

Customer Recommendation Analysis Report

This comprehensive analysis report provides detailed insights into cross-selling and up-selling opportunities for the customer, generated through advanced AI-powered ingredient matching and customer classification algorithms. The analysis was conducted on September 08, 2025 and represents the most current assessment of available opportunities.

Starbucks (C001)

Customer Classification Analysis

The customer has been classified as a **CHG Own Sales Customer** based on comprehensive analysis of their business operations. This classification is determined through mathematical calculations considering both the scale of their store network and their purchasing volume. The customer operates **99 stores** across their network and has purchased a total of **1,000 units** of products, indicating their market presence and purchasing power.

The classification criteria analysis reveals that this customer meets the following thresholds: ✓ Stores > 50, ✓ Quantity > 200,000, ✗ Stores between 25-50, ✓ Quantity between 50,000-200,000.

This classification has significant implications for our cross-selling strategy. As a chg own sales customer, the customer represents a high-value business relationship that requires premium attention and customized recommendations. The extensive store network and substantial purchasing volume suggest strong potential for implementing comprehensive cross-selling initiatives across their operations.

Cross-Sell Recommendations Analysis

Accepted Cross-Sell Opportunities

Our analysis identified **7 catalogue items** with viable cross-sell opportunities that have been validated through AI-powered ingredient matching and confirmed as suitable for the customer's current product portfolio. These recommendations represent products that the customer has not previously purchased and are deemed appropriate based on ingredient compatibility analysis.

Starbucks® Chocolate Chip Cookie (ID: CC101) presents 3 cross-sell opportunities:

1. Pioneer® Simple Split Biscuit Dough (ID: 210101) • Category: Biscuits • Price: \$34.8 • Similarity Score: 0.723 • AI Reasoning: YES. Pioneer® Simple Split Biscuit Dough is a versatile biscuit dough primarily made from enriched bleached flour, buttermilk, and other baking ingredients, suitable as a base dough ingredient. Since Starbucks® Chocolate Chip Cookie lists "Biscuit Dough" as an ingredient, this product can be used as that dough component in cookie preparation[1][2].

2. Conestoga™ Simple Split Whole Grain Biscuit Dough (ID: 3078) • Category: Biscuits • Price: \$31.2 • Similarity Score: 0.745 • AI Reasoning: YES. The "Conestoga™ Simple Split Whole Grain Biscuit Dough" is a biscuit dough product suitable as the "Biscuit Dough" ingredient in the Starbucks® Chocolate Chip Cookie, which lists biscuit dough as a component. The Conestoga dough is a ready-to-bake biscuit dough with compatible ingredients and preparation style[3].

3. Conestoga™ Simple Split Homestyle Biscuit Dough (ID: 3076) • Category: Biscuits • Price: \$36.6 • Similarity Score: 0.731 • AI Reasoning: YES. The "Conestoga™ Simple Split Homestyle Biscuit Dough" matches the ingredient "Biscuit Dough" listed for the Starbucks® Chocolate Chip

Cookie, as it is a ready-to-bake biscuit dough product suitable for use as a base dough ingredient in baked goods like cookies[1][2][3].

Starbucks® Vanilla Sugar Cookie (ID: CC102) presents 4 cross-sell opportunities:

1. Pioneer® Simple Split Biscuit Dough (ID: 210101) • Category: Biscuits • Price: \$34.8 • Similarity Score: 0.723 • AI Reasoning: YES. Pioneer® Simple Split Biscuit Dough is a ready-to-bake biscuit dough made from enriched bleached flour, buttermilk, oils, and leavening agents, which fits the general ingredient category "Biscuit Dough" required for Starbucks® Vanilla Sugar Cookie. It can serve as the biscuit dough base ingredient in the cookie recipe[1][2][4].

2. Conestoga™ Simple Split Whole Grain Biscuit Dough (ID: 3078) • Category: Biscuits • Price: \$31.2 • Similarity Score: 0.745 • AI Reasoning: YES. The "Conestoga™ Simple Split Whole Grain Biscuit Dough" is a biscuit dough product with ingredients compatible for use as the "Biscuit Dough" component in the Starbucks® Vanilla Sugar Cookie recipe, which lists biscuit dough as a base ingredient. The Conestoga dough contains typical biscuit ingredients like flour, buttermilk, sugar, and fats, suitable for cookie dough preparation[3][1].

