

Future Trends Report

Based on Analysis of the Team's Chosen Community / Organisation in Mid-Term and Final Evaluation

Community / Organisation Studied: Singapore Food Agency (on behalf of most restaurants and F&B businesses)

STEP 1. Identify Challenges

Read the Future Scene carefully and generate ideas for challenges, concerns, and possible related problems. Choose the 5 most important challenges and write them in the space provided. Include applicable research with appropriate in-text citations.

Challenge #1: Lower profits due to higher delivery costs

Based on our interview with the Singapore Food Agency, we found out that existing technological options such as food delivery are not viable for several F&B business models. However, more people are opting for food delivery through food delivery apps, since many restaurant outlets are being forced to temporarily close down. Demand for delivery services has increased rapidly during the pandemic as people are afraid to dine out due to the increased risks of transmission, and also the lockdown policies. Coupled with the rise of technology, food delivery has slowly become the new norm, in order to maintain the economic sustainability of F&B companies. [Observation] This could spell trouble for several F&B businesses in the long term as a handful of businesses gain less profits from delivery orders. This is because of several factors, such as the need to provide single-use containers and cutleries, and more severely in some instances, businesses have to hire their own delivery drivers to make deliveries, leading to higher costs. Equipment such as drones, delivery vehicles also require extremely large investments and high maintenance fees. [Why] According to a survey done by The Chope Group, 62% of restaurants that continued to operate on a takeaway and delivery basis have seen significant falls of 50% or more in revenue compared to 2019. The report added that the revenue generated is not sufficient to offset the losses and restaurants still face the high cost of working with logistics or third-party delivery providers. [Research]

Challenge #2: Loss of jobs due to COVID-19 speeding up the use of technology in the kitchen

Based on our interview with the Singapore Food Agency, we found out that there have been more and more inventions of technological devices to act as manpower to assist restaurants for more efficient service. Such technology includes autonomous tray collection robots, robot baristas and omelette making machines. COVID-19 has sped up the idea of incorporating more technology into the F&B industry, as chefs and food production workers were stretched to the limits during the Circuit Breaker period in order to deliver orders on time. [Observation] While incorporating technology aids in efficient service and larger profits in the long term, manual jobs in the F&B industry slowly become redundant and groups of people working in the F&B industry lose their jobs. [Why] For instance, Ella, Singapore's first automated robot barista was created in October 2020 with the objective of emphasising the importance of digitalisation and automation in navigating the pandemic. In 2017, Kelloggs announced that they would cut the jobs of approximately 1300 people in an effort to improve efficiency in their snack production. In October 2020, Miso Robotics created a grilling robot named Flippy that can cook hamburgers and fries etc and track food

inventories, with the aim of allowing for better social distancing since less people are required in the kitchen, and in the long term to increase efficiency in the kitchen. [Research] As we can see, manual jobs have been slowly taken over by technology in favour of efficiency, and the pandemic has only exacerbated this situation by convincing more F&B industries to incorporate technology into their operations after it was evident that tons of F&B businesses struggled financially. With the price of kitchen robots dropping due to an increase in robot production, restaurants also see it as an economic benefit to hire robots to do the hard labour instead. [Why]

Challenge #3: Struggling to please customers with quality of food due to food delivery

Based on our interview conducted with the Singapore Food Agency, we realised that F&B businesses have added responsibility to ensure the quality of the food provided to consumers during food delivery. As takeaway food is often less appetizing than when eaten at the restaurant itself, operators have to find innovative ways to maintain the quality of the food. [Observation] As the Covid-19 situation starts to settle, they need to adapt and change menus to better serve diners online and protect public health as this is now the expectation of them. The shift to online operations and less human labor will require a change in menus and service styles. Many restaurants already have switched up their menus in order to cope with the lack of food options and increased delivery demand, but unfortunately this has sought backlash. [Why] Examples of customers' common complaints are that crispy food needs to stay crispy after delivery, so the temperature of food needs to be high throughout the journey to homes. There has been discussion about Ajisen Ramen having to change their menu to DIY ramen noodles to suit delivery, creating a similar experience to cup noodles except without the original flavour one can taste when eating physically at the restaurant. According to sevenrooms.com, 66 percent of diners say value is a key factor when deciding what to eat. Especially with the onset of food delivery, the quality of food has gone down, and this may pose a challenge to restaurants in attracting customers to enjoy their food. [Research]

