Bristol Regional Food Network - Digital Marketplace

Important Disclaimers:

Please note that all places, names, organisations, and entities mentioned in this case study are entirely fictitious and created solely for educational purposes. Any resemblance to real locations, businesses, or individuals is purely coincidental.

For any features involving payment processing or financial transactions, students must use appropriate test environments such as Stripe Test Sandbox, PayPal Sandbox, or similar testing platforms. Alternatively, containerisation services such as Docker with mock payment services, or local development environments with simulated payment gateways may be employed. Under no circumstances should live payment systems or real financial data be used during development or testing phases.

Background

The Bristol Regional Food Network is a community initiative that connects local food producers with consumers within a twenty-mile radius of Bristol city centre. Currently, forty small-to-medium enterprises (SMEs) within this network face significant challenges in reaching customers beyond traditional farmers' markets and direct farm gate sales.

Market research has identified three distinct customer segments with specific needs. Firstly, young professionals and families demonstrate strong purchasing intent for locally-sourced produce but encounter practical barriers when attempting to visit multiple farm shops during their restricted operating hours. Secondly, community groups – including educational institutions, care facilities, and voluntary organisations – regularly require local suppliers for catering purposes but experience difficulties in identifying reliable and consistent sources. Thirdly, independent restaurants and cafés express desire to source ingredients locally but find the administrative overhead of managing relationships with multiple small suppliers to be prohibitively time-consuming.

Stakeholder Requirements

Producers

The technical capabilities amongst producers vary considerably across the network. Some operate exclusively through email and telephone-based ordering systems, dedicating approximately fifteen hours per week to customer communication activities. Others maintain basic social media presence but lack advanced technical expertise or resources for sophisticated digital solutions.

All producers require intuitive mechanisms to list their products with essential information, specifically: product names, detailed descriptions, pricing information, and availability timeframes. The system must accommodate frequent seasonal inventory updates without requiring extensive technical knowledge or training. Producers need comprehensive visibility of

incoming orders with adequate lead time (minimum 48 hours) to prepare products appropriately.

Financial requirements include weekly payment settlements with transparent audit trails suitable for tax reporting purposes and business accounting needs.

Customers

Customers require robust product browsing capabilities organised by clearly defined categories including vegetables, dairy products, bakery goods, preserves, and seasonal specialities. The system must incorporate search functionality enabling users to locate specific items efficiently.

The shopping experience should reflect the unique requirements of local food systems, including the display of harvest dates, farm origin information, and seasonal availability indicators. The checkout process must handle both single-vendor and multi-vendor orders seamlessly whilst maintaining clear communication about individual supplier responsibilities, delivery arrangements, and collection procedures.

System Requirements

Core Functionality

The marketplace platform must provide comprehensive product management capabilities, enabling producers to list items with seasonal availability updates and inventory management features. Order processing functionality should aggregate multi-vendor orders whilst maintaining complete transparency regarding individual supplier responsibilities and delivery commitments.

A secure payment system must process transactions for both single and multiple vendor orders, distribute payments to respective producers according to agreed timeframes, and calculate the network's five percent commission automatically. All financial transactions must comply with current data protection and financial services regulations.

Quality Assurance and Community Features

The platform must incorporate basic traceability features, enabling producers to indicate organic certification status, allergen warnings, and best-before dates clearly. Comprehensive records linking customers, products, and producers must enable rapid communication channels should quality issues or food safety concerns arise.

Environmental reporting capabilities should provide food miles calculations through postcode-based distance measurements, supporting the network's sustainability objectives. Community engagement features must include surplus produce communication systems with last-minute discount capabilities to reduce food waste.

Educational components should allow producers to share seasonal recipes, storage guidance, and farm stories to strengthen community connections and promote local food education.