED


APPENDICES

Appendix A: Questions used during focus groups and email surveys

1. Who do you cook dinner (or meals) for?
2. How do you decide what to make for dinner?
3. What do you think about when picking out foods to buy?
   a. what is the most important consideration *(email only)
4. Where do you get information about food?
   a. What makes something new worth trying? *(email only)
5. What do people say about the meals you cook? *(email only)
6. How often do you cook at home? *(email only)
7. what do you think about local food? *(email only)
8. Why do you cook your own meals instead of buying convenience foods? *(email only)
Appendix B: Questions asked during key informant interviews

Questions for market vendor
1. Where do you sell produce?
2. Is there a strategy that determines what crops you grow at the farm?
3. What makes a location good to sell at?

Questions for market customers
1. Where do you shop?
2. What does the farmers market offer that is better than Aldi or Marsh (or other commercial retailers)?
3. What does the farmers market offer that makes customers want to come back?
4. What do other retailers offer that attracts customers?

Questions for a chef that sources local ingredients
1. Who is your intended audience to share food with?
2. Why do you share food with people?
3. Why do you use local food?
4. What do you make with local ingredients?
5. How do you make local business connections?
6. What is your relationship with the local food and producers?
7. (How) Do you educate people about local food?
8. Do customers visit because they know about the local ingredients?
9. How might we make people care about local food and business?
Appendix C: Tabulated consumer focus group results

Who do participants cook dinner (or meals) for?

- Family
- Self
- Friends
- SO/Roommate
- Acquaintances
- Community
- Colleagues

How do they decide what to make for dinner?

- On hand/need to
- Health/diet
- Mood/Taste
- Time available
- Cost/price
- Creativity
- Others' tastes
- Flavor variety
- Planned meals
- Fresh/Seasonality
What do participants think about when picking out foods to buy?

- Price/Cost
- Freshness
- Nutrition/Ingredients
- Timeliness
- Taste
- Needs at home
- Ethics
- Location in the store
- Routine

Where do participants get information about food?

- Research
- Personal reference
- News
- Experts
- Labels/in store
- Subscription materials
- Advertising
- Documentaries
Appendix D: Solution brainstorm prompts and results

“How might we” questions
1. How might we increase perceived access to fresh local food?
2. How might we communicate that local food tastes better?
3. How might we help connect buying local food and security?
4. How might we make a social event or activity promoting local food buying?
Appendix E: Low-fidelity prototype elements and transcripts

Is local food healthier?

There’s no doubt you’ve heard an argument against using chemicals or genetically modifying food for human consumption. But does it really matter? It’s true that nutritionally, organically grown food and conventionally produced products are nearly identical. But the introduction of manmade chemicals on a crop for consumption can have unpredictable effects from person to person. While chemicals are tested before being introduced on the market, a substance can bypass some restriction if it attains GRAS status, for being “generally recognized as safe.”

Chemicals have been linked to antibiotic resistance (from use in animals) and to developmental issues in children - pregnant women absorb chemicals and pass them to the fetus through the placenta where they can affect the developing brain and organs.

While some compounds like BPA do break down overtime and can even leave our bodies, other chemicals used in food production do not. For example, aldrin and its byproduct dieldrin, once commonly used pesticides, actually magnify as they progress through the food chain. They were outlawed by a majority of countries in the late 80s and 90s but can still be found in groundwater sources today. Dieldrin is an endocrine disruptor that has been linked to Parkinson’s and breast cancer.

Nutrition Facts

We all know that nutrients degrade after food is harvested - they just do. Food that is harvested closer to the point of sale will contain much more of its nutrient content than something that was harvested and transported to the consumer, as nutrients break down over time. Want proof? See discussion of the Vitamin C study.

Further, foods that are transported hundreds or thousands of miles to their point of sale are often picked well before ripeness to avoid bruising during transport, so they never reach their full nutrient potential to begin with. As a general rule, food that is harvested more proximately to its consumer will be more nutritious at the time of consumption.

