

Contents

- Executive Summary** 3
- Methodology** 5
- Key Findings** 6
 - What is Food Safety Culture (FSC) and why is it important?* 6
 - What are Food Safety Management Systems (FSMS) and why are they important?* 7
 - Relationship between FSC and FSMS*..... 9
- Conclusion and Suggestions for FDA** 17
 - Hear from diverse perspectives* 17
 - Share perspectives and provide forums for collaboration* 17
 - Build relationships with retail food organizations*..... 18

- Appendix A: Core Discussion Questions** 20
- Appendix B: Discussion Guide** 21
- Appendix C: Example Definitions and Models of FSC and FSMS** 24

Executive Summary

Increasingly, retail food organizations are exploring innovative approaches to reduce the risk of foodborne illness. They go beyond technical interventions and compliance with food safety management systems (FSMS) that focus mainly on procedures, training, monitoring, and other processes to promote food safety. There is a growing body of research exploring the relationship between having an effective FSMS in place and nurturing a food safety culture (FSC) across an organization to foster positive food outcomes. FSC goes beyond process steps to be compliant, encapsulating the shared attitudes, values, and beliefs surrounding food safety in an organization (GFSI, 2018; FDA, 2022). Both are critical and interdependent.

FDA continues to foster the development of FSC and support retail food organizations as they modernize their business models. The Food Code further supports the utilization of effective FSMS to prevent, eliminate, or reduce the occurrence of foodborne illness risk factors.

FDA aims to support retail food organizations through investigating best practices for implementing durable, effective FSC and FSMS. Exploring this relationship will help FDA better understand how retailers can enhance their focus on FSMS procedures with more deeply rooted food safety beliefs, behaviors, and attitudes held by organizations with a more mature culture of food safety.

Nine executive retail food organization leaders were engaged through interviews (one via email) to gain insights into how their organizations sustained and strengthened the relationship between FSC and FSMS. Executive leaders brought perspectives from their Director- and Vice President-level roles focused on food safety and quality in retail food organizations (i.e., groceries, convenience stores, and fast food).

Here we capture key themes, including lessons learned and challenges from this initial set of perspectives. Highlights include:

- FSC is not an isolated concept or event, but rather the shared attitudes, values, and beliefs surrounding food safety that are ideally ingrained within the overall culture of an organization.
- FSMS is a core set of minimal expectations and set of actions (e.g., procedures, training, monitoring) to achieve food safety goals, which often exceed regulatory requirements and are supported by FSC.
- Together, FSC and FSMS are co-dependent to successfully mitigate food safety risks. FSC gives value to “why” food safety is important and FSMS includes the tangible systems and procedures that are “how” food safety practices are executed.
- The advancement of FSC and FSMS depends on continually improving over time, as there is no “stopping point” to reach a “strong” FSC – it is a continual evolution.
- Keys to both FSC and FSMS include gaining leadership buy-in and leveraging the existing culture, norms, and infrastructure of the organization to support them rather than trying to implement something brand new or isolated on its own.

- There is also no one generally accepted set of metrics that singularly signifies a “mature” or “strong” FSC, FSMS, and/or relationship between the two.
- Challenges include thinking through strategies to promulgate a culture of food safety when there are multiple franchises /brands under one corporate umbrella.
- See the [Strengthening the Relationship Between FSC and FSMS: Lessons Learned and Challenges](#) section for further information.

Insights gleaned from industry can support retail food organizations and regulators seeking to sustain and strengthen the relationship between FSC and FSMS. See the [Conclusions and Suggestions for FDA](#) section for more information into interviewees’ perspectives.

Methodology

Five interview sessions were conducted to better understand the perspectives of senior leaders across a set of eight retail food organizations. Details of the approach are highlighted below.

Participant identification: Leaders from FDA’s New Era of Smarter Food Safety Core Element 3 (New Business Models and Retail Modernization) and Core Element 4 (Food Safety Culture) collaborated to identify a list of potential participants. Participants were segmented into representatives from three main retail food categories: 1) fast food, 2) grocery stores, and 3) convenience stores. Initial outreach was sent to 3 participants in each retail food category; based on availability and interest, perspectives gathered were from at least two participants in each category for a total of 9 interviewees across 8 organizations. One interviewee from a 9th organization was not able to attend and provided feedback via email in response to the core question. This small sample size of participants included senior executives (e.g., Director- and Vice President- level leaders focused on safety, food safety, and quality) in the food safety space at each identified retail food organization.

