

Problem Solving and Decision Making Report

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Case Study: Basil's Bakery

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1.Introduction

Basil's Bakery is an independent artisan bakery which opened in Coventry in 2015, and sells cakes, pastries and bread using organic ingredients to both shoppers and retail staff, office and warehouse workers. Sales are about 25% lower for 2023-2025 compared to the 2019 level. It is being driven by less footfall from retail-park visitors, shops, redundancies and changing to hybrid working and coupled by the lack of a delivery service and an unreliable telephone pre-order service. Increased rent, utilities, insurance, business rates and ingredient costs also take a strain on viability. This report appraises two potential solutions and proposes a suitable and quantifiable response.

2. Proposed Solutions

2.1 Solution One: Online Pre-order and Collection System

Basil may consider creating a simple website or mobile ordering service where customers can browse through the available products, choose a collection time, securely pay online and automatically receive confirmation – eliminating the need to call the shop or stand in line during busy times. Even the most simple tools of digitisation like a functioning website can help lower operation costs and bring the SME to a competitive position (Ulas, 2019). The system would solve cases in which customers do not receive a call back, wait time is too long, and sales are lost during peak periods. Orders made in advance would also eliminate uncertainty about orders for the day, minimize product waste, and allow for better production planning.

2.2 Local Delivery Service is one of the solutions.

Otherwise, Basil can provide delivery service, either via a third-party delivery service or by hiring a part-time local delivery driver. Convenience is one of the most significant factors in determining customers' intention to use online food services, which could reach customers currently working from home, those that no longer use the retail park, expand the bakery's geographic market, and produce orders outside of the physical footprint of the bakery (Hong et al., 2021). There are, however, delivery costs, platform fees, packaging fees and the possibility of quality loss during delivery that could affect profitability and should be carefully considered

3. Evaluation of Solutions

3.1 PMI Evaluation

PMI is a structured decision making method that asks about the Plus, Minus and Interesting aspects of an option, prompting careful reconsideration of alternatives to the intuitive choice associated with the more rational "causation"-based way of making decisions in SMEs (Hauser, Eggers and Güldenber, 2020). The complete PMI matrix between the two solutions is shown in Appendix A; the highlights of the results are discussed here.

Each was evaluated on 10 different criteria, including setup costs, operating costs, potential market reach, customer convenience, ease of implementation, impact on waiting times, demand forecasting, product quality, reliance on external providers, and potential impact on sales and profitability. The points awarded ranged from +2 (very favourable) to -2 (very unfavourable).

The online pre-order/collection system rated high with respect to operating costs, waiting times, demand forecasting and product quality, and the cost to be paid at the onset of the system was its biggest disadvantage. The delivery service performed well in terms of market reach but suffered on operating costs, product quality while in transit and reliance on third-party services, primarily due to the fact that commissions and packaging negatively impact margins. The online pre-order system (+13) clearly outshined the delivery service (-2), primarily because the pre-order allows business to continue being 100% profitable with a boost in internal efficiency.

3.2 Preferred Solution

The online pre-order and collection system scored higher on the PMI and was the desired solution. Its biggest benefits are that it is the solution to the two most critical issues in its operation: it eliminates the use of unreliable phones to place orders and shortens the lines by allowing customers to order and pick up at a convenient time. Orders are also captured in advance, which also gives the system information on demand that aligns with better production and inventory planning, thereby reducing waste. Economically, it is less riskier than delivery for the same reason as mentioned above, it does not need to pay commission to drivers, package wrapping expenses and does not need to pay drivers' wages, and it can maintain product quality because it does not need to add a transportation link (Hong et al., 2021). One drawback is that it involves a start-up fee and assumes customers are able to access it digitally, so this approach would not work for all walk-in trade, particularly if it is a minority. Overall, these disadvantages

are offset by the benefits in terms of efficiency and revenue retention. The system is not a ticket to resurging sales, but is a measured, controlled reaction to distinctly known issues.

4. Selected Solution Implementation

4.1 Implementation Plan

The detailed, week-by-week implementation table is available in Appendix B, but the main phases are summarised here: The rollout will be over a period of twelve weeks. It starts with a needs analysis and budgeting period (Week 1) where required functions are identified, an affordable budget is established, and customer preferences are checked. Next, supplier selection (Week 2) compares providers of websites and ordering systems on cost, security, support and usability. System design focuses on uploading products, prices, ingredients and photographs and payment and collection time (Weeks 3–4). Testing and staff preparation (Week 5) validates orders, payments and notifications and educates Basil and any necessary staff member. In a pilot launch (Weeks 6 – 7), the system is introduced to a restricted number of customers for feedback and to rectify the glitches, which is followed by the full launch (Week 8), which is promoted in-store, online and through local businesses

4.2 Activities, Timing and Responsibilities Justified

The requirements and budget need to be agreed given that once a system is purchased and the requirements are not clearly defined, there may be risks of buying something the company doesn't need or simply purchasing too big of a system for an affordable budget. Suppliers should be compared prior to commitment to allow cost, security and support to be compared against a backdrop of others and not as a default. Products and collection capacity should be set up prior to the launch of the service, so that customers receive a complete and correct service. Testing comes first as it cuts down on paying for, ordering and customer-service mistakes that would otherwise erode initial trust, and the small pilot helps the same with low-

cost, low-profile, fixes. The decision-making power and budget authority should remain with Basil, which is in line with owner-centred decision making in SMEs (Hauser, Eggers and Guldenberg, 2020), while the technical setting up of the solutions, security, as well as product entry, testing, and order preparation, should be handled by a digital supplier. Because the use of digital is a continuous refinement process, regular postlaunch reviews are required (Ulas, 2019).

