
HINK'S
SMOKEHOUSE
ILLINOIS STATE UNIVERSITY

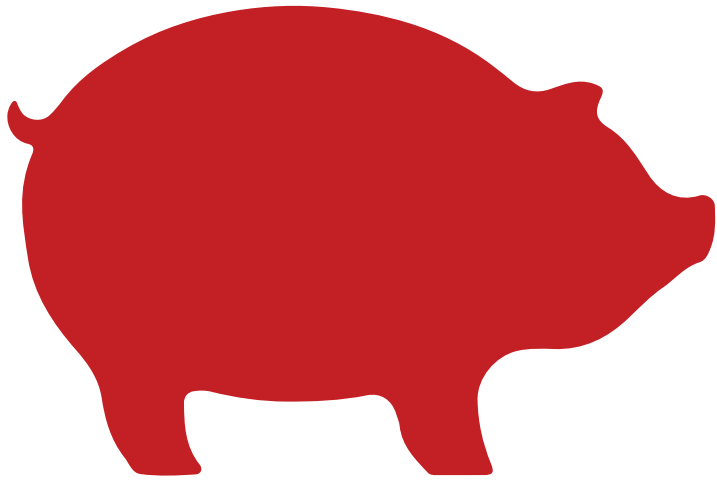

HINK'S
SMOKEHOUSE

HINK'S SMOKEHOUSE

Illinois State University

2025 Phoenix Challenge

Table of Contents



Maili Simons

Project Manager

Graduate Student

M.S. Project Management

Bailey O'Neill

Design Manager

Senior

B.S. Graphic Communications Technology

Halle Martens

Prepress Manager

Junior

B.S. Graphic Communications Technology

Aidan O'Hara

Production Manager

Junior

B.S. Graphic Communications Technology


HINKSSMOKEHOUSE.COM
@HINKSSMOKEHOUSEBBQ
HINK'S
SMOKEHOUSE
BBQ
FEATURING
HINK'S
SMOKEHOUSE
BOURBON
BBQ SAUCE.


HINK'S
SMOKEHOUSE
BBQ

The Client

HINK'S SMOKEHOUSE

Hink's Smokehouse is a Central Illinois staple known for its BBQ sauces and delectable food truck. To Adam Hinkle it's more than just a business but family tradition rooted in the love for feeding others. Growing up as the son of a butcher in a small town in the USA, Adam remembers his dad always being out by the grill cooking. Adam attributes his love for feeding people to his parents being asked to cook for all kinds of events and known as the place to eat backyard BBQ. Adam's dad was well known for his pork steaks and his mom for her sauce that paired with those pork steaks. His mom taught Adam at a young age how to make the sauce that is the foundation of Hink's Bourbon BBQ Sauce. Adam described the day that his dad began to ask to use his BBQ sauce as amazing. Adam's dad now being in his 80's, still mans the grill but uses a different sauce, that sauce being Hink's Bourbon BBQ Sauce (Hink's Smokehouse).

Hink's Smokehouse features a Bourbon BBQ Sauce we mentioned and also a food truck that attends local events. The Bourbon BBQ Sauce is currently available in three flavors being Original, Spicy, and Carolina Golden Mustard. The BBQ sauce is sold locally to Bloomington-Normal in stores such as Hy-Vee, Green top Grocery, Martinelli's Market, College Hills Meat shop, Edge of Normal Workshop, and a few others. The BBQ sauce slowly has expanded to be sold in some butcher shops and markets outside of Bloomington Normal as well.

Why Hinks?

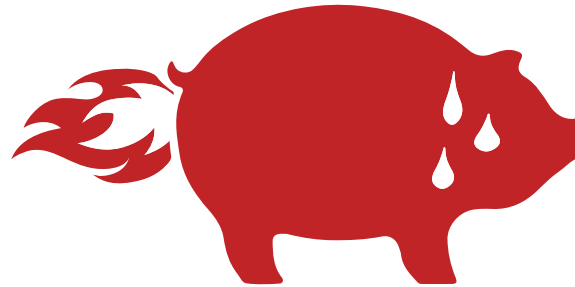
Our team landed on Hink's Smokehouse largely because of the labels on the BBQ sauce bottles labels. After talking with Adam, we realized that he was doing this all himself and would love to have help in creating a new design for the labels and potentially a piece for his food truck.

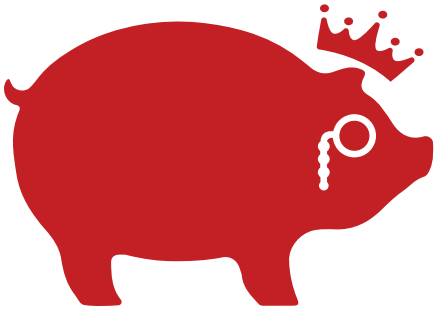
Our Pitch

We established that we wanted our focus to be on providing labels to Hink's Smokehouse as well as something for the food truck. With this notion we decided on the following pieces.

BBQ Sauce Label:

We are focusing on the original with the ability to establish consistency in the label design and appearance as there were lots of glaring inconsistencies between flavors. By starting with the original flavor, we can then transition the labels to also fit the other two current flavors being Spicy, and Carolina Golden Mustard. Adam also mentioned a potential limited-edition flavor of Ghost Pepper.



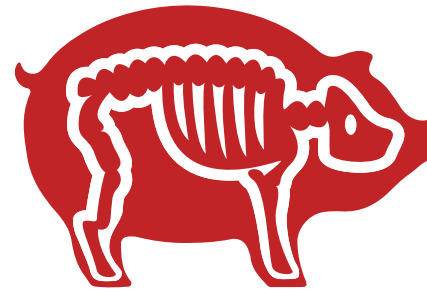


Promotional Labels:

The promotional labels each feature a different illustration of the pigs that correspond with each flavor, drawing inspiration from the original labels' quirks, such as a flame on the spicy flavor and crown on the Carolina Golden Mustard. Additionally, one of the labels features a QR code that directs to the website allowing customers of the food truck or from the farmers market's where they sell the BBQ sauce to purchase more online in the future.

Food Truck Tray:

The tray we wanted to provide as a unique flare and touch to the standard food trays that you see from many food trucks. By adding a branded touch to these it can make the experience of visiting and purchasing from Hink's Smokehouse a more unique and personalized experience.



RESEARCH

SWOT Analysis

Strengths:

- Local and family own
- Rooted in tradition
- Trademark on logo
- Local market penetration and brand recognition
- Website offerings
- Small Batch
- Food truck is in a local market without lots of competition

Weaknesses:

- Very inconsistent branding
- Labels do not stand out or set them apart
- Packaging doesn't convey quality

Opportunities:

- Growth into retail stores for BBQ sauce
- More consistent branding with updated labels
- Unique food truck packaging
- Social media branding and growth

Threats:

- Inflation
- Tariffs
- Consumer loyalty to established brands such as Sweet Baby Rays, Heinz, and Japanese BBQ sauce etc.
- Economic downturn

Competition

Hink's Smokehouse operations with the locality of Central Illinois and also can begin to emerge nationally through further market penetration in the retail space with the Bourbon BBQ sauce. Nationally BBQ sauce brands such as Sweet Baby Rays, Japanese BBQ Sauce, Kraft, and even general condiment brands such as Heinz dominate the retail shelves. These national and widely recognized brands have substantial market share and domination.

Locally, Bloomington-Normal has a vibrant culinary scene where it has the highest number of restaurants per capita in the United States (BN Advantage, n.d.). Despite the abundance of restaurants in the area the local market is not oversaturaated with barbecue oriented establishments. According to the BN Advantage Food Guide, there are a limited number of barbecue restaurants in the area, such as Bandana's BBQ (BN Advantage, n.d.).

As far as food trucks are concerned, the local food truck scene is diverse but does not heavily feature alternative barbeque options. The Eat Local Restaurant Directory lists several food trucks operating in Bloomington-Normal, including Hink's Smokehouse and Loman's Backyard Barbecue (Eat Local Restaurant Directory, n.d.). This indicates that while there are multiple food trucks, barbecue-specific options remain limited, presenting an opportunity for Hink's Smokehouse to capture a unique market segment.

Ultimately, while Hink's Smokehouse faces competition from established national brands in retail and a diverse local dining scene, the relative scarcity of barbecue-focused food trucks and restaurants in Bloomington-Normal provides a strategic opportunity to differentiate and establish a strong local presence.

FDA

Ensuring the safety and compliance of food packaging is a critical responsibility for food manufacturers and vendors. The U.S. Food and Drug Administration (FDA) regulates materials that come into contact with food, including packaging for condiments and serving trays used in food trucks. These regulations are designed to prevent contamination and ensure that packaging materials do not adversely affect food quality or safety.

For condiment bottles, the FDA mandates that all packaging materials must be safe for their intended use, meaning they should not transfer harmful substances to the food product. Materials commonly used for condiment bottles, such as certain plastics and glass, must comply with FDA regulations concerning food contact substances (FDA, n.d.). Manufacturers are responsible for ensuring that these materials are suitable for food contact and do not pose health risks to consumers. This includes evaluating the potential for chemical migration from the packaging into the food and ensuring that any additives used in the packaging material are approved for food contact applications (FDA, n.d.). Hink's food truck currently utilizes disposable or reusable serving trays to present food to customers. The FDA requires that these trays be made from materials deemed safe for food contact (FDA, n.d.). Which would require food safe inks as well as a food safe material to ensure this compliance with the FDA requirements.