*There are exceptions: tomatoes and bananas actually develop more antioxidants over time.

Local Food and the Economy

A review by the national group Farmers Market Coalition revealed that locally, direct-to-consumer food producers have several positive impacts on the national and local economy. Farmers create jobs: for every $1 million in revenue, direct-market farms create almost 32 local jobs, 13 of them full-time jobs. Wholesale growers create only about 10.

They keep money circulating locally: 89% of small, direct-market farmers buy supplies from local businesses vs. 45% from larger farms. 70% of farmers market customers also shop at other local businesses, leading to an extra $.50 to $1.30 in sales for each dollar spent on local food.

Did I say local food creates jobs? A 2013 Michigan-based study found that if residents, institutions, and policies shifted to just 20% of all food sourced locally, it would create over 42,000 jobs and $2.9 billion of economic benefit annually.
Is local food greener?

It’s obvious that local food creates less environmental distress due to transportation. But, even for conventionally produced foods, transportation accounts for only 11% of food’s carbon emissions. A 2008 study found that 83% of food’s emission impact resulted from the food’s production, not its final transport to consumers. The majority of food’s climate impact is not due to CO2 emissions, but other gases, especially nitrous oxide (NO2). A large amount of NO2 is produced due to synthetic fertilizer application, but all of the farmers featured here use only non-synthetic fertilization practices. Most of the time they also follow organic practices, but most are not certified (Read about Minnetrista’s only certified organic vendor).

Further, manipulating the natural nutrient balance of an area’s land can have serious environmental repercussions. Excess phosphorus and nitrogen resulting from non-organic agriculture can end up in the water supply, eventually making its way to the ocean or other large body of water. Upsetting the natural nutrient balance of the water can result in eutrophication, creating a dead zone where no life can grow.
Figure 1. Map showing where featured local farmers are located.
Local Farmer Profiles

Figure 2. Profile page for Becker Farms

“We live and work in our community. If people support us, we will continue to support the community.”

For Emily and Kyle Becker, farming has always been a family affair. Kyle was raised on a dairy farm and has a passion for all things bovine. Emily says, “He can’t imagine life without being on a farm and raising animals in particular.” The couple have backgrounds in veterinary and food science from Purdue University. “Our kids love it too and help with a lot of things... I assume as they grow, their interest will expand and they’ll take on more responsibility.”

“If you asked 10 years ago if we thought about going to markets and sourcing to restaurants, we would have said no - we planned to raise breeding cows. But we’ve grown little by little.” The Beckers’ fundamental belief in soil health has remained constant. “It is our goal to not only produce healthful, nutrient-dense foods for you to enjoy but to also do so in an environmentally responsible manner.”

Becker Farms sources several commercial kitchens, including Twin Archer Brew Pub and Tuchelt’s Salumeria. They hope to soon expand to include a daily operation with Stoney Creek Creamery.

Figure 3. Profile page for Earth Candy Acres

“I wanted a different way to connect with people - a better way.”

Candice Turner bartended for ten years before transitioning to a full-time farmer. This is her second year selling produce at Minnestista. She says her journey to farming started with a shake mixer she bought her husband as a birthday gift. The more she learned about food and health, the more she wanted to share it with friends and family. “I knew they would eat it if I grew it.” and that’s what she did.

Candice is not currently certified organic, but it is her goal to become so. “I only buy organic seeds because I want to put organic produce in my body. I want to get certified because I’m going to eat it.”

Candice is inspired by the community of local farmers. “Farmers are so busy, but they’re so helpful... I’ve never met anybody in all of my jobs who will give so much of their time to help you succeed, it gives me goosebumps.”
Figure 4. Profile page for Northern Tropics Greenhouse

Figure 5. Profile page for Schrock Family Farm
Figure 6. Profile page for Tomato Shack

“The farmers market world isn’t the easiest way to make a living, but the people you meet make it worth it.”

Phil Harris is in his first year at the Minnetrista market. He started as a hobby farmer in 2013 and began farming full-time the next season while taking classes in Indianapolis. “If made sense as a student to farm full-time so I could set my own hours. If I needed to study hard or go to class I didn’t need to ask off of work.”

