

INVESTMENT MEMO: *FRIDGMO, Recipe AI and the Food Graph*

Introduction

CONCEPT: The Fridgmo App is a food graph technology that turns your groceries into recipes based on cost, diet, or palate. Using scan codes (UPC), visual graph (cell phone photo), or your grocery list (POS integration), you can populate your Fridgmo profile with all your favorite foods.

Ever stared into your fridge and wondered what to eat? Figuring out what to make is as easy as picking one, or a few, ingredients from your virtual fridge or cupboard – and Fridgmo AI will suggest dishes, meals, and menus for you or your family. Missing an ingredient? Fridgmo will add it to your grocery list – *or have it delivered!*

Browse the social pantry to discover new recipes or products. Or invent a new dish and watch it go viral. With Fridgmo AI you'll never run out of ideas in the kitchen. Just follow your taste buds and Fridgmo will do the rest: *Sweet? Salty? Crunchy? Sour?* No problem. And using "Grocery GPS" (powered by HotPricing), you can find your favorite foods at the best prices anywhere you shop.

Fridgmo is designed for the everyday chef. Build your own cookbook with the classic "recipe canvas" UI – or get creative using the "gamified arcade" or "social pantry" UI. Future modules include AR kitchen prep, smart kitchen integration, and crowdsourced product design.

OPPORTUNITY: There is no market incumbent in the space of home cooking using groceries. And though there are a flood of food delivery apps, prepared meal services, and dine out experiences, the final frontier is the family kitchen. With Fridgmo AI, grocery list integration and recipe automation makes meal prep an everyday adventure, and indispensable tool for Americans and humans across our diverse food graph.

And because grocery brands are deeply rooted into American cuisine (even our commodity groceries have brand names), there is a natural product integration at both the recipe and grocery list level, which creates a multi-sided business model for contextual ads, product integration, and branded content experiences.

CUSTOMER: The American diet has a legacy of both invention (we invented breakfast cereal) and convenience (more points for condensed soup). But when we eat out of habit, we often eat the wrong things. Ironically, Americans are among the unhealthiest people on the planet.

But nobody likes a boring diet. And many of us need to watch what we eat, and what we spend. The Fridgmo algorithm makes it easy to personalize your cuisine for budget, diet and/or palate. *Food allergies? Counting calories? Exotic taste buds?* Just add your doctors' restrictions, personal goals, or tweak your food graph to any culinary setting – *and go surf the gastrosphere!*

MARKET: The global grocery and food market size for 2022 was \$11.6 trillion, up from \$11.3 trillion in 2021, with US 2022 revenue at \$848 billion for grocery, and \$125 billion other food retail. *Total US and global figures include supermarkets, convenience stores, and big box buying clubs.*

As a platform, Fridgmo's generative AI offers personalized cuisine that enables targeted advertising, with brand optimization across product lines and sales channels. US CPG ad spend increased to \$30 billion in 2021, to \$36 billion in 2022, from \$11.1 billion in 2019 – a \$25 billion dollar spike due to the pandemic, predicted to increase as brands shift their data strategies from linear to digital omnichannel. *CPG includes food, beverage, health and beauty, home supplies, pet and baby care.*

Brick-n-mortar grocery stores spent \$1.8 billion in advertising in 2021, and \$1.94 billion in 2022, while grocery food brands spent \$1.79 billion in 2021, across in-store, out-of-store, and packaging. In addition, 72% of Americans eat out regularly (56% 2 to 3 times a week, 10% 4 to 6 times a week, and 6% everyday), a \$5 billion ad category growing 9% YOY since 2019.

Coupons traditionally influence consumer buying power. But since 2015 coupon use has been on a downward trend, dropping from \$319 billion in 2015, to \$176 billion in 2021, with redemption rates dropping from 89% in 2015, to 55% in 2021. However, starting in 2020 there is a shift from paper FSI (free Sunday insert) to digital coupon redemption, with digital coupons overtaking FSI for the first time in history.