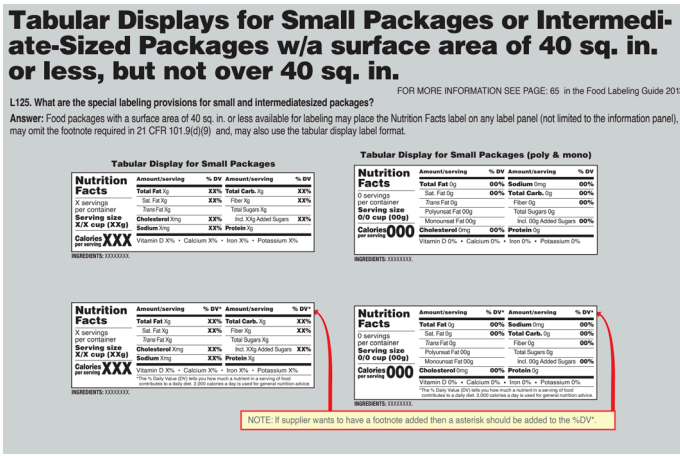
All food packaging must adhere to the FDA's labeling requirements, which include accurate declarations of the product's identity, net quantity, ingredients, and manufacturer information. These requirements are outlined in the FDA's Food Labeling Guide, which serves as a comprehensive resource for manufacturers to ensure compliance with federal regulations (FDA, n.d.).

In summary, compliance with FDA guidelines for food packaging, including condiment bottles and food truck trays, involves selecting appropriate materials, ensuring their safety for food contact, and adhering to labeling regulations. In our case we already know the current bottle for the BBQ sauce is food safe and because the label does not come into contact with the food we do not need to find food safe UV inks. However, the tray does come in direct contact with food and the paperboard is not rated as a food safe paperboard. We acknowledge this and recommend our client specifically to not use our food trays for anything more than a prototype.

Design Consult with Equator Design

To gain some industry insight from experts in consumer packaged goods (CPG) we consulted Equator design who has worked with numerous brands from General Mills, Walmart, and many other notable companies. With this knowledge we were able to get guidance on our preliminary designs and regulatory guidelines necessary for packaging. We were guided on key packaging considerations, design elements, regulatory requirements and material finishes.

From a cost perspective using a custom die-cut will increase production costs for the client as a custom die-cut will have to be ordered. However, this cost could be subset or minimized if our client stuck with the same production company and die-cut long term and for high volume production runs. Additionally, finishing options from matte and gloss varnishes were also noted as popular specifically in CPG.



Tabular Displays for Small Packages or Intermediate-Sized Packages w/a surface area of 40 sq. in. or less, but not over 40 sq. in.

FOR MORE INFORMATION SEE PAGE: 65 in the Food Labeling Guide 2013

L125. What are the special labeling provisions for small and intermediatesized packages?

Answer: Food packages with a surface area of 40 sq. in. or less available for labeling may place the Nutrition Facts label on any label panel (not limited to the information panel), may omit the footnote required in 21 CFR 101.9(d)(9) and, may also use the tabular display label format.

Tabular Display for Small Packages

Nutrition Facts				
X servings per container	Amount/serving	% DV	Amount/serving	% DV
Serving size X/X cup (XXg)	**Total Fat** Xg	XX%	**Total Carb.** Xg	XX%
	Sat. Fat Xg	XX%	Fiber Xg	XX%
	Trans Fat Xg		Total Sugars Xg	
	Cholesterol Xmg	XX%	Incl. XXg Added Sugars	XX%
	Sodium Xmg	XX%	**Protein** Xg	
Calories per serving XXX	Vitamin D X% • Calcium X% • Iron X% • Potassium X%			

INGREDIENTS: XXXXXXXX.

Tabular Display for Small Packages (poly & mono)

Nutrition Facts				
0 servings per container	Amount/serving	% DV	Amount/serving	% DV
Serving size 0/0 cup (00g)	**Total Fat** 0g	00%	**Sodium** 0mg	00%
	Sat. Fat 0g	00%	**Total Carb.** 0g	00%
	Trans Fat 0g		Fiber 0g	00%
	Polyunsat Fat 00g		Total Sugars 0g	
	Monounsat Fat 00g		Incl. 00g Added Sugars	00%
Calories per serving 000	**Cholesterol** 0mg	00%	**Protein** 0g	
	Vitamin D 0% • Calcium 0% • Iron 0% • Potassium 0%			

INGREDIENTS: XXXXXXXX.

Nutrition Facts				
X servings per container	Amount/serving	% DV*	Amount/serving	% DV*
Serving size X/X cup (XXg)	**Total Fat** Xg	XX%	**Total Carb.** Xg	XX%
	Sat. Fat Xg	XX%	Fiber Xg	XX%
	Trans Fat Xg		Total Sugars Xg	
	Cholesterol Xmg	XX%	Incl. XXg Added Sugars	XX%
	Sodium Xmg	XX%	**Protein** Xg	
Calories per serving XXX	Vitamin D X% • Calcium X% • Iron X% • Potassium X%			

*The % Daily Value (DV) tells you how much a nutrient in a serving of food contributes to a daily diet. 2,000 calories a day is used for general nutrition advice.

INGREDIENTS: XXXXXXXX.

Nutrition Facts				
0 servings per container	Amount/serving	% DV*	Amount/serving	% DV*
Serving size 0/0 cup (00g)	**Total Fat** 0g	00%	**Sodium** 0mg	00%
	Sat. Fat 0g	00%	**Total Carb.** 0g	00%
	Trans Fat 0g		Fiber 0g	00%
	Polyunsat Fat 00g		Total Sugars 0g	
	Monounsat Fat 00g		Incl. 00g Added Sugars	00%
Calories per serving 000	**Cholesterol** 0mg	00%	**Protein** 0g	
	Vitamin D 0% • Calcium 0% • Iron 0% • Potassium 0%			

*The % Daily Value (DV) tells you how much a nutrient in a serving of food contributes to a daily diet. 2,000 calories a day is used for general nutrition advice.

INGREDIENTS: XXXXXXXX.

NOTE: If supplier wants to have a footnote added then a asterisk should be added to the %DV*.

We were advised on the regulatory requirement that the FDA has of listing the net weight of the product on the packaging. However due to our clients already having this net weight as apart of the bottle itself we are able to forego this as a require design element on our labels. The most important guideline that we needed guidance on were the nutrition facts. To gain a starting point we were advised on numerous requirements regarding the nutrition facts. The Nutrition Facts (NF) panel cannot be scaled down but can be condensed if necessary, where we also received a starting point for these condensed panels. Additionally, the nutrition facts must be positioned to the right in the design and, in this case, will need to be placed on the back of the packaging.

For packaging considerations we were advised of allocating at least 40% of the front of the package to graphics. Additionally, the dieline should outline the side panels and what is on the front, sides, and back. We wanted a QR code and originally had it close to the barcode, but realized that some scanners would have difficulty scanning and with Sunrise 2027 resulting in a change of one-dimensional barcodes to two-dimensional barcodes this would provide more advantageous long term.

Some upcoming regulations that could be coming in the US and was noted by the Equator design team that the US Food and Drug Administration are conducting case studies on the front of pack labeling that Canada currently has. This front of pack labeling notifies the consumer of products that would notify consumers on if their food choices are healthy or not (Front-of-package nutrition labeling). Having this information from the Nutrition facts front of pack labeling to the upcoming Sunrise 2027 initiative from GS1. If front of pack labeling does come to the US further research regarding implementation for our client would be necessary to ensure compliance with the FDA.

Additionally, with some client requests of glow-in-the-dark ink we were provided some contacts to reach out to about this specialty ink and other options for us to consider for our final design and production process.

Overall the meeting with Equator Design provided our team with a unique opportunity to learn more from industry professionals as well as networking potential. Additionally, they gave us the tools to move forward and ensure compliance with FDA regulations as well as upcoming considerations with Sunrise 2027 from GS1.

Nutrition Facts

The Nutrition Facts label is a critical component of food packaging, providing consumers with essential information to make informed dietary choices. The U.S. Food and Drug Administration (FDA) mandates specific requirements for these labels to ensure consistency and clarity across food products (FDA, 2020).

The FDA's food labeling guide which is a guide for business to assist in ensuring compliance with the necessary information needed on the Nutrition Facts label. In which the FDA's food labeling guide states that the nutrition facts label must include the following nutrients: Total fat, Saturated fat, Trans fat, Cholesterol, Sodium, Total carbohydrate, Dietary fiber, Total sugars, Added sugars, Protein, Vitamin D, Calcium, Iron, and Potassium. These nutrients must be presented in a specific format, detailing the amount per serving and the corresponding Percent Daily Value (%DV), which helps consumers understand the nutrient content in the context of a total daily diet (FDA, 2020).

In 2016, the FDA introduced significant updates to the Nutrition Facts label to reflect new scientific information and improve its usability for consumers. Key changes include manufacturers are now required to declare the amount of added sugars in grams and as a %DV. Additionally, Vitamin D and potassium are now mandatory on the label, while Vitamins A and C are no longer required but can be included voluntarily. Finally, serving sizes have been updated to better align with the quantities consumers typically consume (FDA, 2020). These modifications aim to help provide consumers with more relevant nutritional information to support healthier eating habits.