Challenge #4: Lower profits for hawkers

Based on our interview with Singapore Food Agency, we have found that some businesses may not find the existing tech options viable for their business models, especially hawkers who stay true to their customers by staying affordable. For example, if a hawker wanted to keep prices low by charging \$2.50 for a plate of chicken rice, paying an additional \$4 delivery fee would push up the cost of the entire meal to \$6.50, which entices less people to buy it. [Observation] This strategy of converting to delivery is drawn up by so many restaurants that they take advantage of the tough competition and ultimately take over the hawker stalls which cannot afford or are unable to effectively make the switch to delivery to stay relevant. Therefore, less people will order from traditional hawker stalls, resulting in a lack of demand for these foods. A lack of business could result in these stalls closing down. [Why] In a podcast done by CNA with culinary expert and our interviewee KF Seetoh, he stated that the situation for hawkers now is worse than during Circuit Breaker last year, as delivery apps were just coming onboard slowly then, which resulted in more people using delivery applications and lower demand for hawkers who are not online. [Research]

Challenge #5: Stricter hygiene standards in F&B businesses

In our interview with the Singapore Food Agency, operators of food delivery services have added responsibility to implement measures to ensure that the food is hygienic by ensuring the cleanliness of the vehicle and carrier bag. Restaurants also have to conduct wipe downs regularly in their restaurants and increase the cleanliness of their restaurant in line with new Safe Management Measures. [Observation]

With most restaurants and food outlets implementing mandatory temperature screening and save entry at their entrances, as well as reducing the area available for dining in, due to safe distancing measures, F&B outlets may very well find it challenging to keep up with the requirements (which may restrict their business) while still keeping steady income in check at the same time.[Why] For example, reduced dining areas due to safe distancing measures could exponentially increase the queueing time for dine in, at the same time decreasing income rates. increased queueing times could also discourage citizens from dining out. Even during the popular Heart Of The Matter podcast in Singapore, they have mentioned that Singapore is turning into a 'dabao nation due to all the increased convenience. As opposed to having to go through the tedious process of checking into restaurants with safe entry, as well as temperature screening, most people would rather eat at home. [Research] Not to mention, enhancing restaurant cleanliness and food hygiene, as well as installing temperature screening devices, all come with additional costs and maintenance fees. These factors could largely decrease the economic sustainability of restaurant outlets. [Why]

STEP 2. Craft the Underlying Problem

Using the challenges listed in Step 1, identify a problem of major importance to the chosen community / organization in the future. Write your Underlying Problem making sure your question clearly explains the action that will be taken and the desired results/goal of that action.

Incorporating Challenge(s) # __1,2,3,4_____

Given that F&B businesses have to leverage on technology to tap on food delivery platforms [Challenge 1,3] and increase efficiency in the kitchen [Challenge 2], yet several businesses suffer losses instead and many, especially hawkers [Challenge 4], continue to be reluctant to change their traditional mode of business operations [Condition], **how might we encourage all F&B businesses to adopt such technology without compromising on revenue [Key Verb Phrase] so that the F&B industry can weather this storm that the pandemic has brought and continue to thrive [Purpose] in the years ahead? [Future Scene Parameters]**

STEP 3. Produce Solution Ideas

Generate solution ideas to the Underlying Problem in Step 2. Choose the 5 most effective solutions and write the elaborated ideas in the space provided. Include applicable research with appropriate in-text citations.

Solution 1 : Advanced Artificial Intelligence

We, the Government Technology Agency,[WHO] will create an Artificial Intelligence that is built to analyse sales in businesses, such as the amount of customers that it has attracted from a certain area in Singapore or its most popular dishes[WHAT], and this would be implemented by the year 2025.[WHEN] The government will design the AI based on past models and adapt it to be able to detect sales more accurately. It can read rising trends in certain products and recommend plans and strategies for the restaurant, also known as automated generated DIY advice. It can also assist in automatic stock adjustment, labour management, and manage profit to rental costs ratios to optimise the sales and earnings of the restaurant in order for it to stay alive. If a company is struggling, it can also offer government help and monetary aid. The best part is that this technology is also made available to hawkers and small food shops as big profitable restaurants may already have similar technology or manpower to analyse and optimise their sales. [HOW+WHERE]. For hawkers and restaurant owners, this will make their lives easier as they are able to see if their new ideas are feasible, and are also able to check if a certain product is helping them profit. This would help them to garner profits more effectively, and overcome the losses they made during the COVID-19 pandemic. [WHY]