Discussion guide development and participant outreach: In collaboration with FDA leadership from Core Elements 3 and 4, a set of core interview questions (Appendix A) and a discussion guide (Appendix B) were developed to facilitate discussion. All participants were contacted through email. After scheduling a definitive date and time for discussion, each participant was sent a read-ahead document that provided the core questions, example definitions of FSC and FSMS, and an example model of the relationship between FSC and FSMS (Appendix C). Participation in interviews was entirely optional and voluntary. Names and organizations of each participant are not included in this report, the promise of which promoted candid discussion during the interviews.

Interviews: Each interview consisted of two participants and followed the semi-structured discussion guide referenced above. Each interview was approximately 1.5 hours each. A set of core questions was used to help facilitate discussion.

Analysis: A thematic analysis of the results was performed through inductive and deductive coding. Results are reported in the aggregate, as participants were assured that their comments would not be directly attributable to them as a matter of anonymity.

Key Findings

Key themes are highlighted below, capturing participants' perspectives from 8 large retail food organizations on:

- What FSC is and why it is important
- What FSMS is and why it is important
- The relationship between FSC and FSMS
- Steps retail food organizations can take to sustain and strengthen the relationship between FSC and FSMS, including lessons learned and challenges

Each section below includes bulleted key take-aways, as well as perspectives designated as cross-cutting and/or unique to a retail food organization category (grocery, convenience store, and fast food).

What is Food Safety Culture (FSC) and why is it important?

Key Take-Aways:

FSC includes the behaviors, attitudes, and beliefs held and exhibited – especially when no one is watching – to promote food safety.

FSC is deeply rooted in organizational culture.

Individuals at all levels in all areas of the organization are part of and contribute to the organization's FSC.

Given the complexities and specificity of each individual company's culture and values, there is no "one size fits all" solution to advancing FSC.

Leadership sets the core values and supports efforts to integrate safety.

Participants were generally aligned regarding what FSC meant to them and their organization: **the behaviors, attitudes, and beliefs held and exhibited to do the right thing when no one is watching to promote food safety.**

All participants recognized that **FSC is ingrained in their organization's overall culture**, part of the foundational values of the organization and not an isolated concept or event. FSC seeks to engage members of the entire organization in fully participatory and conscious food safety behaviors as a default, rather than as an additional effort.

"Food safety is a top risk and embedded into everything we do, including our culture." – **Convenience Store Participant**

The culture of food safety permeates all areas of the organization and is critical to upholding the company's values. Participants asserted that promulgating a robust FSC is the responsibility of all members of the organization. It is part of how organizations do business, whether it is the salesclerk, food preparer, supply chain manager, CEO, or food supplier. It is everyone's responsibility to commit to providing safe, high-quality food for customers across the food ecosystem. Displaying commitment across multiple brands or franchisees within their corporate umbrella, some organizations collect an annual food safety pledge from employees as a way to emphasize each individual's role in food safety outcomes and to drive awareness on the importance of FSC.

“It's the belief [each person] has about the work they are doing and [the impact it can have on] the lives of others.” – Fast Food Participant

Participants believed that **corporate leadership was an integral factor in setting the company's guiding principles and commitments**, which drive FSC for the organization. Many participants referenced their company's mission statement, values, or official stance on food safety to illustrate their dedication to FSC. Leadership's understanding of the importance of FSC and the risk that food safety has for the organization were described as paramount to fortify leadership alignment and sustainable **leadership buy-in**. Setting guiding principles enables employees at all levels across the organization to treat people with respect, meet expectations of their customers, and do the right thing when it comes to food safety.

Due to each company's unique position in the market and their corporate identity, FSC must be developed in a tailored manner that caters to the existing culture at the retail food organization. This means that **there is no “one size fits all” approach** for all retail food organizations to follow and each organization's FSC is a journey. This is especially important to organizations with multiple brands or franchises under their corporate umbrella.