The FDA's guidelines specify that the "Nutrition Facts" heading must be in a type size larger than all other print in the nutrition label and generally set the full width of the label. While there are no specific size requirements for the entire nutrition label, it must be prominently displayed and adhere to formatting standards that ensure readability (FDA, 2020). Under the FDA guidelines there are a variety of different Nutrition Facts labels that are compliant for different sized packaging. Since our label is less than 40 square inches we are able to use a condensed version of the label that we received from Equator Design.

Manufacturers are responsible for staying current with FDA regulations to ensure compliance. The FDA provides resources such as the Food Labeling Guide to assist in understanding and implementing labeling requirements (FDA, 2020). By adhering to these guidelines, food producers contribute to a transparent food system that empowers consumers to make healthier dietary choices.

Tabular Displays for Small Packages or Intermediate-Sized Packages w/a surface area of 40 sq. in. or less, but not over 40 sq. in.

FOR MORE INFORMATION SEE PAGE: 65 in the Food Labeling Guide 2013

L125. What are the special labeling provisions for small and intermediatesized packages?

Answer: Food packages with a surface area of 40 sq. in. or less available for labeling may place the Nutrition Facts label on any label panel (not limited to the information panel), may omit the footnote required in 21 CFR 101.9(d)(9) and, may also use the tabular display label format.

Tabular Display for Small Packages

Nutrition Facts

X servings per container
Serving size X/X cup (XXg)

Amount/serving	% DV	Amount/serving	% DV
Total Fat Xg	**XX%**	**Total Carb.** Xg	**XX%**
Sat. Fat Xg	**XX%**	Fiber Xg	**XX%**
Trans Fat Xg		Total Sugars Xg	
Cholesterol Xmg	**XX%**	Incl. XXg Added Sugars	**XX%**
Sodium Xmg	**XX%**	**Protein** Xg	

Calories per serving **XXX**

Vitamin D X% • Calcium X% • Iron X% • Potassium X%

INGREDIENTS: XXXXXXXX.

Tabular Display for Small Packages (poly & mono)

Nutrition Facts

0 servings per container
Serving size 0/0 cup (00g)

Amount/serving	% DV	Amount/serving	% DV
Total Fat 0g	**00%**	**Sodium** 0mg	**00%**
Sat. Fat 0g	**00%**	**Total Carb.** 0g	**00%**
Trans Fat 0g		Fiber 0g	**00%**
Polyunsat Fat 00g		Total Sugars 0g	
Monounsat Fat 00g		Incl. 00g Added Sugars	**00%**
Cholesterol 0mg	**00%**	**Protein** 0g	

Calories per serving **000**

Vitamin D 0% • Calcium 0% • Iron 0% • Potassium 0%

INGREDIENTS: XXXXXXXX.

Nutrition Facts

X servings per container
Serving size X/X cup (XXg)

Amount/serving	% DV*	Amount/serving	% DV*
Total Fat Xg	**XX%**	**Total Carb.** Xg	**XX%**
Sat. Fat Xg	**XX%**	Fiber Xg	**XX%**
Trans Fat Xg		Total Sugars Xg	
Cholesterol Xmg	**XX%**	Incl. XXg Added Sugars	**XX%**
Sodium Xmg	**XX%**	**Protein** Xg	

Calories per serving **XXX**

Vitamin D X% • Calcium X% • Iron X% • Potassium X%

*The % Daily Value (DV) tells you how much a nutrient in a serving of food contributes to a daily diet. 2,000 calories a day is used for general nutrition advice.

INGREDIENTS: XXXXXXXX.

Nutrition Facts

0 servings per container
Serving size 0/0 cup (00g)

Amount/serving	% DV*	Amount/serving	% DV*
Total Fat 0g	**00%**	**Sodium** 0mg	**00%**
Sat. Fat 0g	**00%**	**Total Carb.** 0g	**00%**
Trans Fat 0g		Fiber 0g	**00%**
Polyunsat Fat 00g		Total Sugars 0g	
Monounsat Fat 00g		Incl. 00g Added Sugars	**00%**
Cholesterol 0mg	**00%**	**Protein** 0g	

Calories per serving **000**

Vitamin D 0% • Calcium 0% • Iron 0% • Potassium 0%

*The % Daily Value (DV) tells you how much a nutrient in a serving of food contributes to a daily diet. 2,000 calories a day is used for general nutrition advice.

INGREDIENTS: XXXXXXXX.

NOTE: If supplier wants to have a footnote added then a asterisk should be added to the %DV*.

Barcodes

UPC barcodes are essential in the retail food industry, as they facilitate efficient product identification, inventory management, and sales tracking. Introduced in 1974, the UPC system has become a global standard for encoding product information in a machine-readable format (Smith Corona, n.d.). The standard UPC barcode comprises a series of black bars and white spaces representing a 12-digit number unique to each product, ensuring accurate and quick scanning at points of sale (GS1 US, n.d.).

In retail settings, UPC barcodes streamline the checkout process by reducing manual data entry, thereby minimizing errors and enhancing customer satisfaction.

They also enable retailers to maintain accurate inventory records, track sales patterns, and manage stock levels effectively (GS1 US, n.d.). The adoption of UPC barcodes has revolutionized retail operations, allowing for real-time data collection and improved supply chain efficiency (Smith Corona, n.d.).

The effectiveness of a UPC barcode depends significantly on its design, particularly concerning color and size. According to Barcode Graphics, adequate contrast between the bars and spaces is crucial for scanner readability. The traditional and most reliable color scheme is black bars on a white background. Deviations from this, such as using light-colored bars or dark backgrounds, can lead to scanning issues. Additionally, the size of the barcode must adhere to specific dimensions to ensure compatibility with scanning equipment. The official size for a UPC barcode is 1.46 inches wide by 1.02 inches high, with acceptable variations ranging from 80% to 200% of this size (Barcode Graphics, n.d.). Maintaining these standards is vital for ensuring consistent scanning performance across various retail environments.

The retail industry is on the cusp of a significant transformation with the planned transition to 2D barcodes by 2027, an initiative known as "Sunrise 2027." As highlighted by Equator Design, 2D barcodes, such as QR codes, can store more extensive information than traditional 1D UPCs, including product origin, manufacturing details, and sustainability practices. This advancement aims to meet the growing consumer demand for transparency and traceability in products. Brands are encouraged to prepare for this shift by updating their packaging designs and ensuring that their scanning systems are compatible with 2D barcode technology (Equator Design, n.d.).

Beyond functionality, barcodes offer an opportunity for creative design that can enhance brand identity and consumer engagement. Companies like Vanity Barcodes specialize in transforming standard barcodes into visually appealing elements that integrate seamlessly with packaging aesthetics (Vanity Barcodes, n.d.). By incorporating unique shapes, images, or thematic elements into the barcode design, brands can differentiate their products on crowded retail shelves while maintaining full scanning functionality. This approach not only preserves the practical benefits of barcodes but also leverages them as a tool for marketing and storytelling (Vanity Barcodes, n.d.).

UPC barcodes are a pivotal piece of modern retail, providing critical support for operations and customer service. As the industry moves towards adopting 2D barcodes by 2027, brands must proactively adapt to these changes, ensuring compliance and leveraging new opportunities for consumer engagement. Balancing technical requirements with innovative design will be key to maintaining both functionality and brand appeal in the evolving retail landscape.

Market Research

To better understand the market in which Hink's Smokehouse is operating in we gained insight on the local and national demographic, as well as the consumer's overall behavior and insights for the condiment market.

Local Demographic

Bloomington-Normal, Illinois, where Hink's Smokehouse is located, had an estimated population of 78,587 as of July 1, 2023 (U.S. Census Bureau, 2024). The city's demographic composition is predominantly White (74.3%), with Black or African American residents comprising 12.9%, Asian residents 6.1%, and Hispanic or Latino residents 7.5%. The median household income between 2019 and 2023 was $72,244, with a per capita income of $39,493. Approximately 14.0% of the population lives in poverty. This suggests a community with a moderate income level and a diverse population, both being factors that can influence consumer preferences and spending patterns in the food sector.

National Demographic

On a national level, the United States exhibits a diverse demographic landscape. According to the U.S. Census Bureau, as of 2020, the U.S. population was approximately 331 million people, with 76.3% identifying as White, 13.4% as Black or African American, 5.9% as Asian, and 18.5% as Hispanic or Latino. The median household income in 2019 was $68,703, and about 10.5% of the population lived below the poverty line. This diversity reflects a broad market with varied tastes and preferences, presenting opportunities for businesses like Hink's Smokehouse to cater to multiple consumer segments as further expansion into retail stores can begin to occur.

Consumer Insight and Behavior:

The sauces, dressings, and condiments market has experienced significant growth, driven by evolving consumer preferences. Consumers are increasingly seeking convenient, ready-to-use products that enhance the flavor of their meals, aligning with busy lifestyles and a growing interest in diverse culinary experiences. This trend has led to a heightened demand for a variety of sauces and condiments, including barbecue sauces, which are integral to American cuisine. The global condiments market was valued at USD 94.88 billion in 2024 and is projected to reach USD 153.97 billion by 2032, exhibiting a compound annual growth rate (CAGR) of 6.30% during the forecast period (Fortune Business Insights, 2025).

Additionally, there is a rising trend toward experimenting with different cuisines, increasing the demand for a wide range of sauces and condiments that replicate authentic flavors from around the world (Grand View Research, 2024). Consumers are also showing a preference for products with natural ingredients and minimal processing, reflecting a broader movement toward health-conscious eating habits.