Solution 2 : Mobile App

We, the Government Technology Agency, together with the Singapore Food Agency, [WHO] will create a mobile application called “Eat Out!” by the year 2025 [WHEN] which enables users to scan a photo of their receipts from a recent meal to track the number of times they dine out [WHAT]. The government will encourage restaurants and other food businesses, including hawkers, to register as part of the eligible places to visit for the app. Users who dine out at these registered eateries will be able to use the app to scan the receipt of their meal. For every 10 receipts scanned, users will receive a 10% digital discount voucher on their next meal at any of the registered eateries [HOW + WHERE]. This encourages people to dine out more often as users will be motivated to frequently dine out in order to achieve the 10% digital discount voucher for every 10 dine out meals. This app will also reduce the percentage of sales that Food & Beverage businesses receive from online food delivery, which will be useful for businesses who are making losses by hiring their own delivery drivers and have higher food production costs [WHY].

Solution 3 : Mobile App

We, the Singapore Food Agency, in collaboration with the Government Technology Agency and Singapore Tourism Board [WHO], will create an application called “Hawker Go Where” in the year 2025 [WHEN]. This application consists of most, if not all of the hawker centres in Singapore, with the hawker centres’ locations classified under 4 sections; North, South, East and West [WHAT + WHERE]. Users will be able to place food orders from their favourite hawker stall before physically coming down to the hawker centre to collect their food. The Singapore Tourism Board will also promote the app to tourists by including a section about the history and culture of our hawker centres in the app. Local influencers and foreign tour guides are also able to place a recommendation of the best places for certain dishes [HOW].

For users, such an app will allow them to skip the queue and collect their food efficiently. For hawkers, a personalised application would allow more hawker businesses to have access to online services, thus having a greater reach to customers. This would be integral in increasing profits and adapting to the rise in technology in the Food and Beverage industry. The application would also be useful in increasing profits through tourist sales, as tourists will be intrigued by the hawker culture and will be interested to try out local hawker food during their visit to Singapore [WHY].

Solution 4: Redesign food menus

We, Singapore Food Agency (SFA) and Government Technology Agency [WHO] will help in enabling restaurants and hawkers to redesign their food menus and redesign operations with technology by the year 2023. [WHAT+WHERE] Restaurants could consider offering family packages and bundles. If a substantial percentage of their customers are families, they can offer “kid-friendly” food options. An example to make use of ‘kid’s meals’ or ‘kids’ set meals would be to include activities like build-your-own donuts, or simply include toys, merchandise. In case of hawkers, vouchers for discounts can be introduced to them. This would encourage people to visit the physical store to boost sales. Together with Augmented Reality, restaurants can use apps or websites with AR software to showcase not just their unique redesigned meals, but also can be used to showcase for example DIY products, merchandise, store-wide promotions and ‘ghost kitchens. For the hawkers, many may be interested how our local food is being made, so we can introduce livestream cooking to hawkers. Users are able to get a better view and grasp of what these F&B businesses offer, and increase customer retention. [HOW] Research by US online food ordering company DoorDash has shown that good photos and compelling descriptions make a difference. Making use of different operations would encourage people to visit the physical store to boost sales. One way of innovating to curb a drop in customers' sales is to redesign food menus. If cooked, hot food cannot attract customers anymore, selling frozen versions of food can be an alternative. This promotes the idea of “DIY restaurant food” and also encourages easy online sales. Hawkers can tap on selling more finger food like chicken wings from nasi lemak, which makes it easy to eat and buy. More food customisation options are also able to drive more orders. [WHY]

Solution 5: Digital courses for workers

We, the Singapore Food Agency (SFA) and Ministry of Manpower [WHO] can create a website for the workers directly affected by the transition to technology in the food production sector with direct courses on digital marketing, enabling workers that are registered on the app to learn new digital marketing skills and still contribute to the F&B business. [WHAT] This is to be implemented by 2025 [WHEN]. The website will consist of a plethora of courses specifically related to possible skills in the same Food and Beverage industry. The website is mainly targeted at workers who are directly affected by the Covid-19, in the reduction of labour most companies are practicing. Workers in positions like service crew, kitchen helpers, chefs and managers are being retrenched and none are taking up these positions at this time. Hence, the courses will consist of popular and important skills like digital marketing, to analyse and design marketing strategies digitally to help the restaurant increase sales. [HOW + WHERE] Thus, having a specific course and website dedicated to retrenched F&b workers will be effective in ensuring that everyone gets a job and the F&B industry can still stay alive. [WHY]

STEP 4a. Select Criteria

Generate criteria to determine which solution idea does the best job of solving your Underlying Problem and/or addressing the Future Scene situation. Select the 5 most important criteria for measuring solution ideas and write them in the spaces provided.