“Food safety is something we do and not something we have to do or because someone tells you to do it.” – Fast Food Participant

What are Food Safety Management Systems (FSMS) and why are they important?

Key Take-Aways:

FSMS include a core set of minimal expectations and set of actions (e.g., procedures, training, monitoring) to achieve food safety goals.

Retail food organizations often aim to go above and beyond regulatory requirements as their motivation for food safety is essential (and supported by their FSC).

All participants believed that FSMS begin with the development of a **core set of minimal expectations that apply to the stores, franchises, and/or brands** under their corporate umbrella.

Safety frameworks, including FSMS, enable retail food organizations to achieve their food safety goals. Regulatory requirements are the foundation of effective FSMS because they are minimum public health requirements. Most participants shared that their organizations go **above and beyond baseline requirements with risk-based approaches for food safety**. A majority of participants shared that the starting structure of their FSMS is based upon Hazard Analysis and Critical Control Point (HACCP) principles, which are further customized to fit their organizational identity and needs.

Training, rewards and recognition, monitoring, feedback loops, and other procedures and programs are part of well-formalized safety frameworks and FSMS. **Organizations train on and reward employees for exhibiting positive food safety behaviors**. Complementarily, **employees are intrinsically motivated** to exceed requirements to mitigate food safety risk, supported by FSC, training, and other supportive programs. For example, trainings focus not only on the actions that need to be taken, but also key behaviors supported by an organization's FSC. These behaviors are further incentivized through rewards/recognition programs, an important part of the broader culture of an organization. Many participants' organizations reward employees for identifying when there is an issue and performing well from a food safety standpoint. Communication plays a key role, including feedback loops and other ways to continually learn and embed food safety messaging in discussions.

“We try to focus on not just the action/steps that need to be taken, but also some key behaviors that we expect of all of our associates, and even more at the leadership level.” – Convenience Store Participant

Throughout the interviews, key considerations regarding FSMS included:

- Clear job descriptions and expectations reinforced by trainings are paramount to an individual’s compliance with FSMS.
- Multiple levels of trainings and education (e.g., leadership certification, training for frontline staff) are provided depending on role, geography, and other factors.
- Development of clear SOPs, procedures, and contracts (e.g., with vendors) with monitoring checks built in are a best practice.
- Food safety assessments (both with third party investigators and internal audits) are conducted at regular intervals, using self-assessment and other tools.
- Feedback loops provide opportunities for discussions, providing a forum to provide feedback, ask and answer questions, and share lessons learned/best practices.
- Digitally enabled and manual data collection are leveraged to mitigate risk and inform data-driven performance enhancements.
- Many companies discussed partnering with regulatory agencies (e.g., state, federal) to understand relevant requirements and proactively develop plans to improve.
- Food safety is non-negotiable and is included in contracts made with vendors across the food system from the source to the retail environment.
- Collecting and analyzing data through tools such as surveys were also cited as imperative to mitigating risk and making data-driven decisions.

Relationship between FSC and FSMS

Key Take-Aways:

FSC and FSMS are inseparable entities; one cannot successfully exist without the other.

FSC describes “why” food safety is important and FSMS describe “how” those food safety goals are achieved.

Participants felt strongly that a culture of food safety goes hand-in-hand with successful FSMS execution. They are co-dependent for success as **FSC gives value to “why” food safety is important and FSMS includes the tangible processes that are “how” food safety practices are executed to achieve food safety goals.** FSC supports the effectiveness of FSMS as it drives participatory and moral commitment to compliance.

FSC gives purpose to why specific actions are needed to improve and maintain commitment to food safety. For example, supported by the organization’s FSC, an employee will see an activity

as culturally important versus “checking the box” because they were told to follow a certain procedure without understanding why.

“[FSC] is ‘why’ we do the things we do. And then the systems are ‘how’ do we bring them to life. [It is] what we do every day to be able to meet our ultimate goal, which is the business goal, the success, [and] the brand promise to our customer.” – **Fast Food Participant**

FSMS supports FSC as it brings consistency and gives tactical structure to steps people can take to implement effective systems and reduce risk of foodborne illness. Both FSC and FSMS are needed to develop multi-directional trust between employees and leadership, as well as between the organizations and its customers.