Business Outlook

In the pivotal time for the economy in the United States with the existence of tariffs and several other economic factors understanding the outlook of the condiment businesses as a whole can help provide insight on the future of Hink's Smokehouse as a business.

Central Illinois:

In Central Illinois, the food service industry plays a significant role in the local economy. The region's demographic diversity and stable population provide a consistent customer base for restaurants and food-related businesses. However, competition can be intense, necessitating unique value propositions and high-quality offerings to capture and retain market share.

The City of Bloomington's Economic Development Division promotes economic stability and growth through various incentive programs administered by the city, the Bloomington-Normal Economic Development Council (BNEDC), and the State of Illinois. These programs aim to enhance the economic viability of the city by supporting business development and expansion (City of Bloomington, n.d.).

The BNEDC assists businesses in McLean County by facilitating local business expansion, recruiting new companies to the area, and encouraging entrepreneurship. Their efforts contribute to a dynamic business environment that can benefit establishments like Hink's Smokehouse in their efforts to expand further as growth continues (BNEDC, n.d.).

Nationally

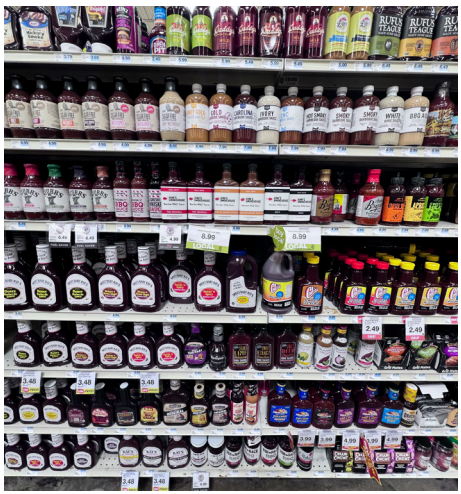
Nationally, the condiments market is poised for continued growth. The increasing popularity of international cuisines and the demand for convenient food options are key drivers. The global sauces, dressings, and condiments market was valued at USD 165.81 billion in 2023 and is projected to grow at a CAGR of 5.3% from 2024 to 2030 (Grand View Research, 2024). This growth indicates a robust market environment with ample opportunities for businesses offering unique and high-quality products.

Color Psychology

Color plays a pivotal role in consumers perception and behavior, especially in the context of Consumer Packaged Goods (CPG) food packaging. The strategic use of colors can evoke specific emotions, influence purchasing decisions, and enhance brand recognition. For Hink's Smokehouse, who utilizes a color palette of red, black, and white, understanding the psychology behind these colors is essential for effective branding and packaging strategies.

Red is a dynamic and attention-grabbing color known to stimulate appetite and evoke feelings of passion and excitement. This makes it a popular choice in the food industry to encourage consumption (TraceGains, 2024). Additionally, red hues are often associated with sweetness, as seen in natural foods like berries, leading consumers to perceive red-packaged products as sweeter (HunterLab, 2023). This color can create urgency and excitement, making it effective in drawing consumers' attention to Hink's Smokehouse products on store shelves.

Black is often associated with sophistication, luxury, and simplicity. It can add an element of elegance and premium quality to food packaging (Forty8Creates, n.d.). When combined with other colors, black creates a striking contrast that enhances visual appeal and conveys a sense of exclusivity (Ignyte, n.d.). For Hink's Smokehouse, incorporating black in packaging elements, such as text or borders, can reinforce the brand's premium feel and highlight its dedication to high-quality BBQ.



White is linked to purity, cleanliness, and simplicity. In food packaging, it can convey a sense of freshness and transparency, helping consumers feel more confident in their purchase (Color Psychology, n.d.). White serves as a neutral backdrop that enhances the visibility of bold design elements and ensures clarity in packaging information (Forty8Creates, n.d.).

Using white strategically allows the bold red and black elements to stand out while reinforcing an image of trustworthiness and authenticity.

For Hink's Smokehouse, the combination of red, black, and white can be strategically utilized to create a compelling brand image. Red stimulates appetite and draws attention, making it an ideal choice for logos, product names, and key design elements. The black adds a touch of sophistication and can be used for framing packaging elements, reinforcing a premium and bold brand identity. Finally, white provides contrast, ensuring that packaging details remain clear and visually appealing while supporting an overall sense of cleanliness. By thoughtfully combining these colors of Hink's Smokehouse we can create packaging that not only attracts consumers but also communicates the brand's values of quality and authenticity that do not currently exist in the packaging.

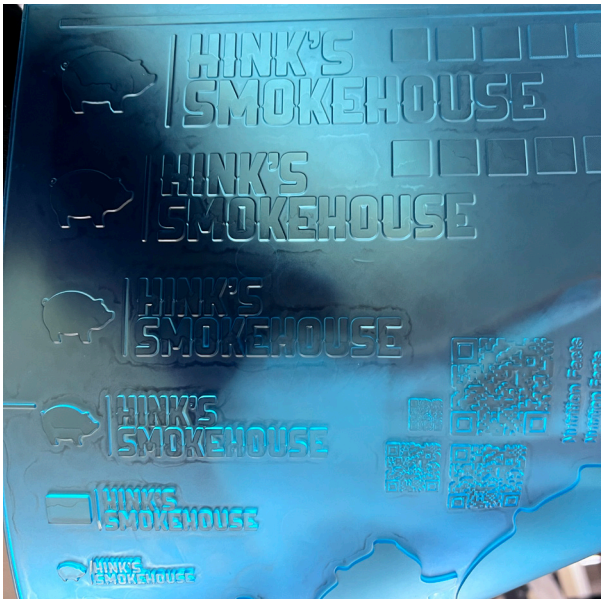
By understanding the psychological impact of colors is crucial in food packaging design. For Hink's Smokehouse, leveraging the appetite-stimulating effects of red, the sophistication of black, and the purity of white can enhance brand perception and positively influence consumer behavior. Strategic use of these colors can differentiate the brand in a competitive market and foster a strong connection with the target audience.

Technical Testing

To ensure the final designs the team went through a series of tests from design testing, dieline testing and ultimately a test run using the press to see our presses and plate makers capabilities.

Label Dieline Testing

Hink's original branding was very flat, a rectangular label on a rectangular bottle. We decided from very early on in our design process that a unique shape to the label would add dimension to the product.



With our original split pig idea, we imagined a cut that followed the outline of the pig, around the ear and over the back on both sides of the label. This gave us the issue of limited space to work with. Part of the reason the original split pig idea was scrapped is due to the nutrition facts having to be scaled down to accommodate for the smaller space caused by this cut.

During our first round of alternative designs, we opted to leave out experimenting with the die line until we settled on another shape. It was during our second round of designs that we decided to make an arched design on the front of the label. We experimented with just the top or both the top and the bottom, deciding that the latter worked best.

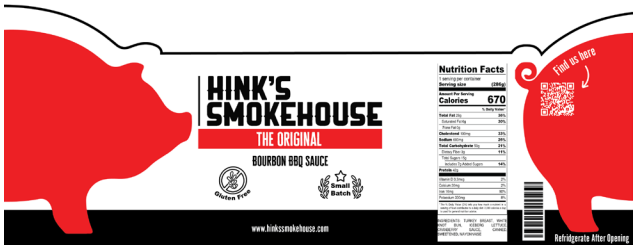
In our final design, the arches evolved to take on the shape of the bottle. We found that this element added a sense of cohesion to the bottle and the label, creating a premium look.

Tray Dieline Testing

Initial design for the tray looked very similar to our final product, we just tweaked a few aspects to make it work better for us. To start, we extended the tabs to be more secure when the tray is folded, because we noticed that with the shorter tabs it would not hold together as securely. Then, we extended the length and width of the tray (flat) to maximize our 7" wide substrate and 12" repeat. This resulted in a final flat size of 6.6" by 11.3". Because we didn't have much space left for bearer bars, we had to make them very thin to keep our finished size. Though this would make production a bit more challenging, we think it was worth it to produce the best size tray for Hink's products. Our final folded tray size is 8 inches wide, 5 inches deep, and 2.75 inches tall.

Design Testing

Our initial concept was a wrap-around label with the pig split on both ends, creating a full pig on the back of the bottle. Our team liked this concept, but there were elements we neglected to achieve this look. Most notably, the nutrition facts were simply too small and would be unreadable to the average consumer. The bar code and QR code were also placed too closely together, which would cause trouble for anyone trying to scan the barcode.



After getting input from Equator, we decided to make some alternative designs for the label. We experimented with the sizing and placement of the pig, ultimately deciding to make it smaller. We also experimented with the placement of the text, such as moving around the "gluten free" and "small batch" text. Most importantly, we experimented with the style of nutrition facts, attempting to find which style best suited the needs of this label. Since the label is less than 40 square inches, we were able to use a more compact label without sacrificing readability.

The first round of alternative designs gave us a clearer vision for what elements worked best: the pig in the middle, smaller logo, the condensed nutrition facts, the barcode further from the QR code, among other things. For our second round of alternative designs, we focused more on sketching out designs. We introduced our stylized flame barcode, alternative logos and other stylized elements. Our second round of design lead us to our final label design. With a few finishing touches, the label was complete.

Press Test Run

For our test plate, our priorities were to test the minimum viable sizes of the Hink's logo, the pig graphic, the QR code, the barcode, and the font sizes

Fonts

The most important font to test was the nutrition facts font in both regular and bold. On our test plate we used the font in various point sizes, ranging from 5pt to 15pt. The other font we tested was Gothic Cheddar Sans, with an interesting rustic effect on the edges of the letters.