3. Conestoga™ Southern Style Simple Split Biscuit Dough (ID: 240301) • Category: Biscuits • Price: \$31.2 • Similarity Score: 0.767 • AI Reasoning: YES. The "Conestoga™ Southern Style Simple Split Biscuit Dough" is a versatile biscuit dough made from enriched bleached flour, buttermilk, water, and fats, which matches the "Biscuit Dough" ingredient needed for Starbucks® Vanilla Sugar Cookie. It can serve as the biscuit dough base in the cookie recipe[1][2].

4. Conestoga™ Simple Split Southern Style Biscuit Dough (ID: 3080) • Category: Biscuits • Price: \$34.8 • Similarity Score: 0.766 • AI Reasoning: YES. The "Conestoga™ Simple Split Southern Style Biscuit Dough" is a biscuit dough product made primarily from enriched bleached flour, buttermilk, water, oils, and leavening agents, which aligns with the ingredient "Biscuit Dough" required for the Starbucks® Vanilla Sugar Cookie. It can serve as the biscuit dough base ingredient in the cookie recipe[1][2].

Starbucks® Buttermilk Biscuit (ID: CC103) presents 6 cross-sell opportunities:

1. Pioneer® Simple Split Biscuit Dough (ID: 210101) • Category: Biscuits • Price: \$34.8 • Similarity Score: 0.723 • AI Reasoning: YES. The "Pioneer® Simple Split Biscuit Dough" contains enriched bleached flour, buttermilk, butter substitutes (palm oil, soybean oil), salt, and other typical biscuit dough ingredients, matching the "Biscuit Dough" component required for Starbucks® Buttermilk Biscuit, which lists biscuit dough, buttermilk, butter, and salt as ingredients[1][2][4].

2. Conestoga™ Simple Split Whole Grain Biscuit Dough (ID: 3078) • Category: Biscuits • Price: \$31.2 • Similarity Score: 0.745 • AI Reasoning: YES. The Starbucks® Buttermilk Biscuit lists "Biscuit Dough" as an ingredient, and Conestoga™ Simple Split Whole Grain Biscuit Dough is a type of biscuit dough, making it a suitable base ingredient. However, the Starbucks biscuit also requires buttermilk, butter, and salt to match the traditional buttermilk biscuit profile. Using Conestoga dough as the biscuit dough component is feasible if these additional ingredients are incorporated.

3. Conestoga™ Southern Style Biscuit Dough (ID: 3079) • Category: Biscuits • Price: \$31.2 • Similarity Score: 0.795 • AI Reasoning: YES. The "Conestoga™ Southern Style Biscuit Dough" contains key ingredients like buttermilk, flour, and salt, aligning with the "Starbucks® Buttermilk Biscuit" ingredient list that includes biscuit dough, buttermilk, butter, and salt. It is a ready-to-bake biscuit dough suitable as the biscuit dough component in Starbucks' product[1][2].

4. Conestoga™ Southern Style Simple Split Biscuit Dough (ID: 240301) • Category: Biscuits • Price: \$31.2 • Similarity Score: 0.767 • AI Reasoning: YES. The Starbucks® Buttermilk Biscuit lists "Biscuit Dough" as an ingredient, and Conestoga™ Southern Style Simple Split Biscuit Dough is a ready-made biscuit dough product that can serve as the base dough. Since the biscuit dough is a core component, using Conestoga™ dough aligns with the ingredient requirement. Additional ingredients like buttermilk, butter, and salt can be added separately to match the traditional buttermilk biscuit profile

5. Conestoga™ Simple Split Homestyle Biscuit Dough (ID: 3076) • Category: Biscuits • Price: \$36.6 • Similarity Score: 0.731 • AI Reasoning: YES. The Starbucks® Buttermilk Biscuit lists "Biscuit Dough" as an ingredient, and Conestoga™ Simple Split Homestyle Biscuit Dough is a ready biscuit dough product, making it suitable as the biscuit dough component in the biscuit recipe. The other ingredients (buttermilk, butter, salt) can be added separately to match the buttermilk biscuit profile[1][4].

6. Conestoga™ Simple Split Southern Style Biscuit Dough (ID: 3080) • Category: Biscuits • Price: \$34.8 • Similarity Score: 0.766 • AI Reasoning: YES. The Starbucks® Buttermilk Biscuit lists "Biscuit Dough" as an ingredient, and Conestoga™ Simple Split Southern Style Biscuit Dough is a ready-made biscuit dough product suitable for making traditional biscuits like buttermilk biscuits, which aligns with the product description and ingredient needs. This makes it a compatible ingredient for the biscuit dough component in Starbucks® Buttermilk Biscuit.