“[They] don't intersect... You can't have one without the other... So, [if] you're managing food safety systems, you can't do that effectively without having an FSC [and] you can't have an FSMS without having an FSC...because...no one [would see it] as culturally important.”

– **Fast Food Participant**

Participants expressed beliefs that FSC and FSMS do not “intersect,” but rather are **engaged in a constant, intertwined relationship**. They must function in lockstep as the success of FSC is dependent on FSMS and vice-versa. One participant highlighted a causal relationship between FSC and FSMS where without one, the other will decline. And without attention to FSC, it is unusual to have a strong FSMS.

Strengthening the relationship between FSC and FSMS: lessons learned and challenges

Key Take-Aways:

FSC and FSMS continually improve over time. There is no stopping point to reach a “mature or “strong” FSC—it is a continual evolution.

The key to both FSC and FSMS is leveraging the existing culture, norms, and infrastructure of the organization to support them rather than trying to implement something brand new or isolated on its own.

Establishing clear, strong **leadership alignment and buy-in** allows for the maturity of FSC and FSMS over time.

Growth depends on an organization’s willingness to **critically reassess their FSC and FSMS regularly**, leveraging employee feedback and data to inform improvements.

Listening and engagement at all levels support positive food safety behaviors.

Mature organizations **learn from others**, especially given food safety is not a competitive advantage.

Leveraging innovative, modern **technologies** signifies financial investment in FSC and FSMS.

Investment in people, programs, technology, and other elements to support food safety and measurement of **return on investment** are key.

Among the small group sampled, all agreed that **maturity is a journey**. There is no perfect solution or one-size-fits-all. There is also not one generally accepted set of metrics that singularly signifies a “mature” or “strong” FSC, FSMS, and/or relationship between the two.

It is a constantly evolving field that depends upon perseverance, investment, and continual improvement to keep up with current standards. All participants noted that this growth must fit within the existing corporate structure of the organization to be sustainable and effective, relating to their individual values, policies, and market niche rather than following a templated approach.

“[We are] continuing to evolve... We're continuing every day [to] improve upon where we've been.”

– Grocery Participant

Within an organization, **corporate leadership’s consistent and unwavering support** of food safety (through moral commitment, funding decisions, etc.) allows for the maturation of FSMS and FSC over time. This includes **continually re-evaluating food safety and risk management programs to evolve**, learning from data and members across the organization to inform improvements.

Food safety is everyone’s responsibility, whether they work in food preparer, salesclerk, or other roles. Listening and engagement across the organization contribute to a culture where everyone understands their role and importance of their role regarding food safety. Mature organizations reward personal accountability and positive food safety behaviors, as well as promote transparent communication.

Learning lessons and best practices from others are key to advancing FSC and FSMS (e.g., through storytelling, benchmarking, and leveraging resources/tools developed by trade associations).

“We don't see food protection or food safety as a competitive advantage, so we benchmark with [other] companies, even our competitors out there, with their best practices.”

– Convenience Store Participant

According to participants, a growing topic of advancement for many businesses is the use of technology, advanced analytics, and automation – the food safety space is no exception.

Leveraging novel ways to collect and utilize data in real-time will be an important investment decision that retail food organizations consider as time progresses. Advancements in this area contribute to a more digital, traceable food safety system and more informed decision-making.

Participants highlighted continual resource investments (e.g., people, financial, time) as key to their success. Challenges facing organizations include gaining investments for food safety given competing priorities (especially for a small or medium-sized organization), keeping food safety a priority even when there is no active crisis, and measuring return on investment (ROI) and impact of FSC/FSMS as there is no concrete set of metrics used by industry.

The participants' organizations faced key challenges and learned key lessons that could be helpful to other retail food organizations, as described below.

