How DOS's Data Tools Are Helping Businesses Make Data-Driven Decisions

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Introduction

Service journeys conducted with businesses revealed that while businesses recognise the importance of official statistics, they face challenges in consuming such data.

Businesses have provided feedback that data are not contextualised, making them difficult to understand and use. As a case in point, a business owner wanted to understand the customer demographics in an area but was unaware that the information can be found within an existing statistical report.

The Singapore Department of Statistics (DOS) stands ready to help businesses make better use of official statistics relevant to them. To address the feedback received, DOS has launched the Data for Businesses webpage which provides data tools containing curated and contextualised data from different agencies.

These tools aim to empower businesses to make data-driven decisions with insights covering three broad themes, viz. (1) customers, (2) Industry, and (3) business performance. They were developed in collaboration with key partner agencies and enhanced based on businesses' feedback during pilot testing.

Theme 1: Know My Customer

Businesses are in constant pursuit of better customer–insights to elevate customer experiences. The data tools under this theme provide information and insights on customers' demographics, household consumption patterns and trends of online shoppers. By supplementing their own customer data with information from these data tools, businesses can gain enhanced insights on their customers for their business planning purposes.

Customer Demographics

Detailed information on consumer populations by geographic area could be useful to businesses. By fusing population and geospatial data, the data tool enables businesses to zoom in on specific geographic areas of interest and tap into the rich demographic information (e.g., resident population with breakdown by type of dwelling, age group and sex) (Figure 1).

Figure 1
KNOW MY CUSTOMER
— KEY DEMOGRAPHICS OF CUSTOMERS
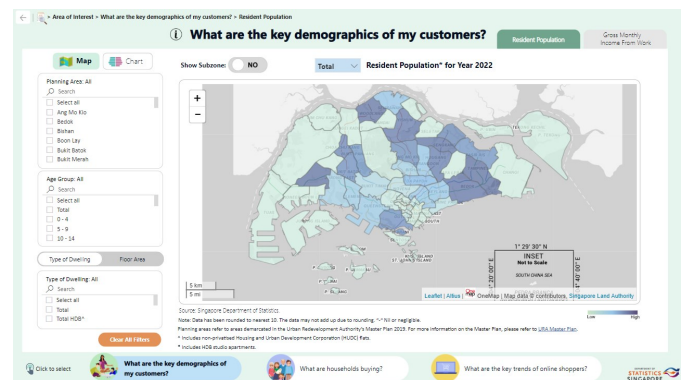
The data tool also presents resident population data on a map, which makes it easier for businesses to visualise and discover pertinent information about the demographics of their customers residing in an area of interest.

Consumption Patterns

Understanding customers' expenditure patterns facilitates businesses' market analyses. The data tool allows businesses to readily discover customers' expenditure patterns based on data from DOS's Household Expenditure Surveys. Using the data tool, businesses can further delve into the details of what households are spending on and their average expenses by type of goods and services (Figure 2).

Figure 2
KNOW MY CUSTOMER
— HOUSEHOLD SPENDING
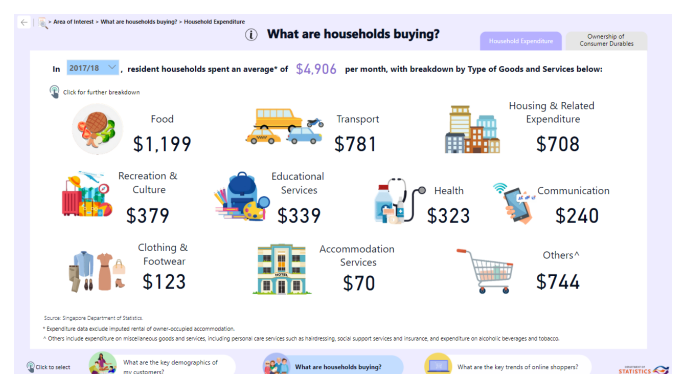
Trends of Online Shoppers

Online spending is growing in prevalence. The data tool also presents data from DOS's Household Expenditure Survey and the Infocomm Media Development Authority's (IMDA) online spending data in user-friendly charts.

Businesses can leverage such information to size the potential market for online sales from insights on online expenditure by type of goods and services and the profile of online shoppers (Figure 3).

Figure 3
KNOW MY CUSTOMER
— ONLINE SPENDING
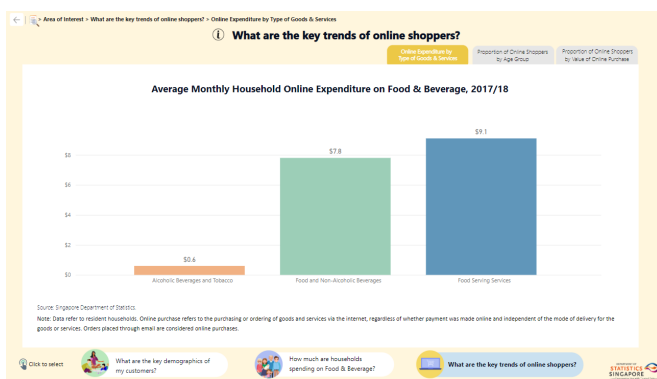
Theme 2: Know My Industry

Having a strong understanding of the industry helps power business strategies. Businesses can obtain industry-specific information on business performance, costs, and labour market situation from the data tool. These insights can help augment businesses' own market research to provide a more holistic view of the industry.

Industry Performance

A full suite of data on the industry, ranging from the number of companies engaged in the same activity to the business performance and outlook of the industry is available in the data tool. Data from various surveys are presented in charts for businesses to perform market analyses.

