



Unforeseen Drivers

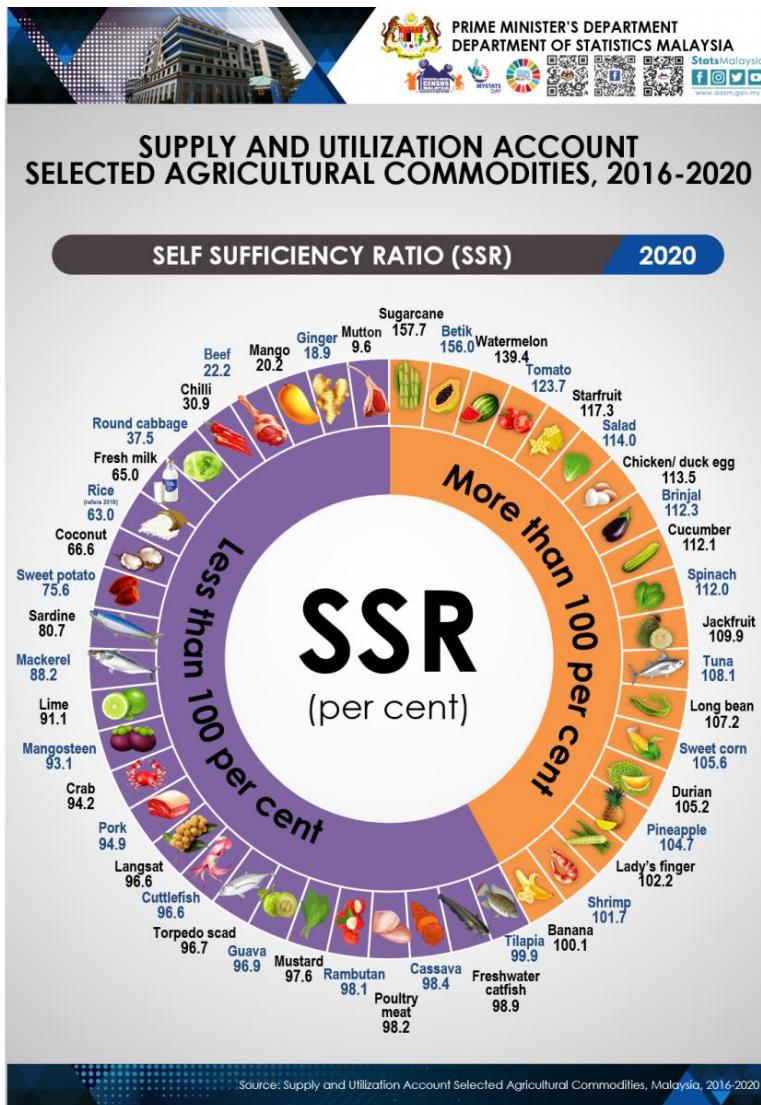
e-Commerce Analysis

Malaysia Indicator

February 2022

Disclaimer: This data intelligence overview is based on known open-source data. Any inquires please reach out to **editor@malaysiaindicator.com**

The Awakening



The Covid-19 pandemic has shoved our food security level under the spotlight after the lockdowns and declining economic growth caused the price hike in essential goods due to some external factors such as the higher cost in logistics and agriculture inputs.

Despite the increasing concerns over the country's food supply, Prof Nasir from the Agricultural Economics department at Universiti Putra Malaysia (UPM) emphasized that disruptions in our food chain are minimal aside from isolated areas such as Cameron Highlands.

Nonetheless, Malaysia is still import-dependent for most of our food items except for poultry, eggs, pork, and fisheries.

Seizing Regional Wave

GLOBAL FOOD SECURITY INDEX 2019



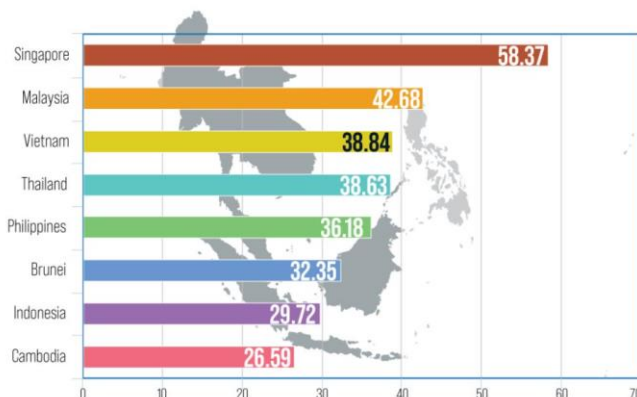
With Malaysia's sturdy standing in the global food security and innovation index, the country has the potential to thrust the innovation industry even further through agriculture.



*Global rank (out of 113)
**Brunei not included
Source: Economist Intelligence Unit

From the regional outlook, Malaysia has a stable position in terms of its global food security index in comparison to other neighboring countries. Interestingly, Malaysia is also on the verge towards becoming an innovative-led economy after Singapore.

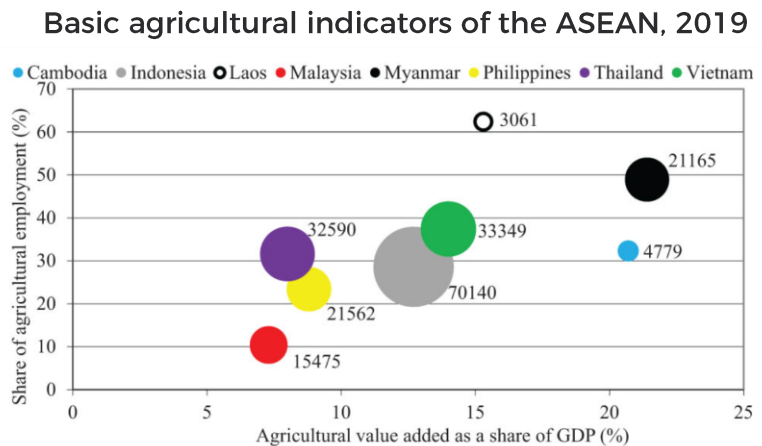
GLOBAL INNOVATION INDEX OF SOUTHEAST ASIAN ECONOMIES



Vital Revival

Despite Malaysia's strong food security at the global level, other ASEAN countries have made agriculture a bigger part of their economy.

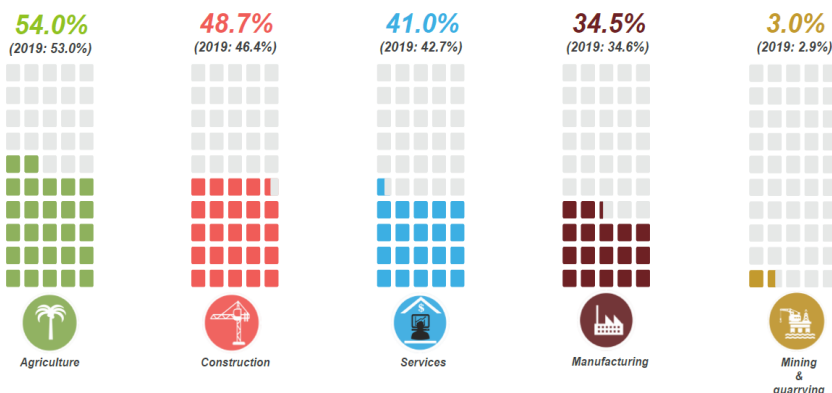
In recent years, the share of Malaysia's agriculture sector to the economy is comparatively small compared to our neighboring countries such as Indonesia, Vietnam, and Thailand.