Relationship between FSC and FSMS: Perspectives on Key Challenges Faced and Lessons Learned

Lessons Learned	Challenges/Questions to Consider
Leadership Alignment and Buy-in Across the Organization	Challenges Discussed
<p>Align as leaders: Align across leadership to set the tone for an overall culture that permeates across the organization as an embedded set of values.</p> <p>Gain leadership buy-in: Gain buy-in by clearly articulating the value and potential risks and impacts associated with FSC and FSMS. Use terminology that senior management uses (e.g., impacts to brand, reputation, financial ROI) along with real life examples. This will help connect the dots across leadership groups that may not see the direct link of their role to food safety.</p> <p>Create diverse and inclusive teams: Form partnerships across the business with diverse teams and perspectives (e.g., business leaders, food safety professionals, finance, operators). Bring in diverse skillsets to help support the team (e.g., food safety, food science, technical backgrounds coupled with creatives, strategic communicators, partnership builders, project managers).</p> <p>Leverage existing systems and infrastructure: Lean on existing organizational culture, values, communications channels, rewards programs, and processes that work in the organization and embed food safety components. It is not about creating something new or stand-alone. This also helps build buy-in and alignment across the organization.</p> <p>Involve all aspects of food handling in FSC/FSMS efforts: Attitudes can be observed across the broader food ecosystem regarding how the retail food organization sources food. Selecting vendors that align with a company’s food safety standards and culture is paramount to propagating food safety consistency and reliability.</p> <p>Think about governance: Consider where FSC and FSMS leadership sit within an organization as this may impact ability to gain alignment and buy-in.</p>	<p>How to promulgate a culture and consistent set of expectations across an organization when there is high employee and leadership turn-over.</p> <p>Do multiple franchises or brands under one corporate umbrella each have their own cultures?</p>

<p>Foster consistent commitment: Demonstrate a commitment to FSC and its relationship with FSMS throughout the entire organization; this also impacts which vendors the organization chooses to engage (for example, alignment around corporate values and FSC).</p>	
<p>Listening, Communication, and Engagement at All Levels</p>	<p>Challenges Discussed</p>
<p>Empower and reward: Empower each store/brand within a retail food organization’s umbrella to employ tactics tailored to their employees’ role, geography, and other factors. Make it personal and speak their language to be inclusive and transparent to help them understand why it is important to do specific activities and to drive behaviors. Understand what people need and then design programs (e.g., rewards/recognition, food safety) in ways that are sustainable.</p> <p>Create a culture so everyone understands the why: Promulgate a culture so everyone understands why food safety is important. Help people understand why it is important to do the right thing and drive behaviors. Everyone should understand – with messaging that resonates with them – how the important work they are doing ties to the value and impact on food safety.</p> <p>Food safety is everyone’s responsibility: Include representatives from across the organization when creating and implementing food safety practices.</p> <p>Continually provide and gather feedback: Provide opportunities for continual feedback (e.g., surveys, forum for various levels of the organization to discuss food safety, ask questions, and provide feedback, analytics/data, self-assessment tools for stores, field team store visits). Be transparent, listen, and improve based on feedback.</p> <p>Influence without authority: Shift the mentality from overseeing food safety through audits (i.e., consequence driven) toward a collaborative, transparent approach (i.e., positive behavior reward). Promote collaboration across levels and roles to understand what people care about from a recognition standpoint, for example, to help drive behaviors.</p>	<p>Once there is alignment and buy-in at the corporate leadership level, how do you get buy-in across the organization (especially when it impacts productivity?)</p> <p>With high employee turn-over, how do you create buy-in and support across the organization? For example, in communicating with thousands of people across multiple stores and geographies, the message can sometimes get lost. It requires constant reinforcement, which takes resources. Continually communicating and training to gain buy-in and improve conformance to FSMS is not a one-time activity. It requires substantial investment.</p> <p>What is the most effective way to maintain consistent FSC and FSMS communication across franchises, brands, and organizations?</p>