Logos/pigs

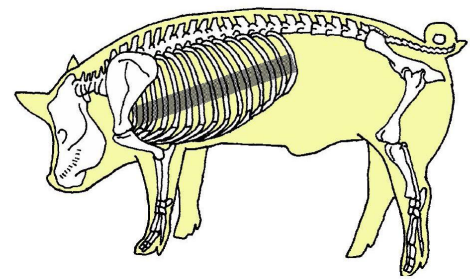
The Hink's logo utilizes the pig graphic and the font Bronco. There are some aspects of this logo we knew could have trouble reproducing on press, such as the tiny notches on the letters, and small eye and tail details on the pig. We experimented with the sizing of the logo from 0.2" to 1.5".

QR codes and barcode

Getting the minimum viable size for the QR code was crucial for this test, as losing any detail can cause the QR code to be unfunctional. The barcode is a similar situation. Losing any detail in the fine lines of the bar will impact functionality of scanning, potentially leading to loss of sales.

Pig Anatomy

Our client has a pig featured as apart of the logo where we knew that we would have a problem reproducing the tail on press as well as the eye. While knowing this we also acknowledge that the curly tail of a pig is iconic and needed to find another version of the tail that we would be able to use. While searching we realized that it is commonly practiced to dock a pigs tail. According to the American Vetrinary Medical Association " Tail docking is performed to reduce tail biting and cannibalism among pigs." (Tail docking and teeth clipping of swine). Additionally for the ghost pepper skeleton pig we researched some skeletal anatomy of a pig. Using a skeletal diagram of a pig from the University of Kentucky Department of Animal and Food Sciences, to help create a illustrated image of a pig skeleton (Swine discovery - skeletal).



Anilox Rolls

Another key piece we knew we needed to look into were our anilox rolls. Our Mark Andy press originally came with anilox rolls that featured a 400 lpi and 8.0 bcm. While we made this line screen and bcm work last year we knew early on with the nutrition facts requirement that we would have lots of fine detail needing a linescreen that allowed for that. Additionally a problem that we had during our test runs was because of the high ink volume the ink was not fully drying on press and resulted in smearing due to not being able to fully cure. Knowing this we reached out to Harper Corporation to acquire these new anilox rolls we need for both our flexographic units on press.

After consulting with the experts at Harper we agreed that the appropriate line screen for the finer detail we needed was a 700 lpi. Further it was recommended for the 700 lpi anilox rolls that we have a 3.5 bcm.

How the Research Translates

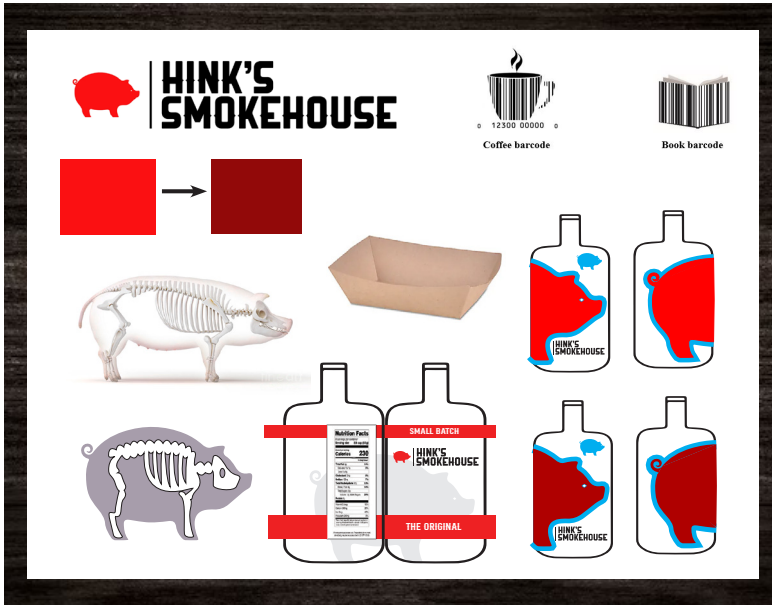
The research provides a pivotal starting point for the team to work off of. While the market research does not directly impact our packaging workflow it is useful information to be able to provide our client for further insight on the current local and national markets.

However the key pieces of our research included were being able to conduct the technical testing realizing that we would have ink drying issues with our ink leading to needing to acquire lower ink volume anilox rolls. Further in our technical testing we were able to ensure that we could reproduce our graphics on press with the key pieces being the QR code, barcode, and the small detail in the nutrition facts. Additionally, being able to go through a prototyping process that helped the team visualize and adjust designs based on the psychical products ensured that when we got to press there would be little hiccups design wise. We also were able to take practical research from pig anatomy and also tail docking into consideration to create our skeleton pig illustrations.

CONCEPTS

Mood Boards

To begin creating concepts and ideas the team create mood boards with then further creating a final one. Many of these ideas were initial concepts that we used to draw inspiration from. One of the key pieces was a label with a unique cut shape that featured the grim reaper and his sickle. The team felt that the unique shape and illustrations was a good starting point for ideas on a sauce label. Another was the idea of designed elements as apart of the barcodes. Also stemming from our meeting with our client was the idea of the ghost pepper sauce and creating some illustration of skeleton or ghost pig for that flavor of sauce. Ultimately, the team felt like we had a good starting point of where we wanted to take our packaging designs.



Original Branding

Hink's original branding is a minimalistic color-block style. His design language is limited to bottle labels for the barbeque sauce line up, each with a unique accent color. Red for the original, yellow for the Carolina Golden Mustard, and black for the spicy flavor. These labels keep the same geometric style, not using any more than the accent color, white, red, and black.

An issue our team noticed with these labels is the lack of design consistency. A few we noticed are:

- The black stroke on the original sauce's red blocks, found only on the original flavor.
- The "Small Batch" text sizing being larger on the original sauce compared to the other two.
- The logo being a screenshot on the Carolina Golden Mustard flavor.
- The website text being sized differently on each label.
- The flavor title above the nutrition facts being missing on the spicy flavor.
- The nutrition facts being sized slightly differently on each flavor.
- The "Bourbon BBQ Sauce" and the "Refrigerate After Opening" text being a different font on the original flavor
- The Facebook and Instagram logos being screenshots on the Carolina Golden Mustard and spicy flavors.
- The barcode being smaller and a screenshot on the Carolina Golden Mustard and spicy flavors.
- The Carolina Golden Mustard text being too large, warping around the edge of the bottle.

While minimalism can help a brand to look more professional, it can also deter a brand's uniqueness. Oversimplification can make packaging seem too generic, blending in rather than standing out. Our team noticed how the rectangular bottle and the rectangular label, along with the color-blocked style make Hink's packaging look flat especially when on the shelf next to other well known brands.

HINK'S SMOKEHOUSE

Updated Branding

Fonts

FARMHAND

Alternate Gothic No1 D

Lobster

Nimbus sans

BRONCO

Official Colors

PMS 3517 C

BLACK

Logo

Hink's Smokehouse originally had a simple combination mark logo depicting a stylized pig and the brand name. The original logo did an excellent job portraying the brand's aesthetic, so our team initially decided not to alter it. Over the development of the new labels however, our team noticed two potential problem areas: the tail and the eye of the pig.

The eye of the pig was a tiny white dot, an almost unnoticeable detail. Our team decided to fill in the eye, because such a delicate detail may cause troubles with print replication.

The original pig had a curly tail that curled towards the pig's back, leaving a tiny gap between the back and the tail. Like the eye, this very fine detail would likely be difficult to replicate in the long-term. It was a difficult decision for our team, and we tried to find methods to keep the curled tail. Ultimately, we knew to keep the best consistency across all media, "docking" the tail would be best.

Bottle Label Design

The label design went through many iterations. Our initial mockup was a wraparound label with the Hink's pig spilt on both ends of the label, creating a visually interesting effect. However, when our team consulted with Equator, we were informed of relevant guidelines that made us rethink our design.

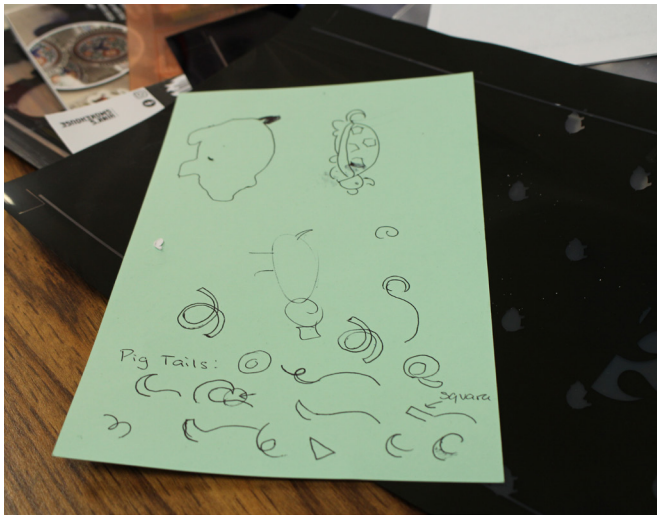
Although we loved our initial concept, the placement and sizing of the nutrition facts was unideal. Firstly, our nutritional facts were placed on the side of the bottle, causing the text to be warped when placed correctly. According to Equator, this affects readability, and it is better practice to place nutrition facts flat on the package. Equator design additionally informed us that it is better to place the QR code and barcode further away from each other since it tends to cause issues with scanning the barcodes in stores, as scanners can also pick up the QR code instead.