The total market opportunity for grocery and food advertising is segmented, multi-faceted, and in need of tech optimization. Of particular concern is the elimination of third party cookies, to be phased out in 2023. In this context, brands are searching for connected user identities and first-party data opportunities, which Fridgmo will interface via a garden of in-app and connected retail experiences.

UTILITY: The function of a world wide food graph can be an indispensable tool where data also becomes a commodity to better understand consumer behavior, human health, agricultural trends, culinary diversity, and climate change issues in the world food chain.

The Fridgmo food graph is a blitzscaling opportunity that can be launched with a single mode, “Shazam for Food,” an instant food loop: nutritional breakdown, calorie count, ingredients, and a killer recipe, all from an image prompt, that builds culinary preference into your food graph.

Add in the gamut of food delivery, subscription meal services, restaurant promotions, as well as health, fitness and dietary programs, to create a consolidated marketplace for brands to build relationships with consumers and communities -- while also turning your food graph into grocery lists, meal plans, a social cook book, and a connected kitchen.

Traction/Metrics

STATUS: Fridgmo, currently at pre-seed ideation, is an AI platform that introduces a new graph-based utility that redefines customer loyalty marketing. The arc to launch with Whole Foods, and other grocery retailers, brings brands and users together via POS integration and in-store POP, with a go-to market strategy built on the successful ecosystem of a natural foods brand, with generative Recipe AI able to create dishes, meals, or entire meal plans from grocery receipt data.

Fridgmo IP also contains a franchise that includes mobile gaming, reality competitions, and unscripted formats. In fact, 46% of Americans have watched a food show in the last 30 days, which through Prime Video, product integration along with brand sponsorships and crowdsourcing, can be a direct channel to drive user growth.

More intensively, 155 million Americans play mobile games everyday, growing 5% YOY from 2020 to 2021, with 2.3 billion playing world wide. In 2022, mobile games account for 51% of gaming revenue in the US, surpassing console revenue, with 94% of revenue coming from ads, a \$41 billion market size. Globally, mobile game adoption is expected to reach 30% by 2027, with \$286 billion in revenue projected for 2023, a natural medium for Fridgmo’s computational recipes.

Challenges to Growth

SCALABILITY: With a plan that builds from an instant food graph utility – into Recipe AI based on your grocery list, fridge and cupboard – into a network effect of extensible data based on diet, budget, and food preferences – the product roadmap can be staged to grow in usability, with monetization built-in from the ground up. Recipes, after all, in American cuisine are tied to grocery

brands that are household names.

In 2015, Chef Watson brought Recipe AI to top chefs, via an industry facing tool that launched computational creativity (computer assisted human creativity) into the culinary sphere. Compounded lists of ingredients (based on Bon Appétit cookbook training data and learned flavor profiles) required skilled chefs to sort ingredients into recipes ideas.

Today, Chat GPT requires semi-skilled prompt engineering to get useful results, when referencing ingredients or culinary styles and asking for recipes. But the larger value proposition is not “what can I make from these ingredients,” but “how, why and where can I eat more of the food I love,” with inputs for budget, diet, and palate, and variance for at-home and dine-out meal options.

According to the USDA Economic Research Service, one third of all US consumer dollars is spent on eating out, which in 2022 has returned to pre-pandemic levels, increasing 16% from 2021 to 2022. If we add government and business to consumer, the US annual food spend almost triples from \$848 billion to \$2.3 trillion.

The B2B side of the business model will include hospitals, schools, government institutions, and private businesses, increasing the total surface area of the food graph and TAM for Fridgmo. 56% of all food spend in these three categories are counted as food-away-from-home, with more than half of the market size being institutional meal services or dine out – a significant vertical for product distribution and business model integration, when scaling from consumer-facing to B2B, a 3X domestic opportunity.

Market

TRENDS: There are several grocery trends including inflation, personal diet changes, and grocery delivery, affecting short and long term consumer behavior, including brand loyalty. Overall, grocery sales have grown 1.8% YOY over the last five years, and e-groceries have grown from 9.3% to 14% from 2017 to 2022, projected to reach 21.5% of total grocery sales by 2027.