Source: Theory vs practice: Patterns of the ASEAN-10 agri-food trade (Tamás Mizik, 2021)

Sprouting Demand

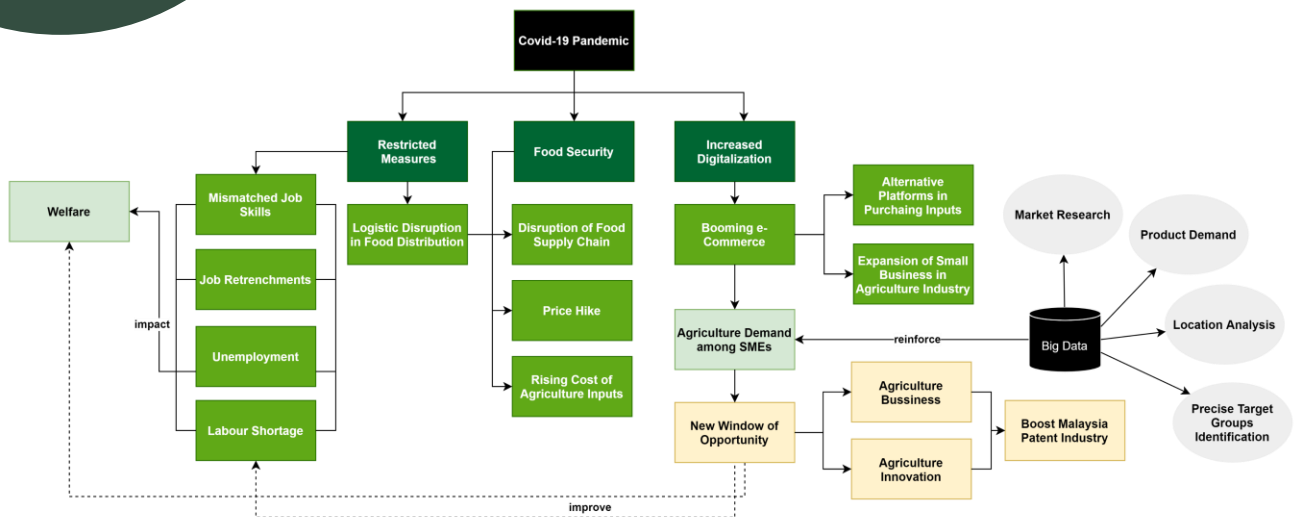
Exhibit 3 Contribution of SMEs GDP to Malaysia's GDP for 2020 at Constant 2015 Prices



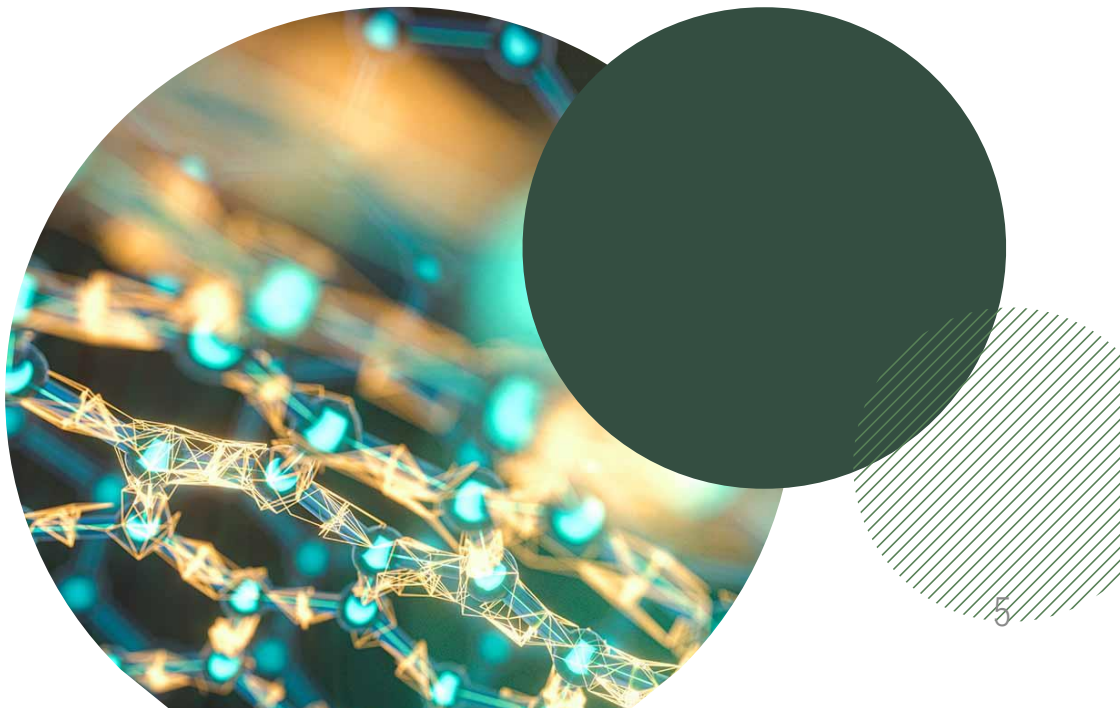
Interestingly, the Department of Statistics Malaysia (DOSM) has revealed that the largest sector that contributed to the SMEs GDP is agriculture.

Therefore, this gives a clear indication that the country should uplift its smallholders in the agriculture business through innovation which will in return boost the country's agriculture economy.

Booming Opportunity



In light of the booming agriculture interest among SMEs along with the digitalization post-pandemic, a wider opportunity has sparked for the country to boost the agriculture sector through product innovation and research which would also broaden the patent industry.



Scanning the Macro Environment



To push the agriculture sector further in terms of innovation and research, it is vital to understand the overview of the macro-environment that invertedly affects the agriculture and patent industry.

As such, the innovation and research of the agriculture sector are highly attributed to several economic and technological indicators such as the thriving e-commerce market and the vigorous digitalization of Malaysians which are among the many signals that influence the sector.



POLITICS

- Political instability
- Perceived corruption levels
- Bureaucracy

ECONOMY

- Labour shortage
- Elevated unemployment rate
- Rising cost of agriculture inputs
- Dependency on imported goods
- Risk of inflation
- Rising debt level
- Supply chain disruption
- Booming e-commerce market
- Stagnant Innovation Index

SOCIAL

- Rising cost of living
- Skills mismatched
- Rising social issues
- Declining public sentiment

TECHNOLOGY

- Fostered digitalization
- Adaptation to modern machineries
- Awareness on Internet of Things (IoT) and innovations
- High accessibility to devices

ENVIRONMENT

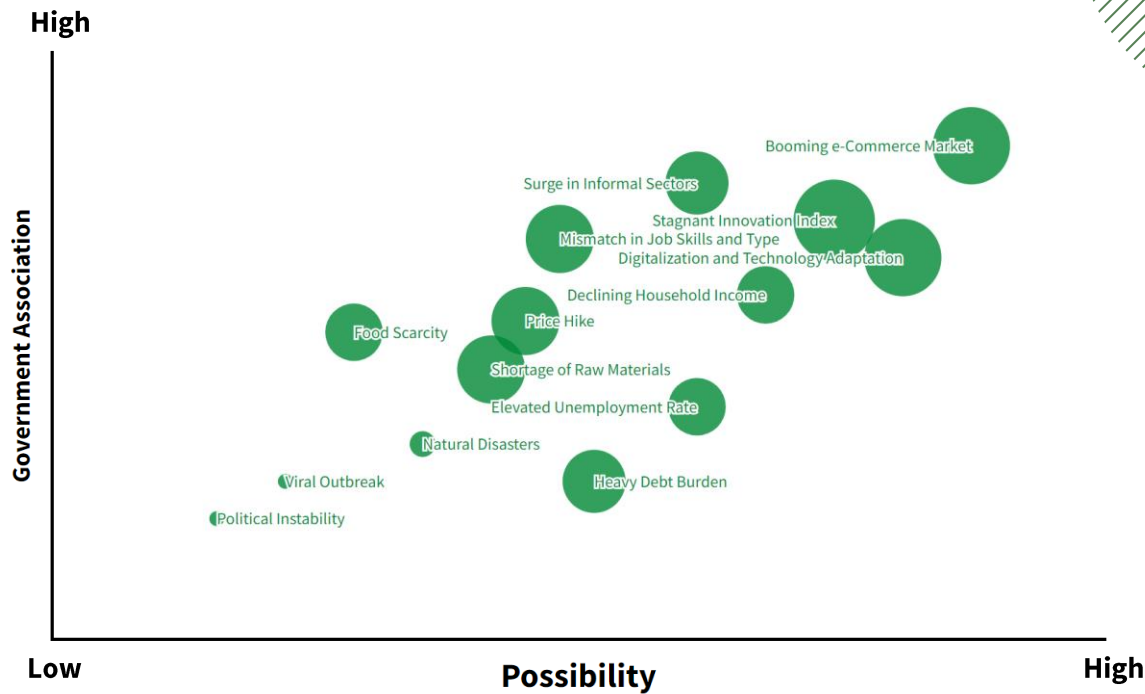
- Pandemic outbreak
- Drastic weather changes
- Soil erosion
- Food security and supply implications