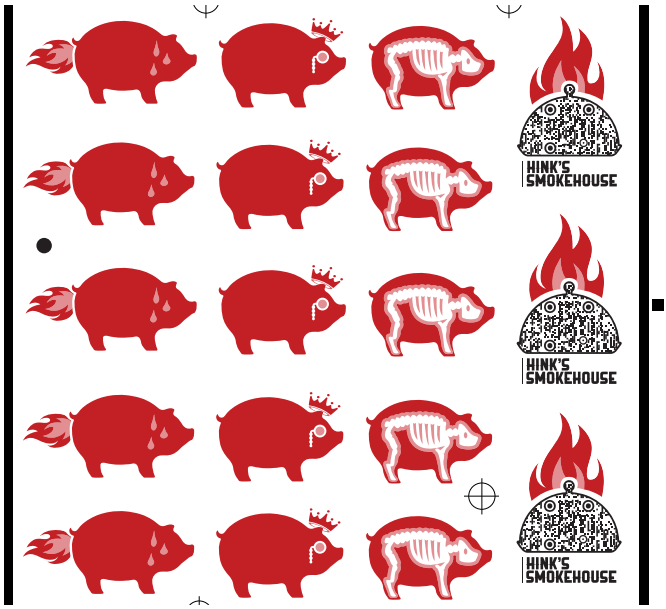
Equator design assisted us with the nutrition facts providing us the guidance of an alternative format for the label's nutrition facts, specifically for labels with less than 40 square inches of surface area. This helped us come up with a more appropriate design for the label. After lots of experimenting with designs, we settled on the final label.

We also included a stylized barcode in the shape of a flame. Stylized barcodes can add a unique creative touch to packaging designs, enhancing already established branding. Brands such as Hello Toothpaste, Mike and Ike, and Hot Pockets, are brands we took inspiration from for this unique styled barcode.

Promotional Label Design

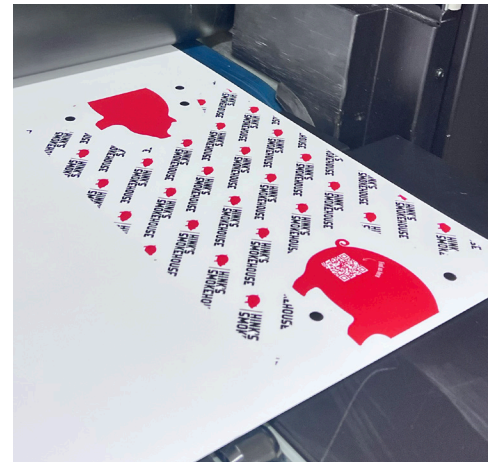
The promotional labels we made are references to the available flavors of Hink's barbeque sauces. The original Carolina golden mustard label featured a pig with a crown, and the spicy flavor featured a flame, both of which are featured on the stickers with added details. The skeleton pig is a reference to a soon-to-be released flavor of ghost pepper barbeque sauce. Our client told us he envisioned a glow-in-the-dark label for this sauce, so we found him information regarding glow-in-the-dark inks that are compatible with flexography. However due to the high entry cost of the glow in the dark ink we began to look into other options. Our secondary options was that we would use a UV reactive red ink where we originally were going to use glow in the dark to add a special and unique touch to the promotional labels. Unfortunately due to shipping times and production schedules we were unable to get this UV reactive red ink and opted to scrap the pieces that would have been UV reactive in favor of white space. We also included simple logo stickers with the original flavor label, intended to be used to close wraps.

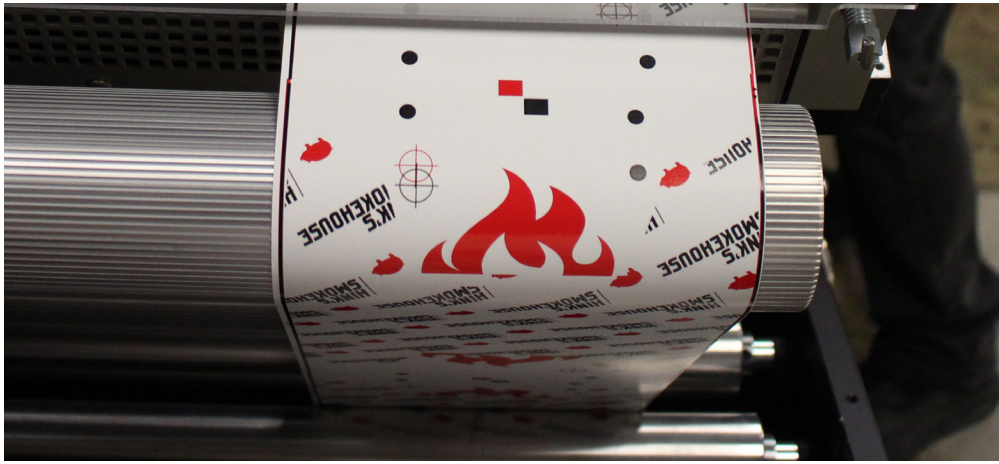




Food Tray Design

For the food tray, we decided on a repeating logo design. As mentioned earlier, we found that at when the original Hink's logo was scaled down, the fine details such as the eye and tail printed worse. With the updated logo, this problem was solved. Originally we also were going to add the pig with a QR code on the butt to the smaller sides to add some differentiation to the repeating pattern, but after testing of the design we opted to add a flame instead. The addition of the flame added cohesion with the stylized barcode on the wraparound label.





Mockups

To better visualize the labels before going to production we created mock ups. By 3d modeling the bottle using Maya we got an accurate model to the unique shape of Hink's BBQ sauce bottle. Then bringing the 3d model into Adobe Dimension and applying the label model to the bottle. Ultimately allowing for a realistic mock up that shows the final product.

EXECUTION

Food Safety

Food safety extends beyond the ingredients within a product. It also includes the materials used in packaging, such as printing inks. In the United States, the use of inks for food packaging is regulated to prevent contamination and ensure consumer safety. The U.S. Food and Drug Administration (FDA) does not directly approve printing inks but requires that they comply with the general safety standards for food contact materials (Food Safety Magazine, 2022).

Since our products featured a tray that would be in direct contact with food the food tray in practice will need to utilize a food safe ink. In cases where ink is applied directly to a food-contact surface, strict regulations ensure that migration of ink components into food is either eliminated or kept within safe limits (Food Safety Magazine, 2022). However due to our press being a UV ink flexographic press not featuring dryers giving us the capability to run water based food safe ink, we chose to forego the food safe piece in creating purely a prototype that we could provide our client to use. The food tray is not food safe due to the UV inks and there are only a select few UV inks that are food safe as they have low migration that is required of food safe ink.

We are able to claim that the label is food safe as the label does not come in direct contact with any food surface. This enables us to be able to not worry about the migration of our inks because of the functional barrier provided by the bottle itself (Food Safety Magazine, 2022).

While food safety is a concern due to the nature of the client we do acknowledge that the food tray would not be food safe in the way that we printed it due to the UV inks utilized. However, the labels themselves are all compliant with food safety regulations from the FDA due to the functional barrier nature.

Environmental Efforts

Increased efforts have been made to ensure that packaging practices are environmentally responsible which we took into consideration during our production process. We utilized preexisting substrates that we had on hand in our label without acquiring new ones. Additionally, the paperboard we utilized being Clearwater Paper's 12 point Candesce® C1S (coated 1 Side) Paperboard is 100% made from virgin fibers from responsible sources with Forest Stewardship Council (FSC) certification. We also ensured that we could reuse our ink through reclaiming the good ink and disposing of what of we could not reclaim in the proper way.

Ink Mixing

We searched through the Pantone Connect service of coated color swatches available in the Pantone book. Once finding the desired shade of red, being PMS 3517 C, we retrieved the formula data from the Pantone Connect service to receive the correct UV inks needed for our desired color. After consulting Tony Parsons of Nazdar Inks on formula, we mixed the inks together using the formula we gathered earlier. We started with a 100g batch of ink to ensure our color was what we desired, then took drawdowns as well as cured the ink to see what the color would look like when printed. Since we were satisfied with the proportions from the formula, we used it again to mix a 12 pound batch of ink for all our press runs to ensure we had enough ink for all three press runs. After we finished mixing, we took drawdowns again and measured with a Spectro densitometer to see what the Delta E2000 value was compared to the original drawdowns. Through utilizing the formula we created the Hink's Smokehouse Red being PMS 3517 C that we wanted with the following percentages:

Hink's Smokehouse Red

Rubine Red: 72%

Process Black: 0.27%

Trans White: 5%

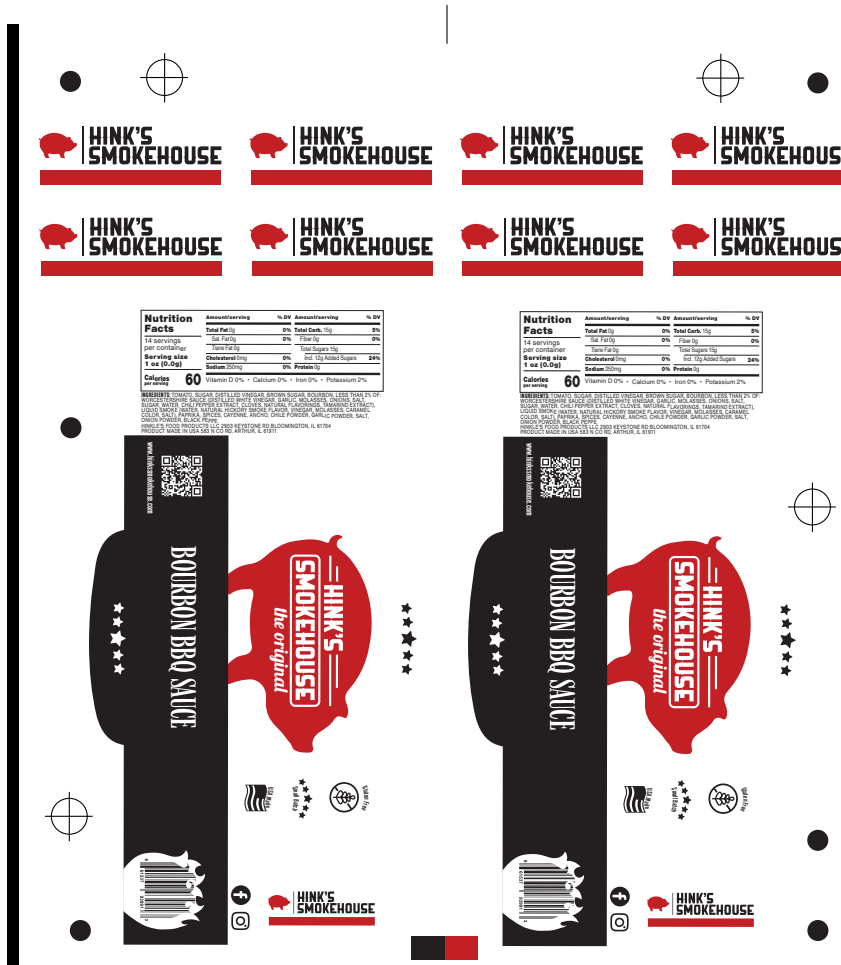
Yellow PY12: 22.73%

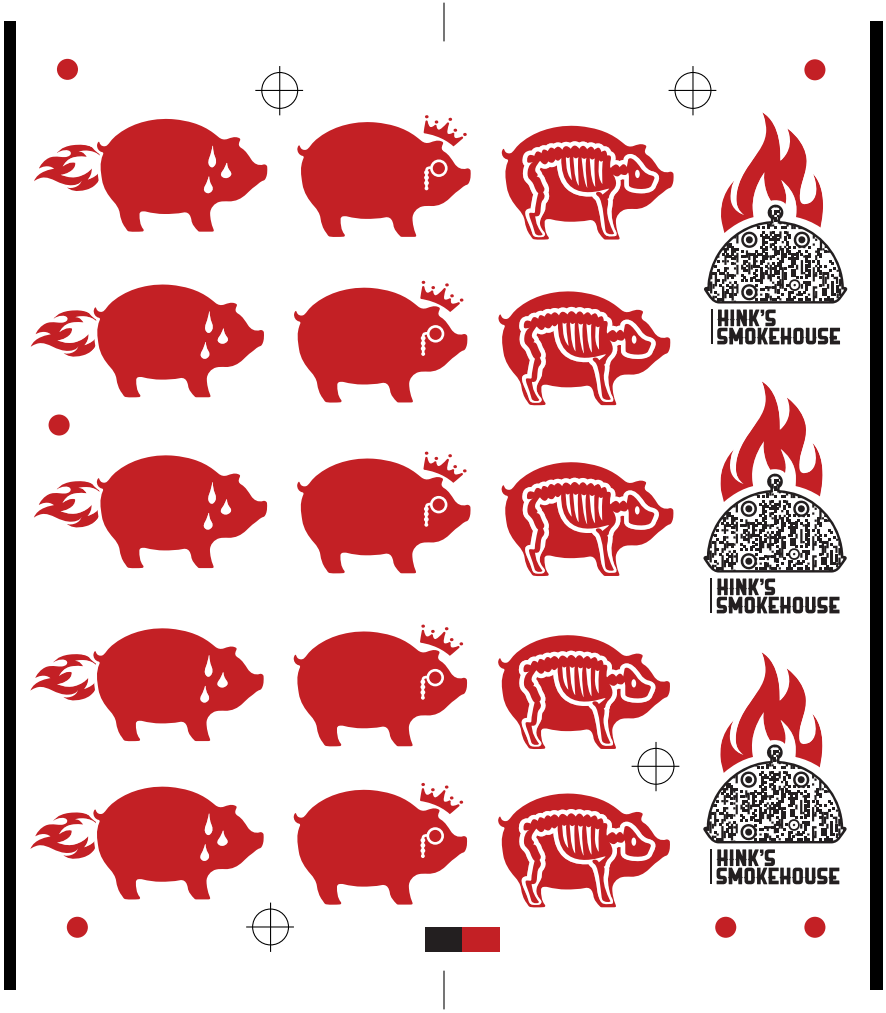
PANTONE 3517 C

Prepress

Since our press features a 96 tooth plate cylinder each of our impositions has a 96.75% distortion applied to them.

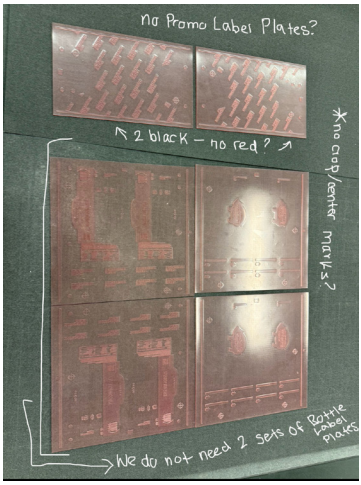
Impositions




HINK'S
SMOKEHOUSE
HINK'S
SMOKEHOUSE
HINK'S
SMOKEHOUSE


HINK'S SMOKEHOUSE

Plate Making

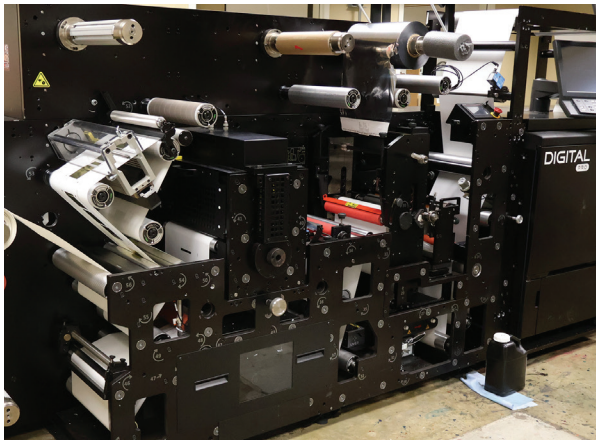


We initially reached out to SGS to make our plates since our designs involved small nutrition facts, and we weren't confident in our own plate maker's abilities to reproduce that. We asked SGS for 6 plates total, 2 for each color of our 3 designs. Unfortunately, we received duplicates of some plates and some were completely missing. Since we didn't want to risk the limited time we had waiting for new plates, we decided to work with what we had.

Luckily, we had the complete set of plates for the bottle labels, which was our most crucial product due to the smaller type necessary from the nutrition facts. Unfortunately, we received duplicate black plates for our tray, and no red, and we didn't receive the plates for our promo labels at all. This meant that we would have to make the red tray plate, and both promo label plates on our own.

After our first few attempts to make plates and having issues in exposure, we realized that we had a few bulbs out in our plate maker. To problem solve, we used our exposure table for screen printing to expose our plates evenly, and we were able to make successful plates.

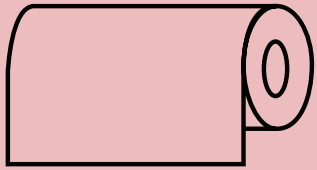
Press Specifications



Mark Andy Digital Pro 3 hybrid flexographic and digital press with a 13" maximum width, 12" maximum repeat, and a built in UV curing for the flexographic units.

Product Specifications

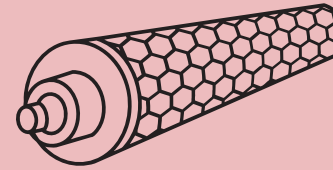
Substrate



Labels: UPM Raflatac's 54# Raflacoat-FSC RP51

Food Tray: Clearwater Paper's 12 point Candesce® C1S (coated 1 Side) Paperboard.