5. Performance Measurement

5.1 KPI and SMART Objectives

The main KPI is the percentage of total sale for the week from online pre-orders, which is:

$$\text{Online pre-order sales \%} = \text{Total weekly revenue} / \text{Online pre-order revenue} \times 100$$

The reason this KPI is suitable is that it is a measure of customer adoption, it indicates how the system is impacting revenue, it can be measured weekly, and it is comparable to a baseline prior to the system implementation. KPIs like this, well-designed, assist owner managers in converting their strategic targets into measurable and actionable targets (Setiawan and Purba, 2020), and to make timely decisions taking into account evidence when things change (Werner et al., 2021).

The KPI will be underpinned by the following 5 SMART objectives (numerical targets should be used in relation to an appropriate and justified baseline):

- Install a completely tested online pre-order and collection process in 8 weeks, on budget.
- By first full launch, 15% of weekly sales are made via online pre-orders.
- By 30% reduce the average waiting time of customers in periods of occupancy within 3 months.
- Maintain customers' satisfaction on the ordering process by a minimum of 85% during the first three months.
- Minimize the amount of unsold products waste by 10% in 4 months based on the advance order information.

The objectives are specific (one point of agreed outcome), measurable (quantifiable based on a percentage, time or satisfaction score), achievable (modest in relation to the baseline), relevant (directly relevant to the identified problems) and time-bound (with a fixed time limit), following the principles outlined by Bjerke and Renger (2017).

5.2 Monitoring and Evaluation

The sources of information will be reports from online ordering systems, till-sales and waiting-time observations during busy periods, brief customer surveys, refund and complaints records and daily production and waste records. These will be checked as per fixed time-lines – online orders and revenue checked weekly, waiting time checked weekly, customer feedback checked monthly, production and waste checked monthly with a formal performance review after three months. This rhythm is of paramount importance, as KPIs are only valuable if they're continually assessed and not just captured and forgotten (Werner et al., 2021).

Results will be measured by the pre-implementation sales data, the agreed KPI value, each of the SMART objective values and the budgeted versus actual implementation costs (Setiawan and Purba, 2020).

6. Key Findings

Basil's Bakery has a main issue of declining sales volume which are approximately 25% lower than 2019 sales and operational issues with the phone ordering system and queue management.

- The retailers' and the labor market have been negatively impacted by external factors such as less footfall in the retail parks, closing shops, redundancies and hybrid working.
- Both an online pre-order and collection system, and a local delivery service were explored.
- The PMI rating was better for the online pre-order system (+13) vs delivery (−2), primarily in operating cost, efficiency and product quality.
- The online pre-order and collection system was identified as a lower-risk response and a controlled.
- Implementation will take place in 12 weeks starting from the need analysis up until the post-launch review.
- The percentage of sales made through online sales that are pre-ordered in the week of sale is the key KPI.

Reference List

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Appendix A: PMI Analysis

Criterion	Solution 1: Online Pre-order & Collection	Solution 2: Local Delivery
Setup costs	−1	0
Operating costs	+2	−2
Potential market reach	+1	+2
Customer convenience	+2	+2

Ease of implementation	+1	0
Effect on waiting times	+2	0
Demand forecasting	+2	0
Product quality	+2	-1
Dependence on outside providers	+1	-2
Effect on sales & profitability	+1	-1
Total	+13	-2

Appendix B: Implementation Plan

Phase	Timing	Key activities	Responsibility
Needs analysis & budgeting	Week 1	Identify required functions; set affordable budget; review customer preferences	Basil (owner)
Supplier selection	Week 2	Compare providers on cost, security, support, usability	Basil
System design	Weeks 3–4	Upload products, prices, ingredients, photos; set collection times and payment	Digital supplier + employee
Testing & staff preparation	Week 5	Test orders, payments, notifications; train Basil and staff	Digital supplier + Basil
Pilot launch	Weeks 6–7	Limited customer group; collect feedback; fix faults	Basil + employee
Full launch	Week 8	Promote in-store, online and via local businesses	Basil
Review	Weeks 9–12	Monitor performance; make improvements	Basil

Appendix C: KPI Monitoring Dashboard

Measure	Data source	Review frequency	Target
Online pre-order share of weekly sales (primary KPI)	Ordering-system + till reports	Weekly	≥15% by month 3
Average waiting time in peak periods	Waiting-time observations	Weekly	-30% by month 3
Customer satisfaction with ordering	Short customer surveys	Monthly	≥85% in first 3 months
Unsold-product waste	Daily production/waste records	Monthly	-10% by month 4
Implementation cost vs budget	Financial records	End of each phase	Within approved budget
Refunds / complaints	Refund & complaint log	Monthly	Downward trend