LEGAL

- Intellectual Property Corporation of Malaysia (MyIPO)
- Financing schemes and grants

Signal Scanning

Drivers of Change



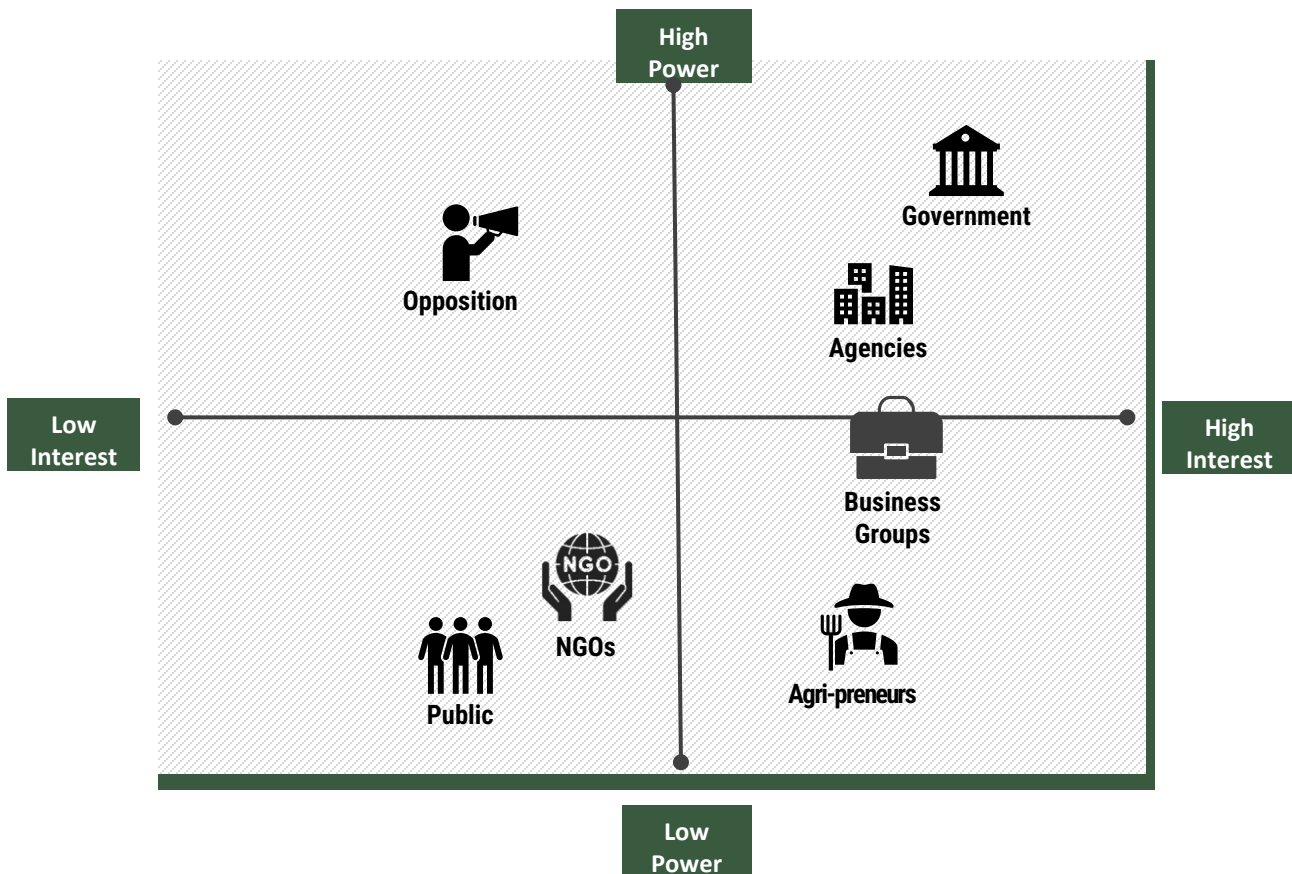
Aside from scanning the macro environment to detect relevant weak and strong signals, identifying the drivers of change will also attribute to better understanding the agriculture sector from the innovation side.

Hence, the analysis has shown that many factors contributing to the innovation of agriculture are related to the e-commerce market and the job market in the country.

According to Secretary-General of Ministry of Agriculture and Food Industries (MAFI) Haslina Binti Abdul Hamid,
ONLY 15% MALAYSIAN YOUTHS ARE IN THE AGRICULTURE SECTOR

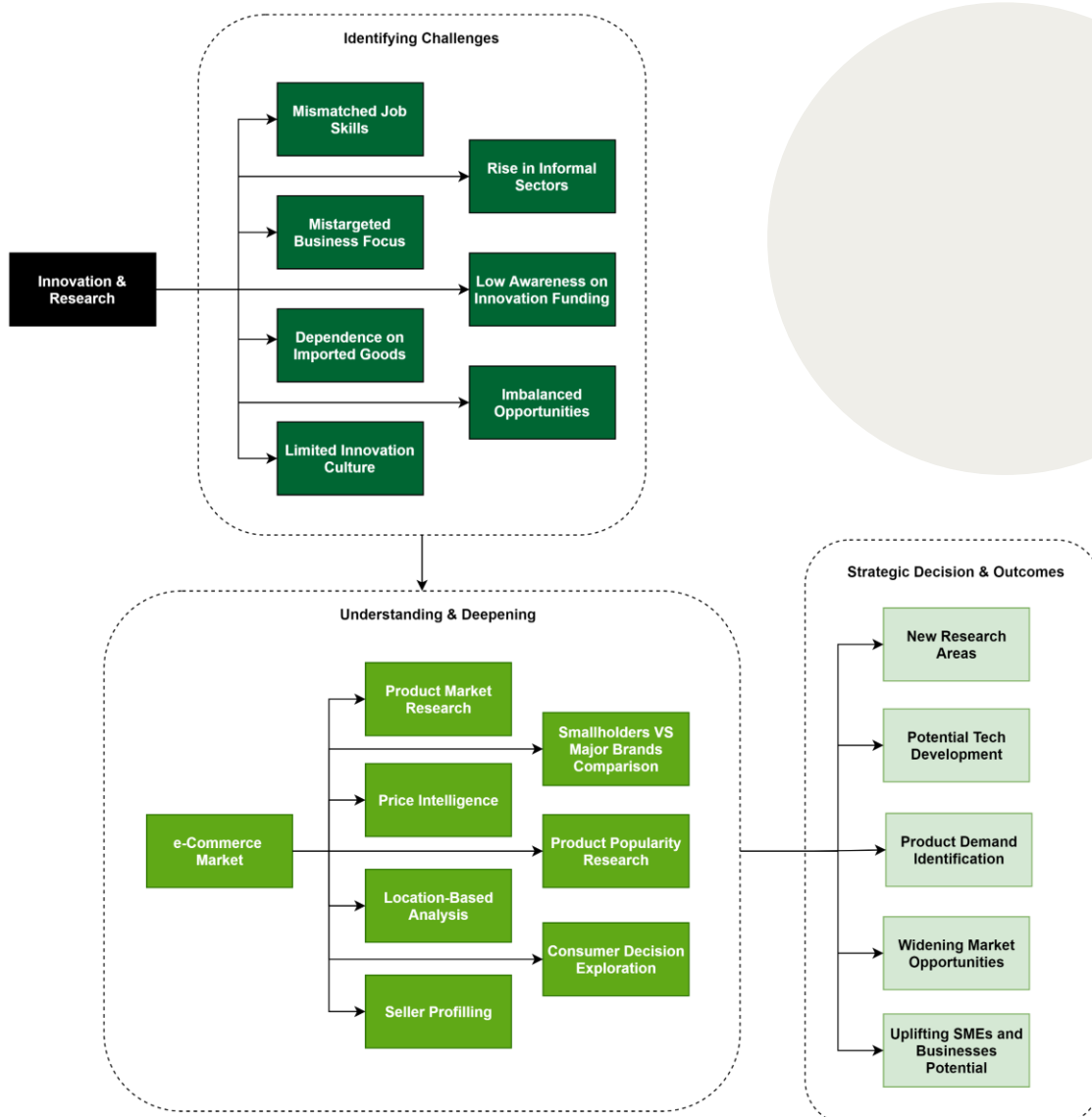
Stakeholder Analysis

In terms of the relevant target groups, the government, agencies, and business groups are among the top stakeholders with the most power in relieving the agriculture sector in the country



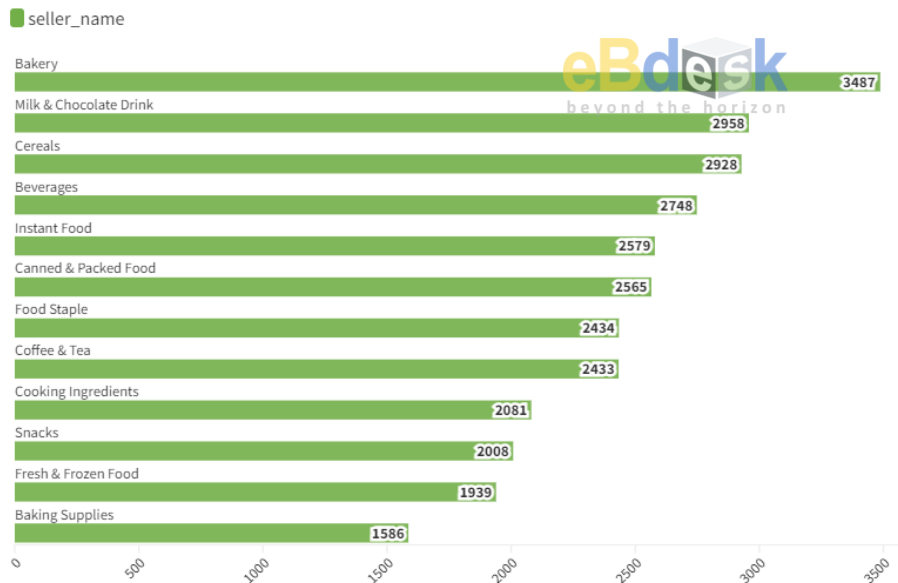
Forging Ahead

In a broader sense, the signals related to the agriculture innovation sector should be supported by an extensive analysis of the holistic environment of the industry such as the accelerating e-commerce market which will ease identifying potential products or ingredients that are dominating the online market. In this analysis, the data gathered is based on the results from a prominent e-commerce website in Malaysia.



Misdirected Concentration

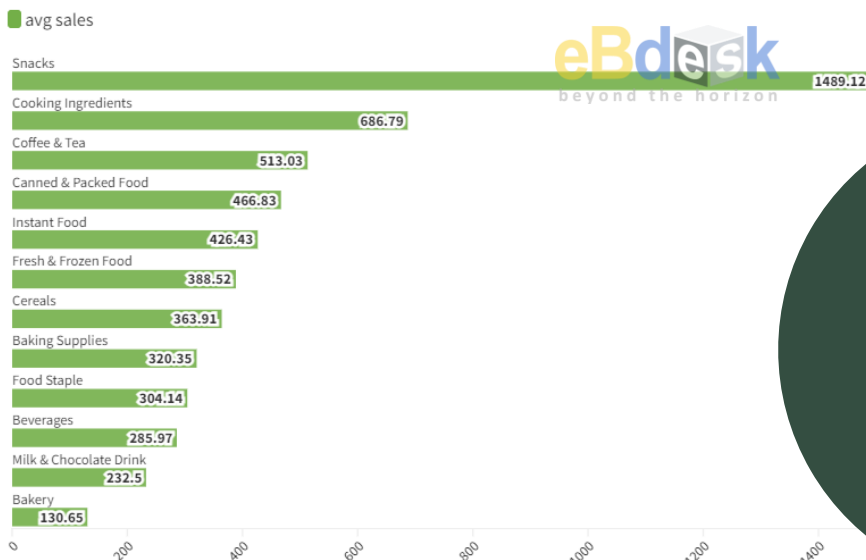
Number of Sellers under Groceries Category



Powered by eBdesk Big Data and Artificial Intelligence

e-Commerce intelligence has indicated that the Bakery sub-category is the most favourable among entrepreneurs in the platform although the sub-categories with the highest average sales are from the snacks, cooking ingredients, and coffee & tea while the bakery sub-category had much lower average sales.

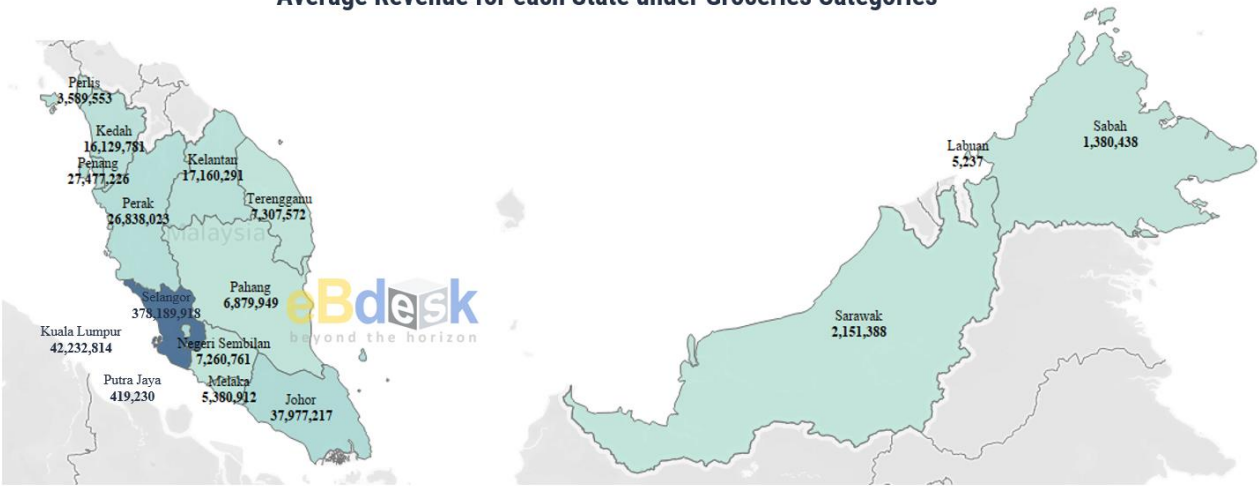
Average Sales under Groceries Category



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Major Component

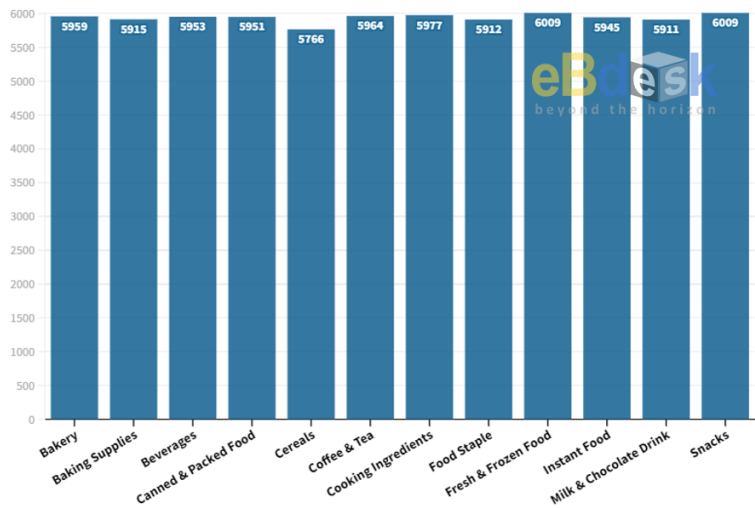
Average Revenue for each State under Groceries Categories



Powered by eBdesk Big Data and Artificial Intelligence

As expected, Selangor is the dominating state with entrepreneurs with the highest revenue due to the higher penetration of technology to the majority of them. Therefore, this solidifies that digitalization can boost people’s financials through e-commerce.

Number of Listings under Groceries Categories



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Balanced Focus

Although the Groceries category shows that the Bakery sub-category had the most sellers, the number of listings across all sub-categories is quite similar.

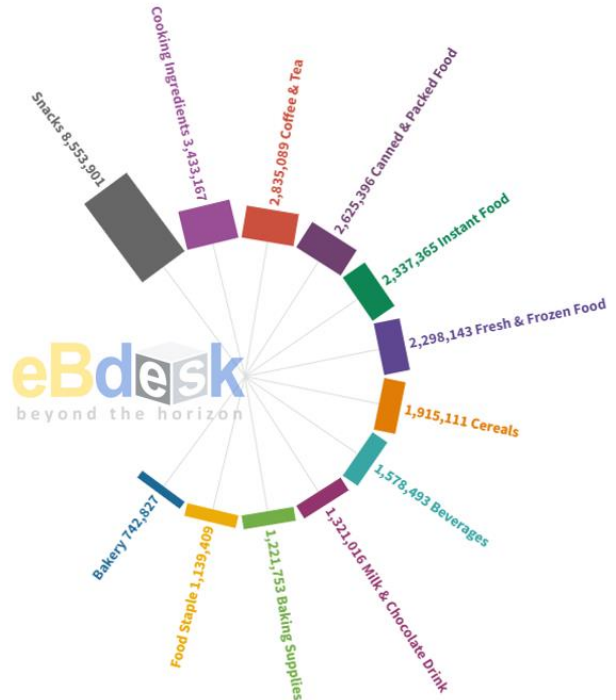
However, the Snacks and Fresh & Frozen Food categories have slightly more variety whereas these two categories have more listings in the online market. Nonetheless, the majority of the sub-categories are still within the same range in terms of the number of listings. Hence, this shows all sub-categories under the Groceries categories generally have a strong demand online.

Overlooked Demand

Nonetheless, e-commerce intelligence shows that the Snacks, Cooking Ingredients, and Coffee & Tea sub-categories are the most popular products seeing that these sub-categories have the most sold items and sellers with the highest average sales.

Meanwhile, the Bakery sub-category which has the most number of sellers on the platform has the lesser items sold. This however might be attributed to the sub-category gaining interests of micro and small businesses in which their products are sometimes priced lower.

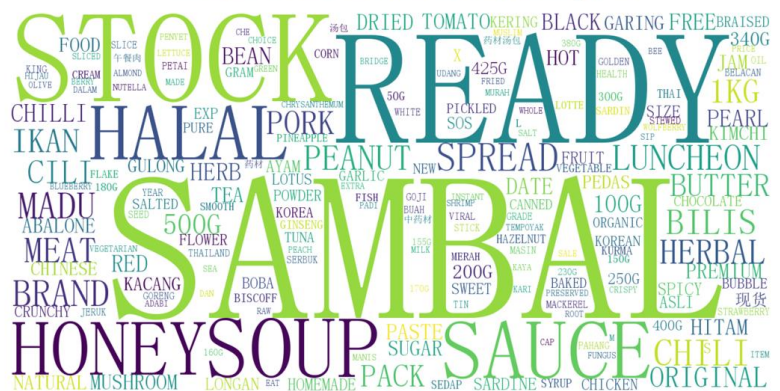
Items Sold under Groceries Categories
(Excluding Subsidized Items)



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Thriving Spotlight

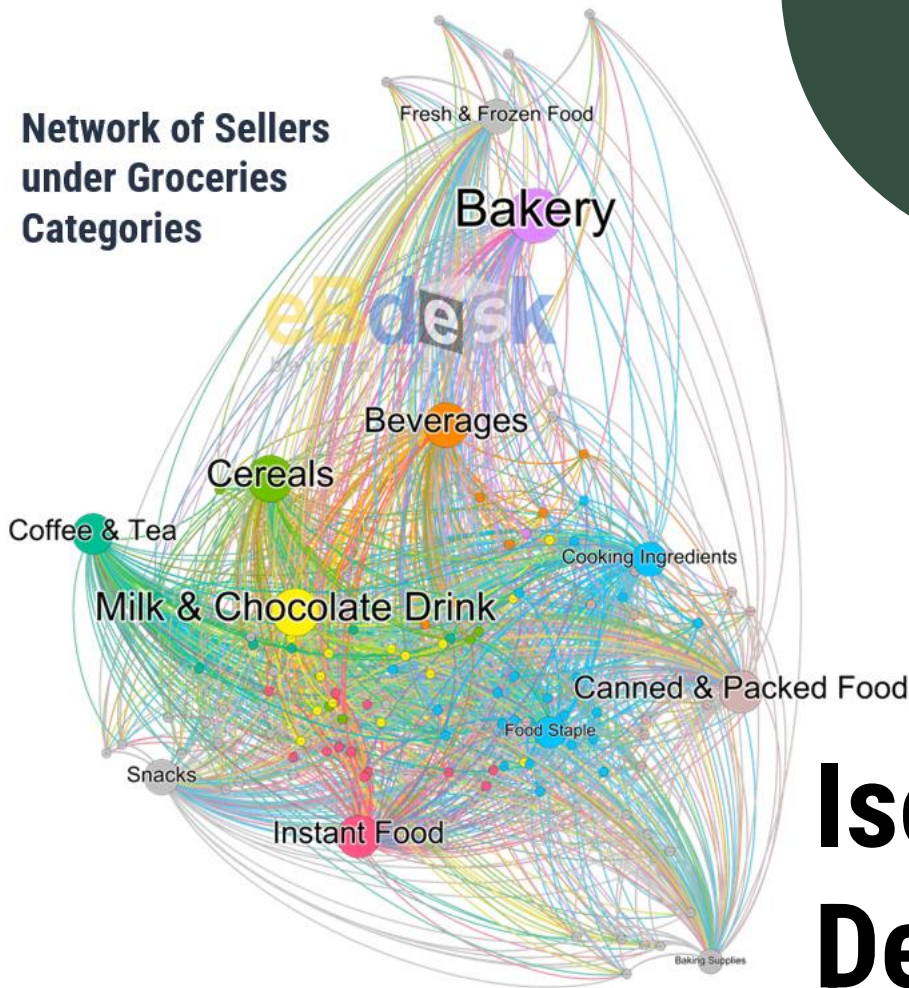
Most Listed Products under Groceries Categories



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From all of the product listing under the Groceries category, "sambal" appeared the most indicating that sambal products have the highest domination online which also concludes how the Cooking Ingredients category gained prominence. Therefore, this shows that the chili market has become more prevalent with more entrepreneurs gaining success with it.

Network of Sellers under Groceries Categories



Isolated Demand

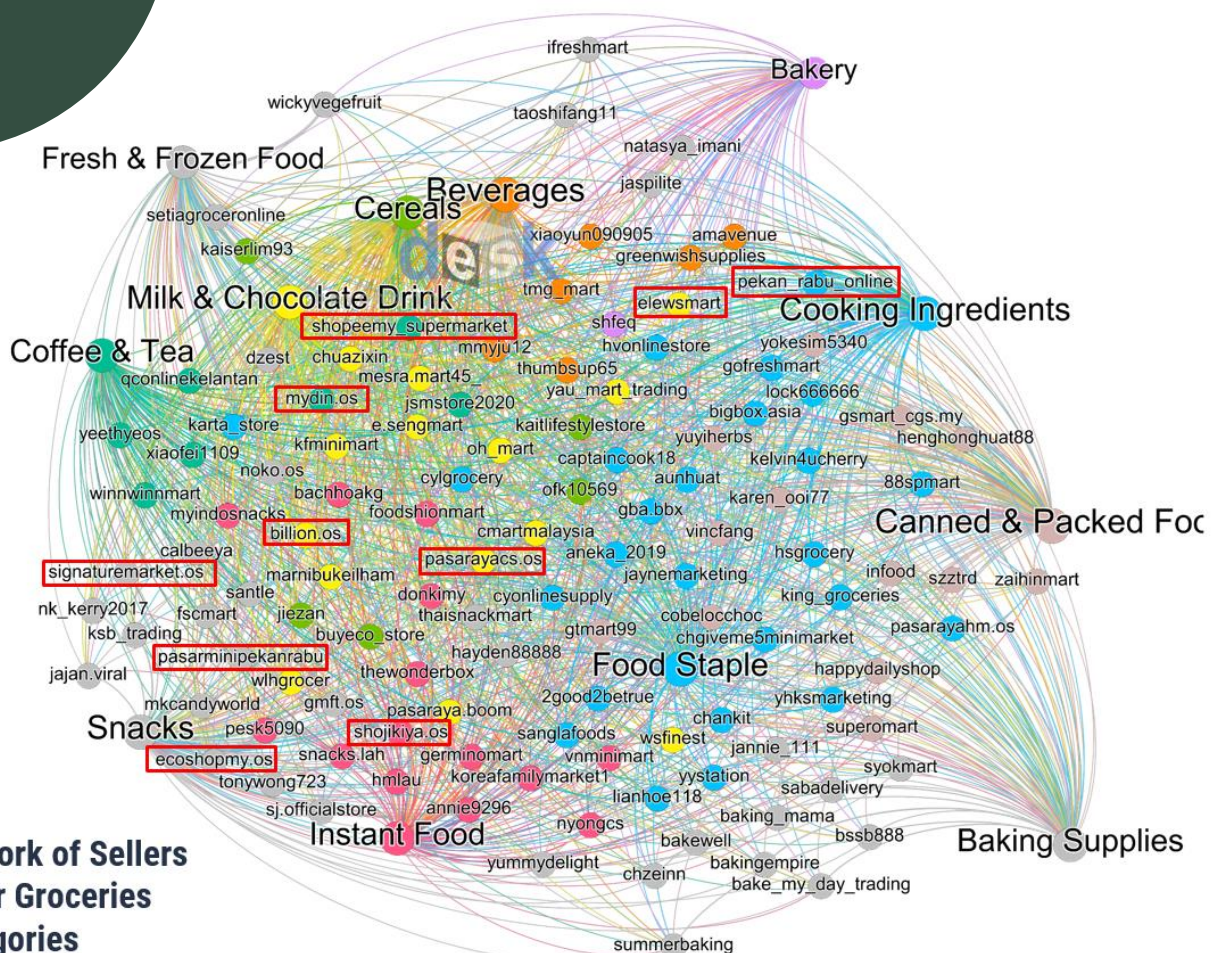
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From the network of sellers on the e-commerce platform, the Bakery sub-category has a bigger node due to the raking numbers of sellers offering its baked goods.

Aside from that sub-categories such as Fresh & Frozen Food and Baking Supplies along with Bakery are distanced farther than the other sub-categories in the network, indicating that these might be contributed by the small sellers.

Meanwhile, other leading sub-categories such as Snacks, Cooking Ingredients, and Coffee & Tea are concentrated at the center of the network with other popular products sold mostly in hypermarkets.

Determinants



**Network of Sellers
under Groceries
Categories**

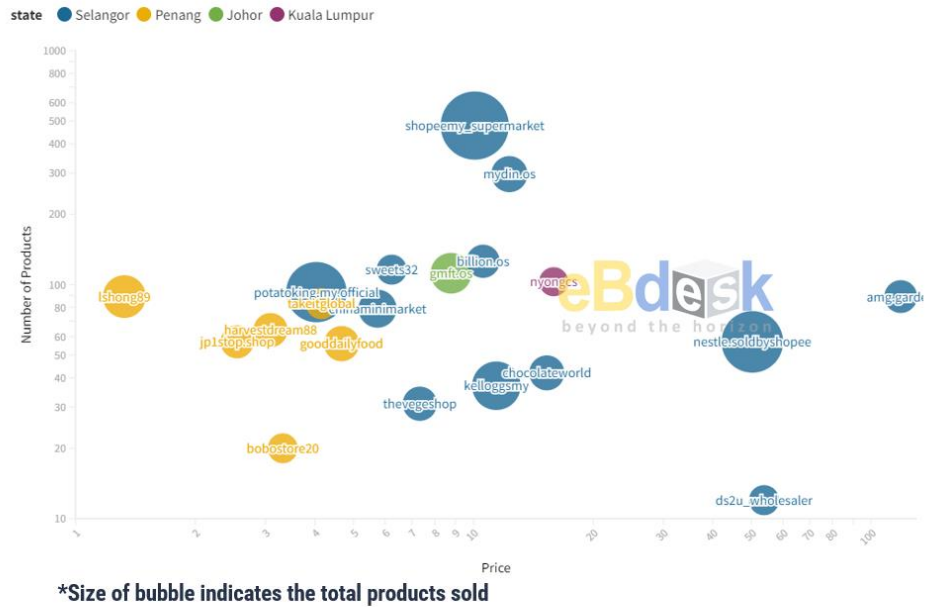
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Taking a closer look at the previous network, it can be seen that the focal point of the network is convoluted with more prominent hypermarkets and stores while isolated sub-categories are dominated by sellers that are less popular.

Therefore, this shows that the leading sub-categories with the most average sales and sold items might be thriving due to widely known shops offering the same products.

Tantamount Possibilities

Top Sellers by Products Sold under Groceries Categories



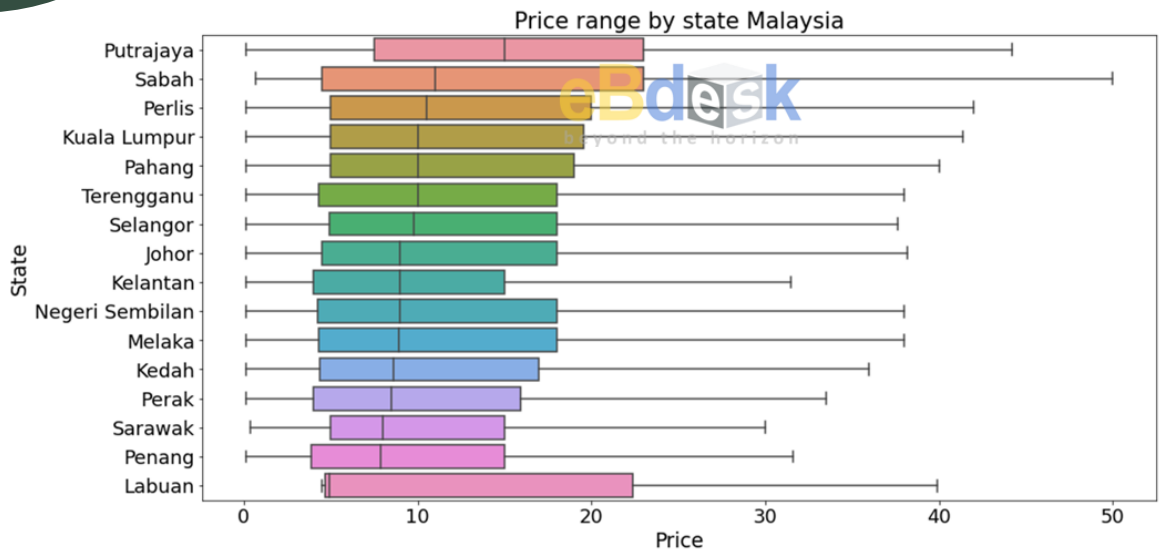
Powered by eBdesk Big Data and Artificial Intelligence

Interestingly, Mydin was spotted having the most number of products after Shopee Supermarket but its total products sold is comparatively similar to other unknown brands on the platform. Thus, this proves the business opportunity where informal sectors are gaining almost as much attention as Mydin online.



Consumer-Centric

Price Range of Products under Groceries Categories by Location



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In terms of the price range of the products in the Groceries category, the median price for states with the highest average revenue (Selangor, Johor, and Penang) are mostly priced at RM10 and below.

Meanwhile, products sold in Sabah are among the highest after Putrajaya which might be due to logistic costs. Nonetheless, the majority of the media price is quite similar which indicates the products sold online that gained the most popularity are affordable, thus making it consumer-centric.

Primary Focus



**Pineapple
Products**



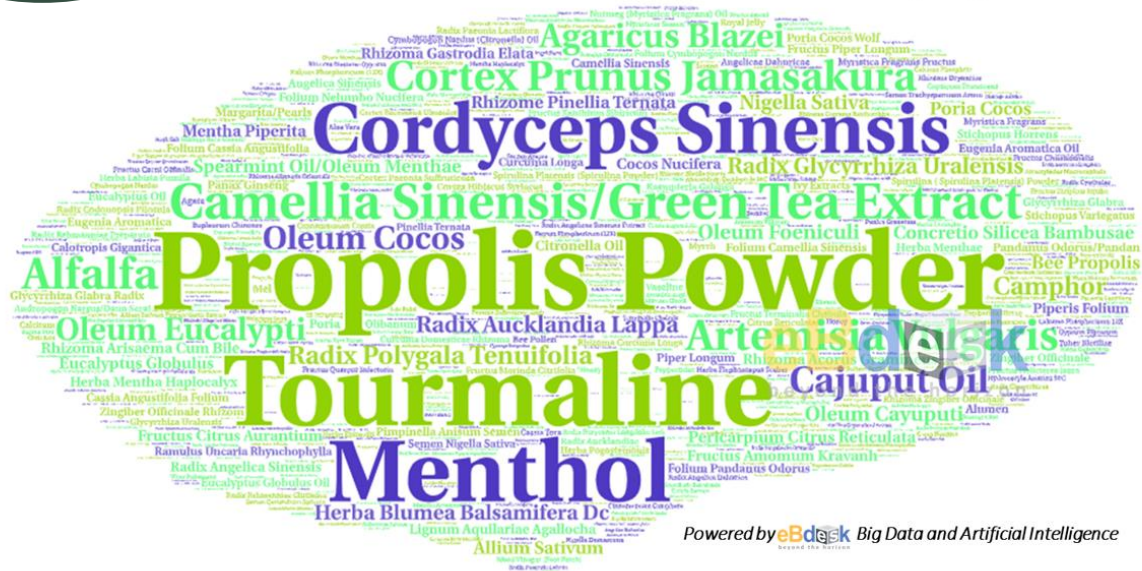
**Honey
Products**

The analysis has also focused on specific products namely pineapple and honey which are highly related to Malaysia's agriculture sector as the country has its own Pineapple Industry Board while honey is highly used in many products as part of its main ingredients.



Treasure Ingredient

Word Cloud of Most Sold Items By Ingredients Online



Based on data from NPRA, propolis or honey is among the top ingredients used in many popular products sold in the country.

Thus, this analysis will be examining the market for honey along with pineapple in the e-commerce platform in terms of the food processing of the products.

The Upper Hand

Top 10 Honey Products under Groceries Category



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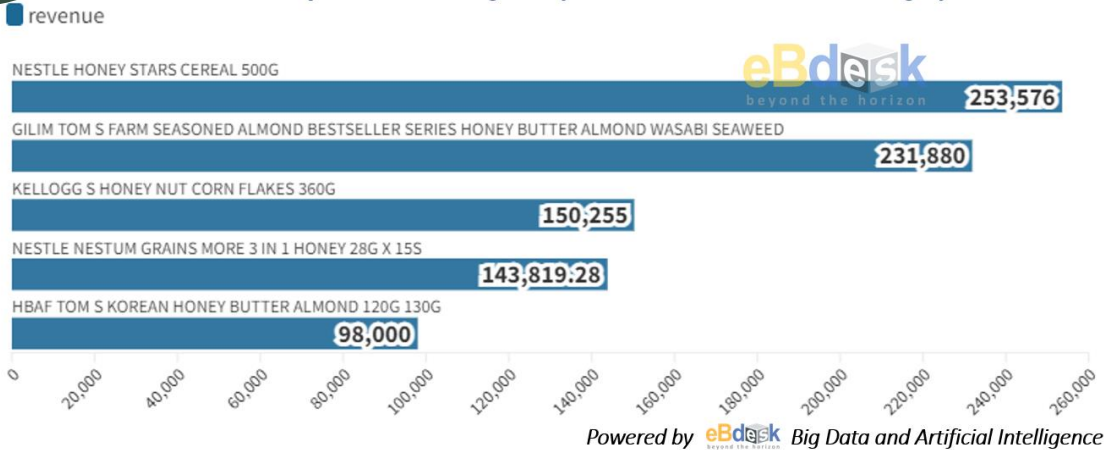
Looking at the popular honey products sold online, major brands have been dominating the top 10 products although honey herbal tea has gained the most sold items.

As seen in the analytics, brands such as Cadbury, Kellogg's, Nestle, and even Nutrisari from Indonesia appeared among the topmost sold honey products under the groceries category. Hence, this shows that honey is highly in demand seeing that top processing conglomerates are still leading the e-commerce race.

Twofold in Size

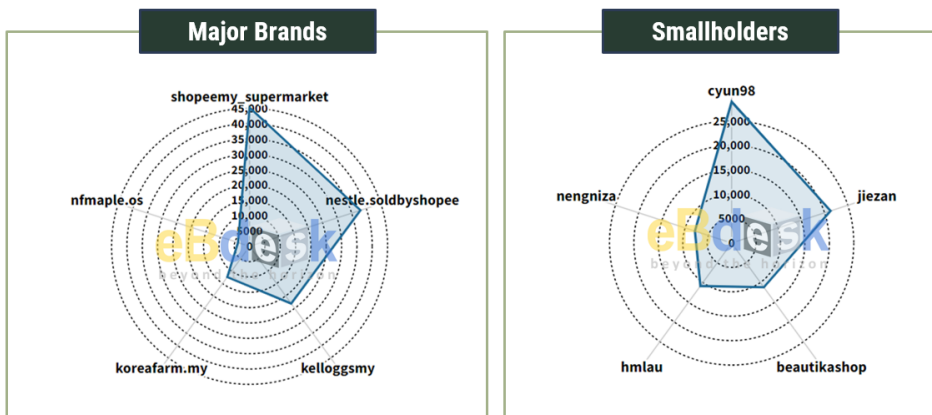
Looking at the revenue of the sellers listing honey products, the revenue obtained is significantly more than sellers selling pineapple products as the top seller for honey doubled from the pineapple product.

Revenue of Top 5 Brands Selling Honey Products under Groceries Category



Overpowered

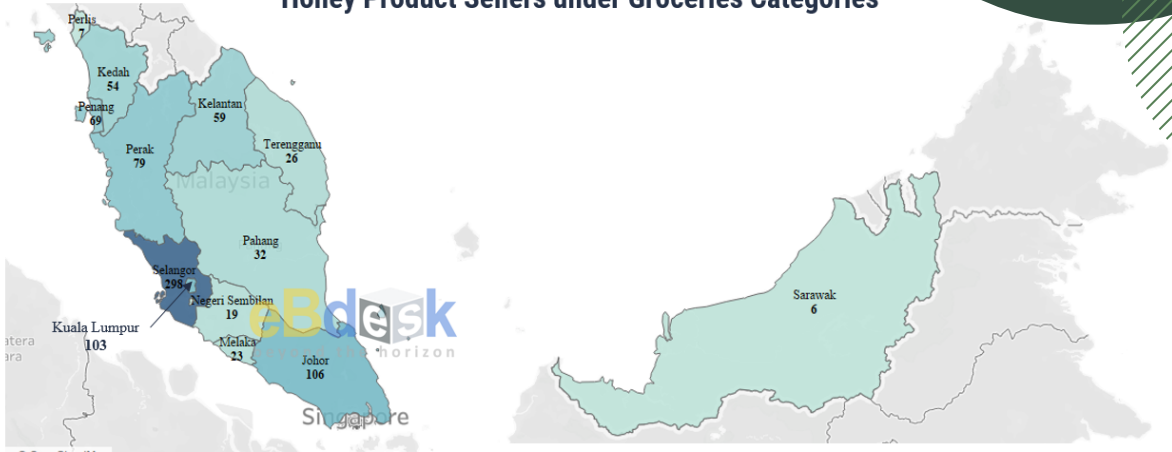
Honey Products under Groceries Category Sold



While comparing the smallholders and major brands selling honey products, major brands obtained more popularity as compared to pineapple where smallholders gained more prominence online. Although these giant brands have overpowered other brands, the smallholders from the unbranded category also showed an impressive number of products sold.

Contributors

Honey Product Sellers under Groceries Categories



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Meanwhile, the location of interest regarding the honey products is similarly concentrated in urban states such as Selangor and Kuala Lumpur, and Johor. The domination of big brands in the honey food processing sector might also be due to the people's dependence and influence on established brands.

84% OF KELULUT HONEY'S SUGAR COMPRISED TREHALULOSE

which is a rare sugar with a low glycaemic index (GI), according to researchers in Universiti Putra Malaysia and the University of Queensland, Australia.



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Processing Demand

Top 10 Pineapple Products under Groceries Category



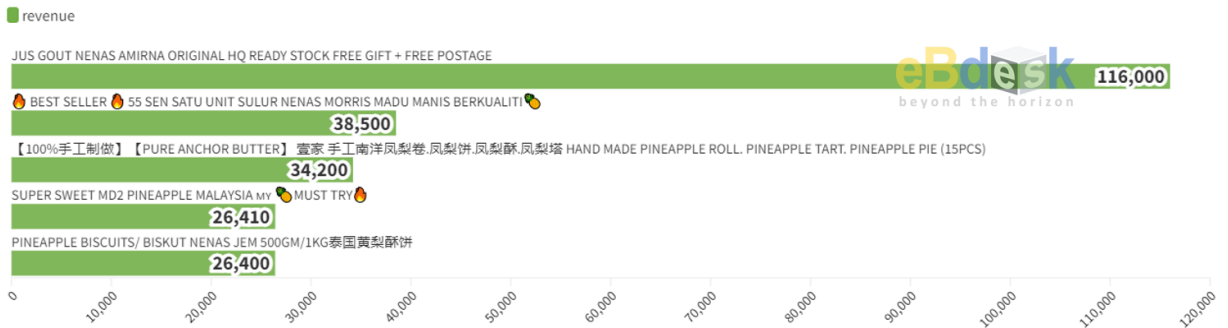
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From all of the pineapple products on the platform, Indonesia's Nutrisari Pineapple Instant Powder Drink is the most sold pineapple product.

Although the analytics also showed a demand for pineapple tart, biscuits, and the actual fruit, the instant pineapple powder from Indonesia gained more attention. Therefore, this does not only show the strength of our neighboring country in pineapple food processing, but it also highlights the need for the country to explore other food processing products that are in demand.

Budding Prospect

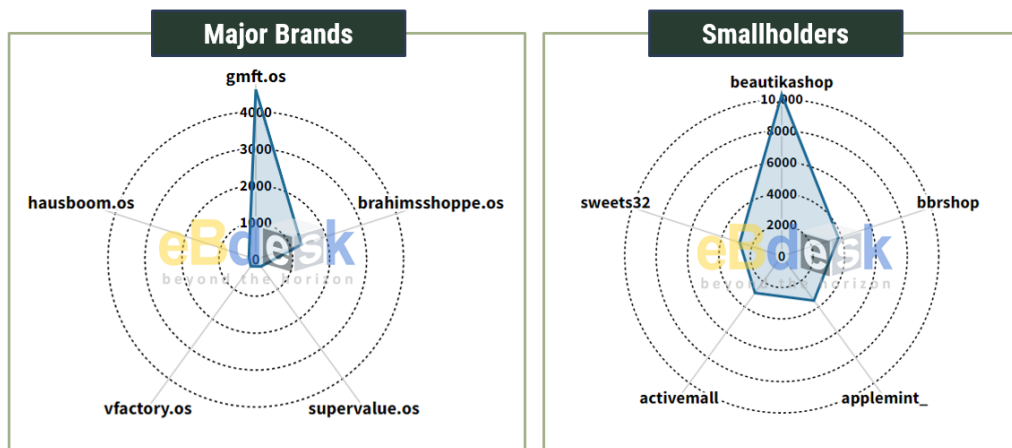
Revenue of Top 5 Brands Selling Pineapple Products under Groceries Category



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Interestingly, the seller that listed the Nutrisari instant powder did not garner as much revenue. Instead, a local product Jus Gout Nenas Amirna gained the highest average revenue. Furthermore, the pineapple juice from Amirna also showed a distinct gap with the following sellers listing pineapple fruits, tarts, and biscuits.

Pineapple Products under Groceries Category Sold



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Less Optimal

On to the comparison between major and small brands, there is a much lesser concentration of selling pineapple products from major brands as the average sales are also much lesser than products sold by smallholders. Meanwhile, smallholders such as beautikashop selling Nutrisari instant powder gained more sold items than big brands like Brahims and Hausboom. 25

Novel Demand



Similarly, Selangor and Johor consist of more sellers listing the pineapple products online. However, the analytics have also revealed a substantial entrepreneurial demand in Perak. Hence, this should give a broader idea of products to venture on for small business owners in the state.

90% OF PINEAPPLE ENTREPRENEURS
under the Malaysian Pineapple Industry Board (LPNM) have exited the B40 group, with an average income of RM5,000 a month

Key Takes

- Based on the e-commerce intelligence, there is a huge demand for snacks, cooking ingredients, and coffee and tea as these are the sub-categories that had sellers with the highest revenue.
- It was also worth noting that there are ample opportunities for the local chili market seeing that the word sambal has overpowered the groceries category.
- Meanwhile, the analysis also examined the market for pineapple and honey one of Malaysia's prominent platforms where findings have shown that processed products gain more popularity in the e-commerce platform as compared to selling the fruit or honey as it is.
- Therefore, the relevant stakeholders should utilize the accelerating digitalization to boost the agriculture sector through innovation which will in return boost the local patent industry and enhance Malaysia's downstream productions.



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