Learning from Others	Challenges Discussed
<p>Benchmark: Look to other retail food organizations and across industries (e.g., risk/safety-based industries) to benchmark FSC and FSMS. Food safety is not a competitive advantage – if one company is impacted, it impacts the entire industry. Mature organizations are open to collaboration to learn best practices and lessons learned.</p> <p>Create a roadmap: FSC is often-times a concept that needs to be broken down into actionable pieces.</p> <p>Leverage available resources: Turn to trade associations, toolkits, webinars, and other available resources to help build a culture around food safety.</p> <p>Share stories: Learn from storytelling to influence with impactful stories (rather than simply reviewing case studies).</p>	<p>As an industry, what is the guiding framework for FSC (and its relationship with FSMS)?</p> <p>How can we learn from other industries to better solve problems and anticipate risks?</p>
Technology/Digital Modernization	Challenges Discussed
<p>Modernize technologies: Continually modernize technologies, digital solutions, automation, artificial intelligence (AI), predictive analytics. Find ways to utilize data even faster and to create a more digital, traceable food safety system and inform decision-making. Leveraging innovative technologies will continue to be a growing area that signifies financial investment in FSC and FSMS.</p>	<p>How to purposefully and in near-real time utilize so much data that has become available with novel digital monitoring techniques?</p> <p>How to use AI, predictive analytics, and automation to leverage data even faster and create a more digital, traceable food safety system and solve the business problems that are facing organizations now and in the future?</p>

Investments and Return on Investment	Challenges Discussed
<p>Make strategic investments: Resources (people, financial, time) are needed to create buy-in and support FSC/FSMS across the organization. Invest in people, programs, technology, communications, and other elements to support food safety across the organization.</p> <p>Explore maturity models: Consider engaging experts to look into FSC and maturity models to inform where the organization should spend resources for the biggest ROI.</p>	<p>When there is no current, active food safety crisis, how to continually keep food safety a priority and invest accordingly?</p> <p>How to accurately measure the ROI and quantitative impact of FSC, FSMS, and the relationship between the two (e.g., impact on foodborne illness, financial impact, etc.)?</p> <p>What metrics should be considered and why?</p> <p>How do small or medium-sized organizations make investments (people, funding, time) to sustain and strengthen the relationship between their FSC and FSMS without as many dedicated resources as the bigger companies?</p> <p>How to get investment, given competing priorities such as growth plans and other business priorities?</p>

Conclusion and Suggestions for FDA

This initial study of perspectives revealed novel insights from senior executives into the relationship between FSC and FSMS in retail food organizations (fast food, grocery, and convenience stores). Interviews from this small sample size uncovered a preliminary set of lessons learned, organizational best practices, and real-life examples. Insights into industry trends can support retail food organizations and regulators seeking to sustain and strengthen the relationship between FSC and FSMS.

“FDA is committed and engaged [for example with] the Conference for Food Protection.” – Grocery Store Participant

When asked about FDA’s possible role in supporting retailers as they sustain and strengthen their organization’s FSC and FSMS, participants highlighted FDA’s unique position to foster cultures of food safety. Participants referenced FDA’s positive impact, including providing forums for retail food organizations to share lessons learned through storytelling. Participants shared it would be helpful not to reinvent the wheel, but rather leverage established forums (e.g., trade associations, Conference for Food Protection) that are developing resources, tools, and guidance for this community. Highlights include:

Hear from diverse perspectives

- **Expand on this initial set of interviews** to gain greater insights into the relationship between FSC and FSMS in fast food, grocery, and convenience stores; consider gaining diverse perspectives from various levels/parts of organizations and across the food ecosystem (not just retail food).
- Extend the scope of the interviews to include **full-service restaurants**.
- Benchmark and learn from the **retail food industry and other industries that have a strong focus on safety and risk** (e.g., medical, financial services). Explore how organizations are solving or anticipating problems and apply to food safety.

Share perspectives and provide forums for collaboration

- Provide an **overarching goal and give examples of how retail food organizations could reach that goal** (e.g., through storytelling). Then **empower each retail food organization** to take its own approach and build their own roadmap as there is no one-size-fits-all approach to FSC and FSMS.
- Build on existing partnerships with organizations such as the Alliance to Stop Foodborne Illness webinars, which are helpful in providing a public **forum for storytelling** to promote the importance of food safety.
- Leverage the **power of messaging from FDA** to share with the broader community what **FSC means internally (to FDA)** and **what it means for retail food organizations** (from FDA’s perspective).