Starbucks® Cheddar Cheese Sauce (ID: CC109) presents 2 cross-sell opportunities:

1. Pioneer® Cheddar Cheese Sauce Mix (ID: 94358) • Category: Gravies • Price: \$11.75 • Similarity Score: 0.818 • AI Reasoning: YES. The "Pioneer® Cheddar Cheese Sauce Mix" matches the ingredient "Cheddar Cheese Sauce Mix" listed in the Starbucks® Cheddar Cheese Sauce recipe. Both contain cheddar cheese and similar components, making Pioneer's mix suitable as the base ingredient for the Starbucks sauce, which also includes milk, butter, flour, and cheddar cheese added separately[1][2].

2. Pioneer® Cheese Sauce Mix (ID: 94335) • Category: Gravies • Price: \$17.2 • Similarity Score: 0.741 • AI Reasoning: YES. The "Pioneer® Cheese Sauce Mix" contains cheddar cheese and related ingredients consistent with a cheddar cheese sauce mix, matching the "Cheddar Cheese Sauce Mix" ingredient needed for "Starbucks® Cheddar Cheese Sauce" which also includes milk, butter, flour, and cheddar cheese as additional ingredients[1].

Starbucks® Chocolate Brownie (ID: CC112) presents 1 cross-sell opportunities:

1. Pioneer® Chocolate Brownie Mix (ID: 94418) • Category: Desserts • Price: \$37.5 • Similarity Score: 0.761 • AI Reasoning: YES. The "Pioneer® Chocolate Brownie Mix" contains typical brownie mix ingredients (sugar, enriched flour, palm oil, cocoa, leavening agents, and flavorings) suitable as the "Chocolate Brownie Mix" ingredient in the Starbucks® Chocolate Brownie recipe, which also requires eggs, oil, water, and chocolate chips to complete the dessert[3].

Starbucks® Cornbread (ID: CC115) presents 3 cross-sell opportunities:

1. Pioneer® Cornbread Mix (ID: 94218) • Category: Baking Mixes • Price: \$31.5 • Similarity Score: 0.784 • AI Reasoning: YES. The "Pioneer® Cornbread Mix" is a cornbread mix product made primarily of cornmeal, enriched flour, sugar, and other typical cornbread mix ingredients, which matches the "Cornbread Mix" ingredient required for "Starbucks® Cornbread" in the customer catalogue[1][3][5].

2. Pioneer® Deluxe Cornbread Mix (ID: 213513) • Category: Baking Mixes • Price: \$31.5 • Similarity Score: 0.764 • AI Reasoning: YES. The "Pioneer® Deluxe Cornbread Mix" is a cornbread mix designed to be combined with additional ingredients like water or milk and eggs to make cornbread, matching the "Cornbread Mix" ingredient required for "Starbucks® Cornbread" which also calls for eggs, milk, oil, and sugar[1][3].

3. Pioneer® Whole Grain Cornbread Mix (ID: 212643) • Category: Baking Mixes • Price: \$31.5 • Similarity Score: 0.797 • AI Reasoning: YES. The "Pioneer® Whole Grain Cornbread Mix" is a cornbread mix made from whole grain cornmeal, whole wheat flour, and enriched flours, designed for baking cornbread with added water only[2][3]. Since Starbucks® Cornbread lists "Cornbread Mix" as an ingredient along with eggs, milk, oil, and sugar, this product fits the requirement as a suitable cornbread mix base.

Starbucks® Pizza Dough (ID: CC118) presents 1 cross-sell opportunities:

1. Great American Pizza Dough Mix - No Yeast (ID: 211640) • Category: Pizza • Price: \$24.7 • Similarity Score: 1.000 • AI Reasoning: YES. The product "Great American Pizza Dough Mix - No Yeast" is explicitly listed as an ingredient in the "Starbucks® Pizza Dough" product description,

confirming it can be used as an ingredient for that pizza dough[customer_catalogue_enhanced.csv].

Rejected Cross-Sell Opportunities

Our AI analysis identified **4 catalogue items** with potential cross-sell opportunities that were ultimately rejected based on detailed ingredient compatibility analysis. These rejections demonstrate the system's ability to provide accurate, validated recommendations rather than simply suggesting all possible matches.