Anilox



PMS 3517 C: Harper 700 lpi 3.51 bcm
Black: Harper 700 lpi 3.51 bcm
Soft Touch Matte Coating: 400 lpi 8.5 bcm

Relief

Cosmolight Photopolymer plate: 0.067" thickness

Stickyback: Tesa Medium

Ink

PMS 3517 C: Unit 1

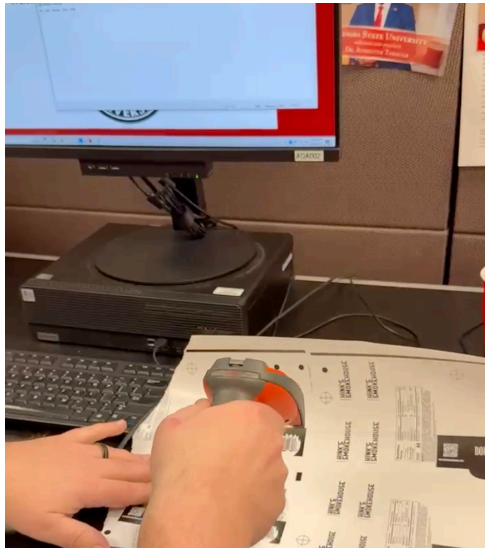
Black: Unit 2

Soft Touch Matte Coating: Reran on Unit 2

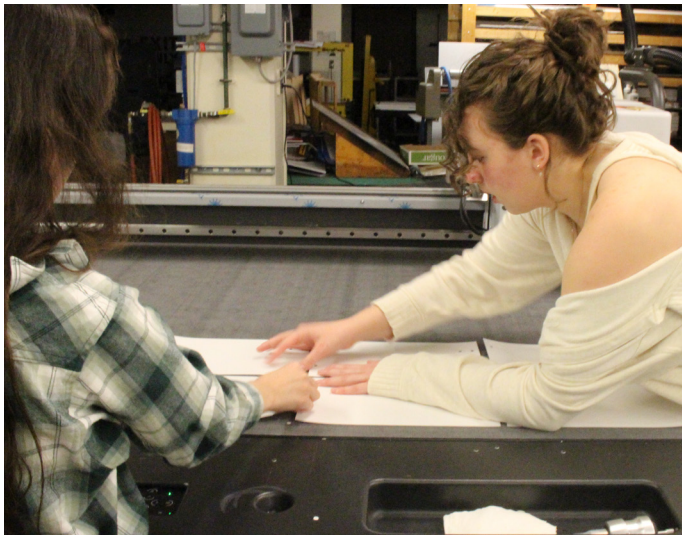
Finishing

Labels

For the finishing of the labels we reran the finished labels through the press for a UV soft touch matte coating from Cyngient, running at 80 feet per minute. Finishing on the CAD table, the kiss cut tool was used to cut out the final size of the sticker, and the Psaligraphy Knife to completely cut through the backing of the label stock. The extra room surrounding the final label size allows for easier removal of the label when they are being placed on the varying products. The mixed ink and with the soft touch matte coating laid very well on the white label stock, and the post-print cutting on the CAD table gave the product a polished finish.



To ensure that our QR codes were still functioning we tested the QR code on our phone ensuring the scan ability across labels. Additionally on the Bottle Label we took it over to our printing services at Illinois State University to ensure that the barcode featured on the label still scanned. By doing a quality check to ensure that the barcode scanned it would be possible for this label to be used in the retail setting our client currently has the sauces featured in such as Hy-vee.



Food Tray

Once the paperboard was printed we brought it over to CAD table where the Psaligraphy Knife and Crease wheel was used to cut and crease the tray to its final size.

Quality Control Report

Bottle Labels

	L*a*b (drawdowns)	L*a*b (samples)	AVG ΔE2000
3517C	L* 43.12 a* 69.93 b* 31.29	L* 44.50 a* 71.03 b* 30.84	2.0
Black	L* 11.62 a* 0.57 b* -0.61	L* 9.37 a* 0.44 b*-0.98	2.1
3517C (coated)	L* 46.55 a* 67.11 b* 28.58	L* 46.56 a* 67.17 b* 28.52	1.26
Black (coated	L* 23.48 a* 0.30 b* -1.59	L* 18.49 a* 0.28 b* -1.28	0.78

Promotional Labels

	L*a*b (drawdowns)	L*a*b (samples)	AVG ΔE2000
3517C	L* 43.19 a* 69.93 b* 30.72	L* 42.89 a* 69.89 b* 31.12	1.02
Black	L* 10.71 a* 0.36 b* -0.96	L* 11.28 a* 0.63 b*-0.76	2.06
3517C (coated)	L* 46.85 a* 66.73 b* 27.93	L* 46.35 a* 67.32 b* 28.66	1.49
Black (coated	L* 18.93 a* 0.33 b* -1.06	L* 19.10 a* 0.28 b* -1.06	1.16

Food Tray

	L*a*b (drawdowns)	L*a*b (samples)	AVG ΔE2000
3517C	L* 43.12 a* 70.40 b* 32.01	L* 43.39 a* 70.74 b* 32.32	1.15
Black	L* 16.73 a* 0.59 b* -0.14	L* 18.49 a* 0.61 b* -0.16	1.46

Color Management

While running the press, we compared LAB values for the Hink's Smokehouse Red (PMS 3517 C) and Process Black to determine how accurate they were to our initial drawdowns where we had with the soft touch matte coatings and without the matte coating . Using the Techkno Spectro densitometerwhich calculates ΔE using the ΔE2000 formula, to find that every value was well within two ΔE of our drawdowns, which is well within the industry standard for accurate color reproduction.

Finished Products


HINK'S
SMOKEHOUSE
the original
BOURBON BBQ SAUCE
HINK'S SMOKEHOUSE


HINK'S
SMOKEHOUSE
the original
BOURBON BBQ SAUCE
HINK'S SMOKEHOUSE


HINK'S SMOKEHOUSE
HINK'S SMOKEHOUSE
HINK'S SMOKEHOUSE

CITATIONS

Sponsors

Citations

American Veterinary Medical Association. (n.d.). Tail docking and teeth clipping of swine. American Veterinary Medical Association. https://www.avma.org/resources-tools/avma-policies/tail-docking-and-teeth-clipping-swine#:~:text=Tail%20docking%20is%20performed%20to,at%20the%20time%20of%20weaning.

Barcode Graphics. (n.d.). UPC barcode color and size requirements. Retrieved March 30, 2025, from https://www.barcode.graphics/upc-color/

BN Advantage. (n.d.). BN Food Guide. Retrieved March 30, 2025, from https://www.bnadvantage.com/bn-food-guide/

Color Psychology. (n.d.). The psychology of colors in marketing and branding. Retrieved March 30, 2025, from https://www.colorpsychology.org/blog/color-psychology-marketing/

Eat Local Restaurant Directory. (n.d.). Food Truck Listings. Retrieved March 30, 2025, from https://directory.eatlocalbn.com/listing-category/all/foodtruck/

Equator Design. (n.d.). Sunrise 2027: Preparing brands for the 2D barcode revolution. Retrieved March 30, 2025, from https://equator-design.com/insights/what-is-sunrise-2027-and-how-can-brands-prepare-for-it-2/

Food Safety Magazine. (2022). The use of printing inks for food packaging in the United States. Retrieved March 31, 2025, from https://www.food-safety.com/articles/7001-the-use-of-printing-inks-for-food-packaging-in-the-united-states

Fortune Business Insights. (2025). Condiments Market Size, Share, Trends | Growth Analysis [2032]. Retrieved March 30, 2025, from https://www.fortunebusinessinsights.com/industry-reports/condiments-market-100541

Forty8Creates. (n.d.). Psychology of colour: Food & drink. Retrieved March 30, 2025, from https://forty8creates.com/colour-psychology-of-food-drink/

Grand View Research. (2024). Sauces, Dressings & Condiments Market Size Report, 2030. Retrieved March 30, 2025, from https://www.grandviewresearch.com/industry-analysis/sauces-dressings-condiments-market

GS1 US. (n.d.). Guide to UPCs. Retrieved March 30, 2025, from https://www.gs1us.org/upcs-barcodes-prefixes/guide-to-upcs

Hink's Smokehouse. Hinkssmokehouse.com. (n.d.). https://www.hinkssmokehouse.com/

Human Foods Program. (n.d.). Front-of-package nutrition labeling. U.S. Food and Drug Administration. https://www.fda.gov/food/nutrition-food-labeling-and-critical-foods/front-package-nutrition-labeling

HunterLab. (2023, November 28). What color psychology is used in food marketing? Retrieved March 30, 2025, from https://www.hunterlab.com/blog/what-color-psychology-is-used-in-food-marketing/

Ignyte. (n.d.). Color psychology in branding: The persuasive power of color. Retrieved March 30, 2025, from https://www.ignytebrands.com/the-psychology-of-color-in-branding/

Smith Corona. (n.d.). Barcode 101: Information on barcodes. Retrieved March 30, 2025, from https://www.smithcorona.com/blog/barcode-101-information/

TraceGains. (2024, December 11). Food and color: What does it all mean? Retrieved March 30, 2025, from https://tracegains.com/blog/food-and-color-what-does-it-all-mean/

U.S. Bureau of Labor Statistics. (2025). Bloomington-Normal, IL Economy at a Glance. Retrieved March 30, 2025, from https://www.bls.gov/eag/eag.il_bloomington_msa.htm

U.S. Census Bureau. (2024). QuickFacts: Bloomington city, Illinois. Retrieved March 30, 2025, from https://www.census.gov/quickfacts/fact/table/bloomingtoncityillinois/PST045224

U.S. Food and Drug Administration. (2020). Food labeling guide. Retrieved March 30, 2025, from https://www.fda.gov/files/food/published/Food-Labeling-Guide-%28PDF%29.pdf

U.S. Food and Drug Administration. (n.d.). Food Ingredients & Packaging. Retrieved March 31, 2025, from https://www.fda.gov/food/food-ingredients-packaging

U.S. Food and Drug Administration. (n.d.). Food Labeling Guide. Retrieved March 31, 2025, from https://www.fda.gov/files/food/published/Food-Labeling-Guide-%28PDF%29.pdf

University of Kentucky. (n.d.). Swine discovery - skeletal. Swine Discovery - Skeletal | Animal & Food Sciences. https://afs.ca.uky.edu/livestock/swine/skeletal

Vanity Barcodes. (n.d.). Creative barcode designs. Retrieved March 30, 2025, from https://www.vanitybarcodes.com


HINK'S
SMOKEHOUSE


2025
PHOENIX CHALLENGE