Still new to farming, Phil is learning a lot of things as he goes. One thing he’s learned is that organic practices are a priority among most customers. “I’m biodynamic organic as much as I can be - if that’s what the customer wants then that’s what I need to supply.”

Though Phil is new at the market, he’s well-acquainted with the importance of relationship with customers, both to help support his farm and keep him motivated. “Still get jitters every time I make a sale because I don’t know if they will like it. Hearing positive feedback on the products really drive passion to put in the hard work it takes to be a farmer - it’s nice to hear the affable type comments.”

Figure 7. Profile page for Christopher Farm

“When people feel a connection to their food source they feel better about what they’re eating and how they spend their money... Everything is connected!”

Wendy Carpenter has always been a farmer. Since planting her first practive garden at a young age in rural Kentucky, she has gained experience in various settings and has run a CSA for many years. “Probably the thing that keeps me doing it when I’m not enjoying it is my relationship with customers... If I’m out picking something when it’s dumping rain, I think about the customer who will enjoy it, and it makes it worthwhile.”

From humble beginnings, Wendy has expanded to grow many specialty and exotic crops, including ginger, turmeric, tenael, and shiitake peppers. She has sourced restaurants in Indianapolis and Muncie, including the Barn Bistro and the Muncie Food Summit.

Wendy is the only certified organic vendor at Minnetrista. Though she has always used organic practices, she became certified in 2017 for many reasons, including to encourage other farmers to achieve certification. “Why would we want to eat any other way? And maybe even more importantly, why would we want to treat the earth any other way?”
"There’s a local economy to be considered. We’ve created business - where there were no jobs, we made jobs."

Shelli and Bill Abbott started farming using organic methods to meet their family’s special health needs - their child’s body could not detox chemicals found in conventionally produced foods. "We couldn’t afford to buy everything organic at the grocery, so we started doing it ourselves."

The Abbotts expanded their garden and now specialize in many varieties of gourmet garlic, eggs and poultry products. Shelli says she also provides an invaluable service through education. "I spend about 80% of my time at market doing education - how to use a product, how to grow it, why it’s healthful."

Shelli emphasizes the wholesome and reciprocal nature of local food on all levels. "When you buy from the person with callouses on their hands and dirt under their nails, you understand that, ‘if I waste this, it’s more than just a piece of food.’" She also notes that money spent at market vendors is invested directly back in the local economy and families.

**Figure 8.** Profile page for Abbott Garlic & Poultry
Appendix F: Mobile app prototype screens

Figure 1. Home screen of Locavore mobile
Figure 2. *Locavore* scrolling feed populated by news, events, coupons, and other information that users can customize with subscription options.
Figure 3. FRESH products featured on the app. These are products currently in season and available for purchase, updated weekly.

Figure 4. Simple events calendar from the app featuring local food and business activities.
Appendix G: External review feedback forms

Dear Kate Elliott:

Thank you for agreeing to serve as an outside evaluator for the creative project of Sara Niccum, who is completing a master’s degree in Emerging Media Design & Development. This evaluation is required as the final step in approval and completion of [his/her/their] creative project. For this evaluation, we ask that you answer the following questions and provide brief comments in support of your answers. If you have additional questions about this process, please feel free to contact EMDD Director Jennifer Palilonis at jageorge2@bsu.edu.

Name: Kate Elliott
Title: Instructor of Journalism
Organization: Ball State University, Art and Journalism

Project Design and Concept

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Please provide brief comments about the overall quality of the project design and concept.

Few projects could be more timely and relevant to our region, in which 64 percent of residents live in food deserts (defined as living more than a mile from a grocery store) and one in four children do not have access to “enough food to lead a healthy, active lifestyle,” according to the U.S. Department of Agriculture. Yet this project reflects the emergence of the buying local movement. It speaks to the individuals, organizations and neighborhoods working to strengthen the local food system through education and outreach.