Starbucks® Chocolate Chip Cookie had 4 potential cross-sell opportunities that were rejected by our AI analysis:

1. Pioneer® Southern Style Biscuit Dough (ID: 8095) • Category: Biscuits • Price: \$31.2 • Similarity Score: 0.742 • Rejection Reason: NO. Pioneer® Southern Style Biscuit Dough is a ready-to-bake biscuit dough made primarily with enriched bleached flour, buttermilk, palm oil, and leavening agents, designed for biscuits rather than cookie dough. Starbucks® Chocolate Chip Cookie requires biscuit dough as an ingredient, but typically cookie dough differs significantly in formulation and texture from biscuit dough, making Pioneer biscuit dough unsuitable as a direct ingredient for chocolate chip cookies[2][5].

2. Conestoga™ Southern Style Biscuit Dough (ID: 3079) • Category: Biscuits • Price: \$31.2 • Similarity Score: 0.795 • Rejection Reason: NO. "Conestoga™ Southern Style Biscuit Dough" is a pre-made biscuit dough intended for biscuits, which differs in formulation and texture from the raw biscuit dough ingredient typically used in cookie recipes like "Starbucks® Chocolate Chip Cookie." Using biscuit dough as an ingredient in cookies would alter texture and baking properties, making it unsuitable as a direct ingredient substitute. The cookie recipe calls for biscuit dough as a base ingredient, but this usually means raw dough prepared specifically fo

3. Conestoga™ Southern Style Simple Split Biscuit Dough (ID: 240301) • Category: Biscuits • Price: \$31.2 • Similarity Score: 0.767 • Rejection Reason: NO. The "Conestoga™ Southern Style Simple Split Biscuit Dough" is formulated as a biscuit dough with ingredients like enriched bleached flour, buttermilk, palm oil, and leavening agents, designed for baking biscuits, not cookie dough. Starbucks® Chocolate Chip Cookie requires a biscuit dough base suitable for cookies, which typically differs in fat, sugar, and texture profile from biscuit dough[1][2].

4. Conestoga™ Simple Split Southern Style Biscuit Dough (ID: 3080) • Category: Biscuits • Price: \$34.8 • Similarity Score: 0.766 • Rejection Reason: NO. The "Conestoga™ Simple Split Southern Style Biscuit Dough" is formulated as a biscuit dough with ingredients and leavening agents specific to biscuits, not cookie dough. Starbucks® Chocolate Chip Cookie requires a biscuit dough base suitable for cookies, which typically differs in texture and formulation from southern style biscuit dough[1][2].

Starbucks® Vanilla Sugar Cookie had 3 potential cross-sell opportunities that were rejected by our AI analysis:

1. Pioneer® Southern Style Biscuit Dough (ID: 8095) • Category: Biscuits • Price: \$31.2 • Similarity Score: 0.742 • Rejection Reason: NO. Pioneer® Southern Style Biscuit Dough contains ingredients like enriched bleached flour, buttermilk, palm oil, and various leavening agents, which differ from the simple "Biscuit Dough" ingredient listed for Starbucks® Vanilla Sugar Cookie that likely requires a more basic dough suitable for cookies, not Southern-style biscuits[2].

2. Conestoga™ Southern Style Biscuit Dough (ID: 3079) • Category: Biscuits • Price: \$31.2 • Similarity Score: 0.795 • Rejection Reason: NO. The "Starbucks® Vanilla Sugar Cookie" lists "Biscuit Dough" as an ingredient, but the product "Conestoga™ Southern Style Biscuit Dough" is a savory-style biscuit dough, typically used for biscuits (bread-like), not sugar cookies. Sugar cookies require a sweet dough specifically formulated for cookies, not a general biscuit dough[1][2][3].

3. Conestoga™ Simple Split Homestyle Biscuit Dough (ID: 3076) • Category: Biscuits • Price: \$36.6 • Similarity Score: 0.731 • Rejection Reason: NO. The Conestoga™ Simple Split Homestyle Biscuit Dough contains ingredients like palm oil, soybean oil, and chemical leavening agents, which differ from typical biscuit dough used as a base for vanilla sugar cookies. Its formulation is for

biscuits, not sweet cookie dough, making it unsuitable as an ingredient for Starbucks® Vanilla Sugar Cookie.