- Bring together members of the community from retail food organizations, industry associations, and others as collaborative partners, leveraging existing forums and committees where possible, for example to:
 - Share best practices/guidance with relevant segments of the retail food ecosystem on how to embed and nurture cultures of food safety and its relationship with FSMS
 - Develop metrics and ways to measure the impact of FSC
 - Better understand the retail food industry’s perspectives and how FDA’s guidance may impact their business
 - Tailor messaging based on a deeper understanding of the retail food industry’s needs, as well as maturity levels of cultures and systems in place

“FDA should get out into industry and understand the level of maturity that is there [and tailor its approaches accordingly]... the best way to really learn something and understand it...is to see it and feel it.”

– Convenience Store Participant

Build relationships with retail food organizations

- Continue to build relationships directly between FDA and retail food organizations (in addition to state regulators), especially given participants noted that a strong FSC is dependent on trust and collaborative partnership; for example:
 - Leverage data from inspections to heatmap where there are challenges and create plans to address
 - Work as collaborative partners to advance food safety, especially when there are no outbreaks or planned inspections
 - Create more collaborative partnership opportunities for small/mid-sized companies (as larger companies may have more relationships with FDA through their network with regulators)

Continuing to explore the relationship between FSC and FSMS will help FDA better understand how retailers can move from a focus on compliance with FSMS procedures to more deeply rooted food safety beliefs, behaviors, and attitudes held by organizations with a more mature culture of food safety. This is key not only during a time of crisis during an outbreak, but at all times to systematically improve food safety outcomes and lower risk of outbreaks.

Bibliography

Global Food Safety Initiative. 2018. A Culture of Food Safety: A Position Paper from the Global Food Safety Initiative (GFSI). Available at <https://mygfsi.com/wp-content/uploads/2019/09/GFSI-Food-Safety-Culture-Summary.pdf>. Accessed 12/15/2023.

U.S. Food and Drug Administration. 2022. Food Safety Culture Systematic Literature Review. A report prepared by Westat, Inc. Available at <https://www.fda.gov/media/163588/download>. Accessed 11/01/2023.

Appendix A: Core Discussion Questions

Proposed Questions

1. In two-three minutes, please briefly introduce yourself, tell us your position, and then share your opinion or your organization's perspective about what is FSC and why is it important.
2. Regarding FSMS – could you give a brief overview of how they are structured according to the following three dimensions: Procedures, Training, and Monitoring?
3. From your or your organization's perspective, how does FSC intersect with FSMS? In your own words, what does it mean to have FSMS and FSC “intersect”?
4. How did your organization take steps to sustain and strengthen FSC *paired* with the development and implementation of your FSMS? Essentially, how do you move from management system compliance to a fully participatory food safety culture?
5. What challenges, if any, have you faced merging FSC and FSMS? How did you overcome these challenges?
6. What other lessons learned or best practices can you share related to the intersection of FSC and FSMS and how they shape your organization's food safety strategy?

Appendix B: Discussion Guide

Date and Time:	
Discussion Participants:	
Facilitators:	Dr. Corinne Hausmann/Kyle Nickel