Current inflationary trends have shown consumers trading down to cheaper grocery products, with brands raising prices as much as 13.4% this year, with an average of 8.5% from July 2022 to July 2023. That’s over 4X the five year annual rate of 1.8%.

On the big brand side, total sales volume may be down a few points, but profits are higher. (*Coca-Cola’s Q2 price hike increased annual profits 12%, adding \$3.1 billion to the bottom line!*) Though some products like convenience beverages have withstood price consciousness, inflation is currently slowing. And, people are eating healthier, with 600% growth from 2019 to 2022 in the vegan foods category, a projected annual growth rate of 16.2% from 2023 to 2032.

As well, better-for-you baby brands are being acquired, adding innovation and sustainability to big brand portfolios. Comprehensively, each of these trends creates new opportunities to support consumers to make the right choices for their diet, budget, or palate, with naturalized ads and in-app promotions responsive to adaptive user behavior.

Future States

PROSPECTS: As Fridgmo grows product-market fit into new revenue streams, and families are getting more satisfaction from their grocery store choices, we may enter a phase where consumers can better impact big brand product development.

More data, along with game shows that crowdsource and launch new grocery products, supports the relationship between brands and consumers. In this way, the network effect of having a world wide food graph could create new consumption patterns that enable trends to spread laterally

between users, and vertically from users to brands.

“User-generated cuisine” may even cause a shift to more personalized eating styles, affecting national and regional cuisine patterns, bringing brands new opportunity to market how their products are used. When brands discover the creative ways consumers use their products, the exciting frontier of a multi-sided food graph can unlock rich data points that can facilitate responsive brand positioning and promotions executed at both hyperlocal and targeted levels.

Just as user trends may become part of popular culture, we may also see DNA, health records, and food science begin to intersect with the food graph, influencing eating habits, wellness, and longevity. And, as brands embrace consumer driven innovation, they may be able to support lifestyle changes that promote a synergy between healthier food for humans that are less impactful on the environment. Blue-zone diets, including a recent Minnesota pilot, places diet at the center of community, a win-win for brands building next level social content and game play.

Competitive Landscape

Because of anticipated growth in e-grocery delivery, the current strategy to build the food graph is to optimize for verticals, including grocery delivery, prepared meal services, dine-out, and take-out options – all currently components of American eating habits.

Instacart revenue increased to \$2.5 billion, 39% growth YOY, in 2022. And with projected sales estimated to exceed 25% of total grocery sales, Fridgmo must either acquire, build, or partner with a grocery API business that supports what continues to be a high adoption rate for grocery delivery post-pandemic.

Subscription meal kit distribution, challenged by customer acquisition and retention, can benefit from a centralized marketplace where potentially meal kits can be sourced at grocery retailers, through co-branded “market basket” promotions, as a convenience option for the family menu.

And though Doordash is becoming a last mile fulfillment service, with e-grocery and CPG added to restaurant delivery, its focus is delivery, not food – and certainly not the creative human diet.

Another way to create value is to offer a meal card that includes dine-out, which can function in the same way that airline “fare buckets” manage ticket prices to optimize revenue. When seats are empty in a dining room, real-time promotions can present cost-effective ways for restaurants to sell off-peak services for dine-in or takeout, which can leverage rewards and loyalty programs.

Each of these strategies can turn a competitor into a collaborator, building the network effect and value of a food graph into a platform ecosystem for both consumers, brands and vendors.

Team

Jared Suarez believes when humans play with their food they can master health and longevity. As CEO, he is looking for a technical co-founder who wants to build the next major graph technology. His work building the franchise property StomachMovie.com is based on having childhood food allergies, including lactose and gluten intolerance, and hypoglycemia. Want to build new tools for the brain-stomach connection? *Join Fridgmo to invent new food cultures.*

Use of Funds

PHASE 1, Seed Capital: 1) Bootstrap “vending machine” UI, and instant recipe function with nutritional food metadata from visual prompt. 2) Launch grocery store loyalty card integration with grocery list API, linked with branded recipe content. 3) Introduce Chef Fridgmo visual VPA.