Besides quantitative data, the data tool also presents information on industry-specific business outlook gathered from DOS's Business Expectations Survey. Businesses can leverage the collective sentiments of fellow industry players on the projected business outlook for their industry in their planning and risk management (Figures 4 and 5).

Figure 4
KNOW MY INDUSTRY
— NUMBER OF SIMILAR FIRMS
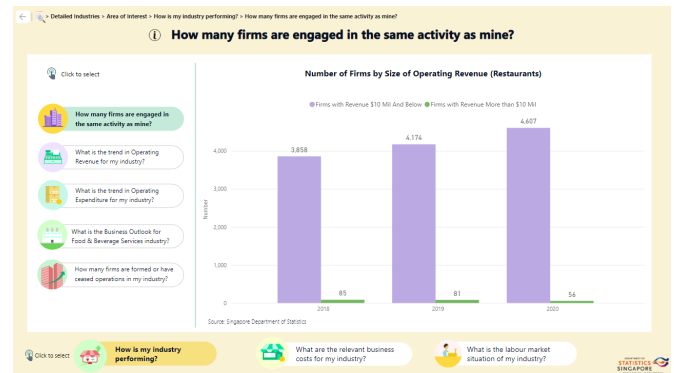
Figure 5
KNOW MY INDUSTRY
— BUSINESS OUTLOOK
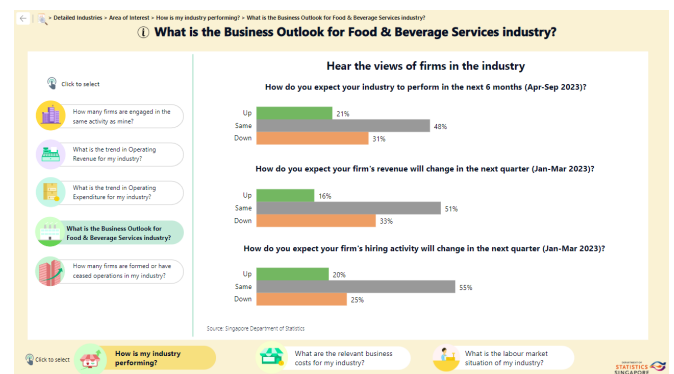
Business Costs

Business cost is a crucial component of businesses' bottom line, which businesses seek to optimise. With the data tool, businesses can find out the top 3 business costs facing the industry and obtain information on rental costs by street (Figure 6). Businesses can also use the latter to make an informed decision before renting any premises.

Figure 6
KNOW MY INDUSTRY
— RENTAL COSTS
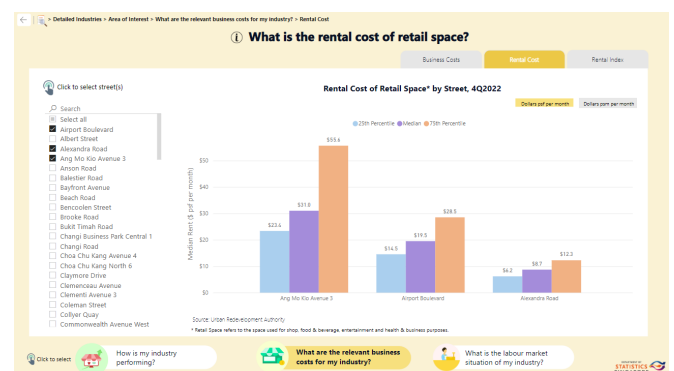
Labour Market Situation

Labour market analysis is an integral part of a successful business. The data tool provides links to the Ministry of Manpower's data tools that allow businesses to compare salaries and bonuses as well as employment conditions against industry norms. Businesses can also analyse staff turnover rates against industry norms to review their recruitment or retention strategies (Figure 7).

Figure 7
KNOW MY CUSTOMER
— LABOUR MARKET SITUATION

Theme 3: Benchmark My Performance

The data used in this benchmarking tool are contextualised and personalised, providing businesses with an improved experience in effortlessly benchmarking their performances against their contemporaries.

For example, businesses can compare their financial ratios with the industry average. Commonly used ratios such as Return on Assets, Return on Equity, Current Ratio and Equity Ratio are also represented on the data tool (Figure 8).

Figure 8
BENCHMARK MY PERFORMANCE
— SELECTED FINANCIAL RATIOS

Deep dives and benchmarking exercises can be performed on the firm's profit margin, profit per worker and revenue per worker, to possibly identify areas done well and areas for improvement. Expenditure related ratios can be compared against fellow industry players to identify relative inefficiencies in spending (Figure 9).

Figure 9
BENCHMARK MY PERFORMANCE
— BUSINESS PERFORMANCE

Conclusion

These data tools, by providing businesses with more insights on their customers, industry and business performance, empowers them to make data-driven decisions.

**Hear from Businesses
Their Feedback on the Data Tools!**

The interactive electronic publication of data on SingStat's new website is a useful tool for our business. Through features such as the visualisation dashboards, we are able to easily access relevant statistics which help us gain a better understanding of our industry, how we are doing relative to other players, and potentially identify new growth opportunities through a data-driven approach.

*Mr Pang Fu Wei,
Group Managing Director, Mothercare*

The business tools gave concise insights to the F&B industry statistics and helped me gain a better understanding on the changing customer demographics.

*Mr Mervin Lee,
Vice President, Fei Siong Group*

Start your data journey with us today!

Visit go.gov.sg/dfb-ssn to use our business tools (available for Retail and F&B industries).