I absolutely LOVE the project and its execution. It’s integrated approach blends a website to share information, a mobile app to support buying decisions, social media to engage residents, and live interactions to make meaningful connections. I appreciate the blend of storytelling (introducing farmers, etc.) paired with events and presentation of research/facts. It gives our audience many access points to learn and engage in the movement.
Research and Writing

Please provide brief comments about the overall quality of the research and writing.

The depth and scope of this project demonstrates that Sara explored a tremendous amount of research from a diverse range of sources to inform the project’s design and execution. She explains detailed studies in accessible language, which is no easy feat, and her outcomes are clearly informed by the studies she cites. The writing is solid, concise and clear, and the pictures and graphs pair well to add meaning to the text.

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Graphic Design and/or Project Presentation

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Please provide brief comments about the overall quality of the project design and concept.

The presentation is clear and the photos, charts and maps add tremendous value to the project and give context. Reading this piece and reviewing the photos brings me—as a Muncie resident—so much joy and hope. I am confident we will achieve some of the outcomes Sara describes, and I am beyond grateful she has dedicated herself to this project. I can only hope this good work doesn't live only here, on the pages of this thesis. I look forward to working with Sara and others to bring life to these words and ideas. Our community deserves a vibrant local food system. Thank you for dedicating your time, energy and expertise to advance these vital initiatives.
Dear Josh Gruver:

Thank you for agreeing to serve as an outside evaluator for the creative project of Sara Niccum, who is completing a master’s degree in Emerging Media Design & Development. This evaluation is required as the final step in approval and completion of [his/her/their] creative project. For this evaluation, we ask that you answer the following questions and provide brief comments in support of your answers. If you have additional questions about this process, please feel free to contact EMDD Director Jennifer Palilonis at jageorge2@bsu.edu.

Name: Dr. Joshua Gruver
Title: Associate Professor
Organization: Ball State University – Natural Resources and Environmental Management

Project Design and Concept

Please provide brief comments about the overall quality

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In terms of better understanding how to engage more people in the local food movement, to increase sales of local foods, and to shift people’s attitudes toward purchasing more local and regional food products – the project design was a success. Sara certainly understands the issues East Central Indiana faces regarding encouraging consumers to participate in local and regional foods. She articulated this very well in her introduction and literature review. I think the design solution fits very well within the context of consumers in Muncie IN who are just beginning to dabble in the local food landscape.

Admittedly, I think Sara could have more clearly delineated how the data she gleaned from study participants - through the focus groups, the interviews, the ideation session, and the exhibit space - translated into the four platforms of her design. I know they do – but I feel like it could be clearer.

Overall, I think the project makes a significant contribution to the genre. I have not seen a comprehensive strategy to promote the sale and consumption of local food by tying in web, apps, live interactions, etc. I think what she has developed here would be very useful for the MFHP.
Research and Writing

Please provide brief comments about the overall quality of the research and writing.

The quality of the writing is high. Sara did a nice job of making the thesis readable and enjoyable to consume. The literature review was done especially well. She demonstrated significant command of the material. She was able to weave everything together in thought provoking ways. She was also able to present critical evaluative commentary on previous research. This was useful and good to see.

In terms of the research element – I think we have different training and research backgrounds so my comments may not be appropriate here. For example, in my field, focus groups have 10 participants max. More than 10 and the researcher will find it difficult to track ideas that emerge from the group conversation as well as who said what. Focus group sessions are typically audio recorded and transcribed so researchers can evaluate and analyze the data carefully. Transcripts are coded and analyzed for common themes, etc. Themes are member checked or peer debriefed so as to maximize data validity. None of this was done here – but I think it’s not that the research was done sloppily, but that the research frame is entirely different.

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Please provide brief comments about the overall quality of the project design and concept.

The quality of Sara’s graphic design and project presentation was very good. I would like to use everything she’s done here! The website, the farmer biographies, the FB posts, The Locavore Application were extremely well done. They are inviting and interesting and beyond anything I’ve ever seen before.