Starbucks® Cornbread had 1 potential cross-sell opportunities that were rejected by our AI analysis:

1. Conestoga™ Cornbread Mix (ID: 99408) • Category: Baking Mixes • Price: \$31.5 • Similarity Score: 0.805 • Rejection Reason: NO. The Starbucks® Cornbread ingredients specify a particular enriched wheat and corn flour blend with added nutrients and specific additives, which likely differs from the generic Conestoga™ Cornbread Mix. The product details and ingredient complexity suggest they are not interchangeable without altering the recipe significantly[2].

Starbucks® Pizza Dough had 4 potential cross-sell opportunities that were rejected by our AI analysis:

1. Great American Pizza Dough Mix With Yeast (ID: 211648) • Category: Pizza • Price: \$24.7 • Similarity Score: 0.941 • Rejection Reason: NO. The Starbucks® Pizza Dough specifically uses "Great American Pizza Dough Mix - No Yeast" as an ingredient, indicating the yeast is added separately during preparation. Using "Great American Pizza Dough Mix With Yeast" would introduce yeast twice, altering the intended recipe and potentially affecting dough texture and rise.

2. Great American Pizza Dough Mix Hard White Whole Grain - No Yeast (ID: 215671) • Category: Pizza • Price: \$24.7 • Similarity Score: 0.893 • Rejection Reason: NO. The potential ingredient is "Great American Pizza Dough Mix - No Yeast," but the product is "Great American Pizza Dough Mix Hard White Whole Grain - No Yeast," which differs in grain type and may not match the specified ingredient exactly.

3. Great American Thin Dough Mix With Yeast (ID: 215672) • Category: Pizza • Price: \$24.7 • Similarity Score: 0.792 • Rejection Reason: NO. The Starbucks® Pizza Dough specifically uses "Great American Pizza Dough Mix - No Yeast," while the "Great American Thin Dough Mix With Yeast" contains yeast, making it a different formulation not aligned with the ingredient list for Starbucks® Pizza Dough[1][4].

4. Great American Thick Dough Mix With Yeast (ID: 215673) • Category: Pizza • Price: \$24.7 • Similarity Score: 0.780 • Rejection Reason: NO. The "Starbucks® Pizza Dough" specifically uses "Great American Pizza Dough Mix - No Yeast," indicating the recipe is formulated without yeast. Substituting it with "Great American Thick Dough Mix With Yeast" would alter the ingredient profile and likely the dough's characteristics, making it unsuitable as a direct replacement. Yeast presence changes dough behavior significantly[1][2].

Already Purchased Cross-Sell Opportunities

The analysis identified **1 catalogue items** where the customer has already purchased the recommended cross-sell products. This demonstrates the system's ability to track customer purchase history and avoid redundant recommendations, ensuring efficient use of the customer's resources and preventing duplicate purchases.

Starbucks® Buttermilk Biscuit has 1 cross-sell products already purchased:

1. Pioneer® Southern Style Biscuit Dough (ID: 8095) • Category: Biscuits • Price: \$31.2 • Similarity Score: 0.742 • AI Reasoning: YES. Pioneer® Southern Style Biscuit Dough contains key ingredients like buttermilk, flour, butter (palm oil as fat), and salt, aligning closely with the Starbucks® Buttermilk Biscuit ingredient list, making it suitable as the biscuit dough component[1][4].

Up-Sell Recommendations Analysis

No up-sell opportunities were identified in the current analysis. This may indicate that the customer is already purchasing optimal quantities of products, or that the current catalogue items

don't present clear up-sell scenarios. The system continues to monitor for future up-sell opportunities as the customer's needs evolve.

Executive Summary

The comprehensive analysis of the customer's catalogue and purchase history has yielded significant insights for cross-selling strategy development. The system processed multiple catalogue items and identified **20 viable recommendations** across up-sell and cross-sell categories.

The recommendation breakdown shows **20 accepted cross-sell opportunities**, **12 rejected opportunities** (demonstrating quality control), and **1 already purchased items** (showing effective duplicate prevention). Additionally, **0 up-sell opportunities** were identified to enhance customer value.

These findings provide a solid foundation for implementing targeted cross-selling initiatives. The high number of accepted recommendations indicates strong potential for revenue growth, while the rejection rate demonstrates the system's commitment to quality and accuracy. The identification of already purchased items shows effective inventory tracking and prevents redundant recommendations.

Recommended Next Steps: Focus on the 20 accepted cross-sell opportunities as priority implementation targets. These recommendations have been validated through AI analysis and represent the highest probability of successful adoption by the customer. Regular monitoring of these recommendations will help track implementation success and identify additional opportunities.