Time	Topic/Questions
12 mins	<p>Welcome/Introduction Script</p> <p>Thank you for taking the time to meet with us. I'm [Corinne/Kyle] and I am a member of the Deloitte team supporting FDA in conducting this outreach. I'll be facilitating the discussion today and I'm joined by [Corinne/Kyle] who will help capture notes and facilitate. We have about 60 minutes together and a few primer questions that were sent to you in advance. Thank you in advance for sharing your opinions and perspectives.</p> <p>Your responses will remain confidential and may be combined with others and shared in aggregate. We will have a note-taker here to capture key themes, but the notes will not identify individuals and will remain with the Deloitte team.</p> <p>To help us with notetaking, would you mind if we record? (Note: record if yes, do not record if any participant responds no)</p> <p>Background and Context Script</p> <p>Before we get into formal introductions, we would like to give you a little background on this effort:</p> <p>As FDA advances its New Era of Smarter Food Safety, FDA is interested in exploring the intersection between food safety management systems (FSMS) and food safety culture (FSC) in retail food organizations.</p> <p>The Food Code supports the use of effective FSMS to prevent, eliminate, or reduce the occurrence of foodborne illness risk factors in retail settings. And a mature FSC helps associates understand and behave in ways to mitigate food contamination. Two examples of definitions for these terms, along with an example of a model visualizing at a high level how they fit together, were shared with you as part of the read-ahead for your consideration.</p> <p>Exploring this intersection will help FDA to learn strategies that retail firms employ, including how firms can move from a focus on compliance with FSMS procedures to more deeply rooted food safety beliefs, behaviors, and attitudes held by firms with a mature FSC.</p> <p>FDA has asked the Deloitte Team to help gather information through guided discussions with nine retail firms.</p> <p>Participant Introductions Script</p> <p>We are joined today by representatives from [two/three] retail organizations from [firm names] and look forward to a robust conversation.</p> <p>Before we go around for introductions, any questions before we get started?</p>

	<p>Introductory Questions for FSC</p> <p>In two-three minutes, please briefly introduce yourself, tell us your position, and then share your opinion or your organization’s perspective about what is FSC and why is it important.</p> <p>Optional primer if needed: How does your organization measure FSC and/or the impacts of FSC?</p> <p>Optional primer if needed: Are your organization’s FSC programs formalized? If yes, how so?</p> <p>Optional primer if needed: How is FSC at your organization promoted or incentivized?</p> <p>Now let’s talk about FSMSs. Could you give a brief overview of how they are structured according to the following 3 dimensions: Procedures, Training, and Monitoring?</p>
<p>35 min</p>	<p>Perceptions on How Culture Intersects with FSMS</p> <p>From yours or your organization’s perspective, how does FSC intersect with FSMS? In your own words, what does it mean to have FSMS and FSC “intersect”?</p> <p>Optional primer if needed: Are the definitions and model we provided as a read-ahead and opened during this call – are they a good description of how you see these two ideas/programs intersecting? Are there better/other models or ways of thinking about these ideas?</p> <p>Optional primer if needed: Are the same staff involved with FSC and FSMS? How are staffing decisions made?</p> <p>Steps to Mature FSC</p> <p>How did your organization take steps to mature FSC <i>paired</i> with the development and implementation of your FSMS? Essentially, how do you move from management system compliance to a fully participatory FSC?</p> <p>Challenges and How They Were Overcome</p> <p>What challenges, if any, have you faced merging FSC and FSMS? How did you overcome these challenges?</p> <p>Lessons Learned and Best Practices of Retail Firms with FSMS Looking to Develop or Mature Their FSC</p> <p>What other lessons learned, or best practices can you share related to the intersection of FSC and FSMS and how they shape your organization’s food safety strategy?</p> <p>Optional primer if needed: According to our research, a major consideration of a mature FSC includes its interactions with FSMS as well as the following key elements: Leadership, Communication, Commitment, Environment, and Risk. Do you find any of these elements that intersect with FSC and FSMS key to your organization’s success?</p>
<p>5 mins</p>	<p>Final Questions</p> <p>Kyle/Corinne to ask participants if they have any questions or any other insights to share before we close out.</p>

	Note: If participants ask if the report or portions of the report can be shared with them after the interviews are completed, we will inform them that we will share the report after it has been cleared.
2 mins	Conclusion Kyle/Corinne to thank [insert retail firm representatives' names] for their participation.

Appendix C: Example Definitions and Models of FSC and FSMS

Example Definitions of FSC and FSMS

- FSMS:
 - A set of interrelated or interacting elements that organizations use to direct and control how food safety-related policies are implemented and food safety-related objectives are achieved (Encyclopedia of Food Safety, 2014)
 - A specific set of actions (e.g., procedures, training, and monitoring) to help achieve active managerial control (FDA)
- FSC:
 - The aggregation of the prevailing, relatively constant, learned, shared attitudes, values and beliefs contributing to the hygiene behaviors used within a particular food handling environment (FDA)

Example Model of the Relationship Between FSMS and FSC:

