**Exploring Expansion Opportunities for SME Support Services in South and West London: A Data-Driven Approach**

1. **Introduction**

**1.1 Background**

Over the course of its 28-year existence, the not-for-profit Portobello Business Centre (PBC) has established a solid reputation for helping start-ups and early-stage companies in London. In addition to being an approved BEIS Enterprise Agency, accredited to the ISO9001 quality standard for business procedure, a London Living Wage employer and holder of the Mayor’s Good Work Standard, PBC is a multi-award-winning company. Additionally, it is a founding member of Business for London (BfL) and a member of the National Enterprise Network (NEN), keeping abreast of regional and national business opportunities and innovations.

With over 5,000 start-ups and over 13,000 individuals supported, PBC is primarily based in the Royal Borough of Kensington and Chelsea (RBKC) and is a reliable choice for prospective clients. The organization is based at Morley College North Kensington Centre, making it easily accessible to clients especially from disproportionately deprived areas such as North Kensington. The majority of PBC's informational events and training courses are held onsite, ensuring good engagement and participation from various clients, primarily from RBKC.

Despite the pandemic's effects on PBC's performance, the company has remained committed to achieving the contract's objectives. PBC has been able to stay in touch with the demands of its customers, particularly in RBKC, by actively networking and working with neighbourhood companies and organisations. This has made it possible for the organisation to gather important data on the unique and increasing needs of its varied customers.

Pre-startups are the primary audience for PBC's business advising seminars. The organisation is skilled at recognising the instances in which self-employment may not be the best choice for budding entrepreneurs and provides a variety of helpful choices, including referrals to alternative employment and skills programmes or webinars hosted by industry experts. The staff at PBC has a mix of experiences and access to specialist advisors, which enables it to provide a range of services, such as guidance on marketing, finance, and e-commerce.

PBC has looked into new approaches to providing clients with comprehensive and dynamic support in an effort to make its services as accessible as feasible. The organisation has a strong history of assisting women in RBKC and beyond, as well as customers from communities with a worldwide majority. PBC is presently collaborating with two universities in London to get more digital media support to engage and assist entrepreneurs on their entrepreneurial path.

Clients may easily get face-to-face business advising sessions and drop-in chats five days a week thanks to PBC's location in North Kensington. Additionally, clients have daily access to PBC's website, which is being improved to enable clients to complete preliminary work at their convenience before scheduling a face-to-face meeting. Bookings for Business Advisor slots will soon be possible on the redesigned PBC website.

**1.2. Research problem and motivation**

1.2.1 Research Problem

The research problem this dissertation aims to address is the identification and prioritization of potential areas for PBC's service expansion in the target boroughs of South and West London, which include Ealing, Hounslow, Richmond Upon Thames, and Merton. The study aims to offer insightful information about the particular requirements, difficulties, and opportunities experienced by SMEs and start-ups in these boroughs, which will assist in guiding PBC's marketing plans and initiatives.

1.2.2. Motivation

This study is significant both in terms of academia and application. Academically, the findings will add to the body of knowledge on entrepreneurship and the growth of small businesses, particularly in relation to regional economic development and social services. The study will also point out best practices and approaches that can be used by additional business assistance programmes and organizations.

Practically, the study will help PBC and the local business communities in Ealing, Hounslow, Richmond Upon Thames, and Merton by offering a data-driven approach to service expansion that ensures efficient and effective resource allocation. This may result in the production of jobs, economic expansion, and community development in the target boroughs, as well as other possible economic and social advantages. Furthermore, PBC will be better able to personalize its services as a result of the research's understanding of the unique difficulties faced by SMEs and start-ups, such as access to capital, resources, and support services.

The analysis of innovative marketing strategies for connecting with and interacting with the target audience in the target boroughs of Ealing, Hounslow, Richmond Upon Thames, and Merton is an essential aspect of this study's motivation. PBC's marketing campaigns will benefit greatly from the research's exploration of the efficacy of various means of communication and approaches for reaching out to varied audiences.

Despite the potential contributions of the study, there may be constraints and difficulties along the way. For instance, in some boroughs, data availability and quality may be a problem, and the variety of the local business communities may call for a more subtle method of data analysis. The research will make use of several data sources and analytical techniques to overcome these possible issues, ensuring the reliability and validity of the results.

In conclusion, the research problem and motivation for this dissertation will offer insightful information and practical advantages to PBC as well as the larger field of entrepreneurship and small business development in the target boroughs of Ealing, Hounslow, Richmond Upon Thames, and Merton.

* 1. **Research questions and objectives**

1.3.1Research Questions:

The purpose of this study is to investigate the following research questions, which centre on identifying potential opportunities and difficulties for PBC's expansion into the target boroughs of West and South London, assessing the efficacy of PBC's marketing strategies in North Kensington, and understanding the key characteristics of the SME market in the target boroughs:

RQ1: What are the main characteristics of the SME market in West and South London's target boroughs (Ealing, Hounslow, Richmond Upon Thames, and Merton), and how do these characteristics compare to those of the SME market in areas where PBC already provided services (North Kensington)?

RQ2: What marketing techniques have PBC used to connect with start-ups and SMEs in RBKC? and how effective were these tactics in producing the desired results?

RQ3: What opportunities and difficulties would PBC face when expanding its services to West and South London, considering the SME market features of the target boroughs and the efficacy of PBC's present marketing strategies?

RQ4: In consideration of the answers to the earlier research questions, what modifications, if any, should PBC consider making to its current marketing plans in order to successfully engage SMEs and start-ups in the target boroughs of West and South London?

By addressing these research questions, this study will be able to evaluate the effectiveness of PBC's marketing strategies, offer valuable insights into the SME market in the target boroughs, and provide thoughts on how to adapt those strategies to better suit the needs of SMEs and start-ups in West and South London.

1.3.2 Research Objectives:

The following research goals—which are intended to advance knowledge of the SME market in the target boroughs, assess PBC's marketing approaches, and offer suggestions for PBC's expansion into West and South London—correspond to the research questions and are as follows:

RO1: Using the data available from the UK government website, analyse and visualize the major characteristics of the SME market in the target boroughs of West and South London, and then contrast these characteristics with those of the SME market in regions where PBC has already given service.

RO2: Conduct an in-depth review of scholarly literature already in existence to comprehend the landscape of SMEs and self-employed businesses in London, and marketing approaches used by public support service providing organisations. In addition, research on data-driven tools used for supporting the establishment and operation of SMEs and self-employed entities will be reviewed and studied.

RO3: Examine internal PBC documentation and a survey of PBC's current clients to determine the success of PBC's current marketing efforts in attracting SMEs and start-ups in RBKC.

RO4: Investigate and assess various methodologies for visualising and analysing SMEs' and self-employed entities’ market in London, especially the targeted boroughs. In addition, examine the utility of data-driven approaches for evaluating the marketing strategies of SMEs support services. The aim is to identify methodologies that use data-driven tools to provide an insightful, effective analysis of landscapes of support services organisations and SMEs and self-employed entities.

RO5: Based on the analysis of the SME market's features and the assessment of PBC's current marketing methods, identify potential possibilities and barriers for PBC's service development into the target boroughs in West and South London.

RO6: Using the research's findings as a guide, provide suggestions for potential changes to PBC's present marketing tactics that will better engage SMEs and start-ups in the target boroughs of West and South London

By accomplishing these research goals, the study will assist PBC's efforts to broaden its services and effectively serve SMEs and start-ups in the West and South London regions by offering insightful analysis and valuable advice.

**1.4. Scope and Limitations**

1.4.1 Scope:

The primary focus of this study is on Portobello Business Centre's (PBC) possible service extension into the West and South London boroughs of Ealing, Hounslow, Richmond Upon Thames, and Merton. Understanding the unique traits and requirements of the SME market in these boroughs, as well as assessing the viability of PBC's marketing plans for these new areas, will be the main goals of the research. The investigation will include data from a variety of sources, including internal PBC data, public statistics from UK government websites, and survey responses from current PBC clients. To generate insightful conclusions and suggestions, the study will combine qualitative and quantitative research techniques, as well as data analysis and visualisation.

1.4.2 Limitations:

Despite the thorough approach, this research has some restrictions. The extent of the analysis may be constrained by the quality and quantity of public data available for particular boroughs. The complexity and diversity of the SME market in various boroughs might also call for a sophisticated interpretation of the data, which might induce biases. Time restrictions could restrict the scope of the survey and the depth of the analysis, potentially limiting how thorough the study findings are.

Furthermore, the COVID-19 pandemic's effects on the SME market during the past three years have led to unprecedented circumstances that might not reliably predict the market's future in London. When interpreting the research findings and using them to inform future plans and decisions, this constraint should be taken into account.

In addition, the fast-evolving business environment, particularly in the context of the post-pandemic recovery, may eventually impact the validity and applicability of the research findings.

**1.5 Structure:**

To present the study in a logical manner, the dissertation is divided into seven chapters.

Chapter 1 introduces PBC and provides background information. Chapter 2 explores into existing literature, focusing primarily on SME landscapes and marketing approaches in public sector organisations. Chapter 3 fits into details about getting data ready for analysis. Chapter 4 is devoted to an examination of methodologies for analysing SMEs' marketing strategies. Chapter 5 presents and discusses the findings of the data analysis. Chapter 6 provides a conclusion that summarises the research findings and encompasses all the research objectives. Chapter 7 concludes the dissertation by making potential recommendations and identifying future research areas.

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| --- | --- | --- | --- |
| Chapters | Title of Chapter | RQ | RO |
| 1 | Introduction and Background to Company | - | - |
| 2 | Literature Review |  | 2 |
| 3 | Data Exploration and Preparation | 1 | 3 |
| 4 | Methodology | 2 | 4 |
| 5 | Data Analysis and Findings | 3, 4 | 5, 6 |
| 6 | Conclusions | 1- 4 | 1-6 |
| 7 | Recommendation and Future Research |  |  |
|  | References |  |  |

1. **Literature Review**

This chapter undertakes a thorough review of the existing literature, focusing on the role and impact of Small and Medium-sized Enterprises (SMEs) and self-employed entities in the United Kingdom (UK), particularly in London. It explores their economic contributions, the significance of support services in their expansion, and the impact of government policies and digitalization on their success. The review also investigates how data-driven tools, like data visualisation, can improve support services and speed up strategic decision-making. Additionally, it also covers the significance of employing successful marketing techniques that can be utilised by support services.

The aim of this chapter is to understand the current landscape, recognise research gaps, particularly regarding the impact of support services and data-driven tools, and demonstrate contribution of this dissertation to the broader academic discourse.

**2.1. SMEs and Self-Employed Entities in the UK**

Small and Medium-sized enterprises (SMEs) is defined as a company with fewer than 250 employees, and either a yearly turnover of less than €50 million or an annual balance sheet total of less than €43 million, by the European Commission.

The economic growth and development of the UK are significantly influenced by SMEs. These organisations play a significant role in innovation, competitiveness, and the creation of job opportunities in a modern economy (Van Stel, Storey, and Thurik, 2007). And all kinds of businesses—regardless of their size or age—can contribute to entrepreneurial activities. Both new and established businesses—including SMEs and self-employed entities—are covered by this (Kraus et al., 2011).

SMEs and independent contractors are particularly prominent in London. According to a report by the Department for Business, Energy & Industrial Strategy in 2020, London has the highest number of SMEs in comparison to other regions of the UK, and these SMEs exist in a variety of industries, such as the creative industries, technology, and services, which help support the city's resiliency and prosperity.

This diversity of industries where SMEs exist is an important contributor to London's economic stability as well as to being an indicator of the city's entrepreneurial spirit. The abilities of SMEs, particularly in terms of proactive corporate social responsibility, can have a positive impact on their financial performance (Torugsa, O’Donohue and Hecker, 2011). Additionally, home-based businesses, which constitute a sizeable portion of SMEs and self-employed entities, have unique features that provide various contributions to the local economy (Mason et al., 2010). This demonstrates the diversity of SMEs and self-employed individuals in London further.

The various SMEs and self-employed entities in London, with their various business approaches, contribute to the economic strength of the city in various ways. Some might be supporting sustainable practises, others might be creating innovation in their field, whilst others might be generating jobs in the communities they serve. Despite their differences, each of these contributions is significant and aids in strengthening the city's economy.

However, it is crucial to stress that entrepreneurial endeavours do not always succeed. There are countless factors that can lead a start-up to fail, and one of those is its innovativeness, which may be negatively correlated with its eventual survival, particularly if the entrepreneurs are prone to taking greater risks (Hyytinen et al., 2015). This highlights the important function that public support services serve in supporting SMEs and self-employed individuals to effectively navigate their respective markets and increase their chances of success.

**2.2. Support Services for SMEs and Self-Employed Entities in the UK**

Support services, or business development services (BDS), for SMEs and self-employed entities, are crucial in encouraging entrepreneurship and facilitating business growth. These services enhance the performance of the enterprise, its access to markets, and its competitiveness in the marketplace (Committee of Donor Agencies for Small Enterprise Development, 2001). There are two main types of support: non-financial and financial. Non-financial support includes resources like business counselling, mentoring, training, and opportunities to network. Financial support, on the other hand, provides access to funding, grants, and subsidies (Ombi et al., 2018).

The growth and expansion of these support services is significantly influenced by government policies. For instance, the opportunities available to SMEs and self-employed entities could be impacted by procurement policies. According to findings from studies conducted in the United States, certifications, such as those for women-owned businesses, can have an impact on how frequently SMEs submit bids for and obtain federal procurement contracts (Orser et al., 2019).

In Europe, the success of SMEs and self-employed entities, including freelancers, is also influenced by social and cultural norms, as well as the increasing digitalization of the entrepreneurial environment. These factors are key to promote the success of new careers in terms of job and career satisfaction. Along with the government programmes indirectly influence the job and career satisfaction of start-ups and freelancers, demonstrating how the entrepreneurial ecosystem plays an essential part in supporting freelancers on their career development (Huđek et al., 2021).

However, the specific impact of these support services on SMEs and self-employed entities, particularly in the context of London boroughs, needs further investigation. While the existing literature provides thoughts on the role of support services in promoting entrepreneurship and facilitating business growth in general, there is a notable lack of research focusing on the unique dynamics of London's entrepreneurial ecosystem. This leaves a gap in the literature, emphasising the potential value and contribution of this dissertation in demonstrating the impact of support services for SMEs and self-employed entities in London and in the UK.

**2.3. Data Visualisation – Data-Driven Tools in Support Services for SMEs**

As the big data era develops, data-driven tools in business analytics such as data visualisation are becoming increasingly important in comprehending the business landscape. Managing big amount of data is a challenge for businesses. Storing it takes priority, but analyzing and presenting it meaningfully is important. Big data analysis often produces raw numbers that are hard to interpret, but visualization helps recognize patterns and make better decisions (S. M. Ali, et al., 2016). These visualisation techniques assist in the identification of trends, patterns, and clusters, which are essential to strategic decision-making and policy formulation (Kitchin, 2014). Geospatial visualisation, for example, can provide insights into the geographical spread of SMEs and self-employed entities, assisting in recognising areas of high entrepreneurial activity and areas that may be underserved (Hajek et al., 2013).

Data visualisation also enhances the effectiveness and efficiency of business support services. Presenting and interpreting the data visually could help in better and quicker understanding in the data and enables faster decision-makings (Fiaz, A. Syed, et al., 2016). Support services can better comprehend the need of SMEs and self-employed individuals, adapt their services accordingly, and evaluate the effects of their strategies by using data analytics tools and visualising data on them. For example, support services providers such as PBC, can recognise factors that contribute to business success and areas where additional support may be needed by using data analytics techniques and visualising data on the survival rates and growth histories of SMEs (Chen, Chiang and Storey, 2012).

In the business analytics field, there are numerous data visualisation tools available. These tools can perform various visualisation tasks, including clustering and business demographics. Popular programmes like Tableau, PowerBI, and QlikView are often used for this purpose. They offer different visualisation forms like bar charts, line graphs, scatter plots, and geographic maps to present diverse types of data and analysis results (S. M. Ali, et al., 2016). Different types of visualisations have their own strengths in representing different types of information. Line graphs are helpful for showing trends over time, scatter plots are utilised to show how variables are correlated, geographic maps are useful for demonstrating spatial patterns, and bar charts can be used to compare quantities between different categories (Hardin, M., et al., 2012).

Data visualisation also involves the use of different programming languages, among which Python and R are the most commonly used. These languages come with libraries like ggplot2, Matplotlib, and Seaborn, which offer a broad range of features for creating static, animated, and interactive visualizations (Wickham & Grolemund, 2016).

Data visualisation can be a valuable tool for supporting SMEs and self-employed individuals. However, it can also present challenges, including the need for knowledge and resources to effectively use data visualisation tools. Additionally, concerns about data privacy and the complexity of visualising large and diverse datasets may also be obstacles to their use (S. M. Ali, et al., 2016). Despite these obstacles, data visualisation has a lot of potential in its role in supporting SMEs and individuals. The use of data visualisation tools will become increasingly crucial for making sense of this data and using it to inform decision-making and policy formulation as the volume and variety of data on SMEs and self-employed entities continue to increase.

**2.4. Marketing Approaches - Support Services for SMEs and Self-Employed Entities**

At the organisational or strategic business unit level, marketing strategy deals with issues of gaining a long-term competitive advantage. Developing a marketing strategy is crucial for any company or business unit to gain a competitive edge in the long run. It requires careful consideration of target markets and the creation of marketing programs that are in line with the organization's present or future marketing behaviour (Varadarajan, 2009). Businesses use marketing strategies to connect with their target customers, convey their value proposition, and ultimately increase customer engagement and sales. These strategies involve market segmentation, targeting, positioning, and the marketing mix, which consists of product, price, place, and promotion (Armstrong, 2014).

When it comes to supporting SMEs and entrepreneurial individuals, having effective marketing strategies is also crucial for reaching out to these businesses, explaining the benefits of the support services, and building engagement with them.

Support services use different marketing techniques such as digital marketing, content marketing, and relationship marketing. Digital marketing, for example, involves reaching out to and engaging with SMEs and self-employed entities by using digital channels such as social media, email, and search (Chaffey & Ellis-Chadwick, 2019). Through this approach, support services can reach a wide audience while delivering personalized and targeted content. And Content marketing involves creating and sharing valuable content to attract and retain a specific audience (Pulizzi, 2012). This approach can effectively encourage profitable customer engagement among SMEs and entrepreneurial individuals for support services. Support service providers can also utilise relationship marketing, which focuses on establishing long-term connections with clients to enhance brand loyalty and engagement over time.  (Morgan and Hunt, 1994).

The pricing strategy for these support services is also a key component of their marketing strategy. It is especially important for support services aimed at SMEs, as these businesses are often price-sensitive and operate on a tight budget. As a result, the pricing strategy for support services should be carefully designed to ensure that it is affordable for SMEs and competitive in the market (Faith and Agwu, Prof Edwin, 2014).

The effectiveness of these marketing strategies varies, and using data-driven tools could assist in strategic decision-making. Using different data-driven tools can be useful in identifying factors that contribute to the success of implementing good marketing strategies to better support SMEs and self-employed entities, while also ensuring long-term benefits for support service providers. Data plays an important role in shaping these marketing strategies. Support services providers can develop and implement more effective marketing strategies by analysing data on customer behaviour and preferences. These data-driven strategies have the potential to expand the impact of support services by helping them to better meet the needs of SMEs and self-employed individuals (Wedel and Kannan, 2016).

1. **Data**

This chapter focuses on the exploration and preparation of the datasets that serve as the foundation for this dissertation. It begins with the identification of relevant data sources, with a focus on datasets that provide insights into the demographics of businesses in London boroughs, as well as internal client data from the Portobello Business Centre (PBC). The following section then goes into the data preparation process, which includes cleaning the data, dealing with missing values, and transforming variables as needed. The prepared data is then subjected to exploratory data analysis, with visualisations and statistical summaries providing insights into PBC's clients' and London's SME landscape. This chapter establishes the foundation for the subsequent analysis and modelling in the following chapters, ensuring that the data is reliable, comprehensive, and ready for in-depth exploration.

**3.1. Explore Raw Data**

The analysis of this project relies on two primary sources of data: public datasets obtained from London Datastore that provide information on business demographics in London and internal client data provided by the Portobello Business Centre (PBC). These datasets provide a thorough overview of the London business environment as well as in-depth knowledge of the characteristics, needs, and experiences of PBC's clients.

3.1.1 Public Datasets

The datasets that collected from the London Datastore provide a comprehensive overview of the business landscape in London boroughs, which include information about the number of businesses, their size of businesses (in terms of the number of employees), and the industries they operate in.

These datasets span several years, but our analysis focuses specifically on the years 2019 to 2022. This timeframe allows us to examine the most recent trends and changes in landscape of businesses in London, offering a current and relevant perspective. Additionally, this time span covers the COVID-19 pandemic, providing an opportunity to explore its impact on businesses in London, enabling a before-and-after comparison. The datasets are as follows:

**Business Demographics and Survival Rates, Borough** (London Datastore, 2023): This dataset contains information on the number of active businesses in various areas of the United Kingdom, including detailed data for London boroughs and aggregated data for other regions. It also includes the number of new businesses and the rate of new business birth for each year and area. Additionally, it provides the number of businesses that have ceased operations or closed down, as well as the rate at which businesses are exiting the market. The dataset is currently available up until 2021. The columns within this dataset are described in Table 1.

Table 1

|  |  |
| --- | --- |
| Column Name | Description |
| code | Unique identifier for each area |
| area | The name of each area |
| year | The year the data was collected |
| active\_enterprises | The number of active businesses in the area for the given year |
| births | The number of new businesses in the area for the given year |
| birth\_rate | The rate of new businesses per 100 existing businesses in the area for the given year |
| death | The number of businesses that exit in the area for the given year |
| death\_rate | The rate of businesses that exit per 100 existing businesses in the area for the given year |

**Local Units and Enterprises by Employment Size, Borough** (London Datastore, 2023): These datasets provide information about the number of employees in businesses of different sizes in various areas of the UK, including detailed data for London boroughs and aggregated data for other regions. This data is available for each year up until 2022. The columns within these datasets are described in Table 2.

Table 2

|  |  |
| --- | --- |
| Column Name | Description |
| Code | Unique identifier for each area |
| Area | The name of each area |
| 0-4, 5-9, 10-19, 20-49, 50-99, 100-249, 250+ | The number of employees that businesses in this category have. For example, "0-4" represents businesses with between 0 and 4 employees |
| Total | The total number of businesses in the given area, across all size categories |

**Local Units by Broad Industry Group, Borough** (London Datastore, 2023): These datasets provide information about the number of businesses in various industries in different areas of the UK, including detailed data for London boroughs and aggregated data for other regions. This data is available for each year up until 2022. The columns within these datasets are described in Table 3.

Table 3

|  |  |  |
| --- | --- | --- |
| Column Name | Description | |
| Code | Unique identifier for each area | |
| Area | The name of each area | |
| SIC07: 01-03 : Agriculture, forestry & fishing, SIC07: 05-39 : Production, SIC07: 41-43 : Construction, SIC07: 45 : Motor trades, SIC07: 46 : Wholesale, SIC07: 47 : Retail, SIC07: 49-53 : Transport & Storage (inc. postal), SIC07: 55-56 : Accommodation & food services, SIC07: 58-63 : Information & communication, SIC07: 64-66 : Finance & insurance, SIC07: 68 : Property, SIC07: 69-75 : Professional, scientific & technical, SIC07: 77-82 : Business administration & support services, SIC07: 84 : Public administration & defence, SIC07: 85 : Education, SIC07: 86-88 : Health, SIC07: 90-99 : Arts, entertainment, recreation & other services | | These are categories of industries based on the Standard Industrial Classification (SIC) system. (SIC Code: classifying industries with different digits based on primary business activity) |
| SIC07: Total | The total number of businesses in the given area, across all industry categories | |

**Employment by Self-Employed, Full time and Part time and Gender, Borough** (London Datastore, 2023): These datasets provide information about the employment status (full-time, part-time, etc.) of individuals in various areas in the UK, including detailed data in London boroughs and aggregated data for other regions. They also include worker genders and its percentage data. This data is provided for each year up until 2021. The columns within these datasets are described in Table 4.

Table 4

|  |  |
| --- | --- |
| Column Name | Description |
| Code | Unique identifier for each area |
| Area | The name of each area |
| % in employment who are employees - working age | The percentage of the working-age population in the given area that are employed as employees |
| % in employment who are self employed - working age | The percentage of the working-age population in the given area that are self-employed |
| % in employment working full-time - working age | The percentage of the working-age population in the given area that are employed full-time |
| % in employment working part-time - working age | The percentage of the working-age population in the given area that are employed part-time |
| % of males in employment rate working full-time - working age | The percentage of the working-age male population in the given area that are employed full-time |
| % of males in employment rate working part-time - working age | The percentage of the working-age male population in the given area that are employed part-time |
| % of females in employment rate working full-time - working age | The percentage of the working-age female population in the given area that are employed full-time |
| % of females in employment rate working part-time - working age | The percentage of the working-age female population in the given area that are employed part-time |

3.1.2 Internal Datasets

The internal data of clients of PBC provides a more specific view of the clients that PBC serves. This information includes the basic information of clients, business status, business location, business sector, business size and number of jobs created. The PBC client data is provided for each year from 2019 to April 2023, allowing for an analysis of the client base of PBC and the services they offer. The columns within these datasets are described in Table 5.

Table 5

|  |  |
| --- | --- |
| Column Name | Description |
| First Name | The first name of the client |
| Surname | The surname of the client |
| Borough | The borough in which the client's business is located |
| Bus Descript | A short description of the client's business |
| SIC Code | The Standard Industrial Classification (SIC) code for the client's business |
| sicshort | A shortened version of the SIC code |
| Total of Emps plus total Jobs created | The total number of employees in the client's business plus the total number of jobs created by the business |
| No of Employees | The number of employees in the client's business |
| Total of Jobs Created | The total number of jobs created by the client's business |
| Initial Stage | The initial stage of the client's business (e.g., pre-start, start-up, existing) |
| new bus stage | The current stage of the client's business (e.g., Existing, CEASED) |

3.1.3 Survey Distributed

As part of this research, a thorough survey was conducted alongside the previously mentioned datasets. The survey consisted of 18 questions presented in multiple-choice, short-answer, and fill-in-the-blank formats. It was distributed to over 150 clients who had previously used PBC services. The questions were intended to collect basic information about the clients, such as the name of their businesses and their location, as well as more detailed information about their experiences with PBC. This included, among other things, the services they received, their ratings of these services, their perceived challenges in establishing a business, and the reasons why they may have stopped using the services.

However, it's important to note that the response rate of this survey was relatively low, with only 10 responses received over a two-month period. Due to the low response rate, the analysis conducted based on the survey result may be limited. In this case, the small sample size may not be fully representative of PBC's entire client base, potentially biassing the findings.

The survey data still offers some insights despite those limitations, and it could be used in the analysis where appropriate, with the understanding that the findings should be interpreted with caution.

3.1.4 Data Exploration Summary

To sum up, the datasets collected in this research provide a comprehensive understanding of the business landscape in London and detailed insights into the clients served by PBC. The subsequent section will cover more details to prepare these datasets for analysis.

**3.2. Prepare the Data**

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