Criterion 1: Time taken

Which solution takes the shortest time to implement so as to ensure that the negative impact on the Food and Beverage industry can be minimised?

Criterion 2: Financial budget

Which solution would cost the least money, making it most financially practical to implement?

Criterion 3: Long-term impact

Which solution would still prove to be relevant and work for the longest time whilst still benefitting the Food and Beverage industry?

Criterion 4: Greatest outreach

Which solution will benefit the largest target audience and generate the most attention for the solution to be effective?

Criterion 5: Manpower

Which solution would require the least manpower to implement, thus making it more resourceful?

STEP 4b. Apply Criteria

List the solution ideas from Step 3 on the grid. Use each criterion to rank the solutions on a scale from 1 (poorest) to 5 (best). The weighting for one important criterion may be doubled if necessary.

Step 3 Sol'n #	Solution Idea	Criteria					Total
		1	2	3	4	5	
#1	Advanced Artificial Intelligence	1	1	5	5	1	13
#2	"Eat Out!" application	3	5	4	4	4	20
#3	"Hawker Go Where" application	2	4	3	3	2	14
#4	Redesign food menus	4	3	1	2	5	15
#5	Digital courses for workers	5	2	2	1	3	13

STEP 5. Develop an Action Plan and Evaluate its Feasibility

Develop your top-scoring solution idea into an Action Plan. Thoroughly explain how the Underlying Problem is solved, how the plan will be implemented, and how the community / organisation will be affected. Explain how this Action Plan is feasible with secondary research consulted, preferably also with primary research (feedback from chosen community / organization)

Action Plan derived from Solution #_2_:

Implementation timeline:

From **2022**, we will **get in touch** with many restaurant chains in shopping centres, as well as eateries and possibly hawker centres all around Singapore to **introduce them to our application** and seek their approval to implement this app. By **2024**, we will **allay all the fears** of our potential resistors by assuring them that the app will help them to increase financial profits in the future, as well as **providing them with a guarantee** that we would account for their losses should their business fall as a direct implication of incorporating our app into their business regime. By **2024**, we will also **successfully conduct courses** at community centres and make visits to hawker centres to **guide the first generation hawkers** on how to use basic technology and how to operate their business with incorporation of our app. By **2025**, our app will be **fully functional** and **ready to be released** to the public to be downloaded on their handphones and devices.

Potential assistors:

A potential assistor would be the **Government**. As the mobile app can encourage people to eat out, it would **boost the economy** through the **increase of profits** in the F&B industry, thus the government would therefore back this measure, which increases support for it. Another potential assistor would be the **majority of restaurants**. This is because the mobile app solution is a measure that will allow them to **bounce back** from the pandemic and help them to increase their profits. This is made possible as the app encourages people to dine out more often, hence **increasing the sales** of F&B businesses.

Potential resistors:

However, a potential resistor to our suggested solution would be **hawkers**. First generation hawkers might be **unwilling to use technology** as it is **unfamiliar to them**, thus they might **reject the idea** of incorporating technology into their food businesses. Other potential resistors are **Delivery services**. The “Eat Out” application reduces demand for delivery services as more people will be encouraged to dine out, thus **decreasing the profits** of food delivery companies, hence these companies would oppose such a move.

How these difficulties can be overcome:

Firstly, the **Government Technology Agency** and the **Ministry of Manpower** can educate the hawkers by **visiting their stalls** and **teaching them the basics** of technological devices and how the mobile app operates, as well as holding **complementary courses** at community centres directed at hawkers to allow them to have a greater understanding of how the mobile app initiative works, thus allowing them to be **less confused** and **more willing** to adopt this initiative in their businesses.

Secondly, the **Ministry of Finance** can offer benefits for delivery services once a month, such as occasional **food delivery discounts** offered to citizens which will convince citizens to use food delivery services for their meals once in a while. This will help delivery services **continue to make sales** just like during the pre-pandemic period, but will not affect the main aim of encouraging people to dine out. This is a win-win situation for both parties, as food businesses will greatly profit from people dining out, while delivery services are ensured that they **will not be redundant or unwanted** in the future.

Why the action plan will solve this problem:

The app provides a further incentive to people to eat out physically at restaurants compared to relying on food delivery or takeaways. This encourages more people to dine out, which boosts the restaurants' **profit by square metre** for every customer that steps into the place. This revenue by square feet is essential and known by all restaurants. It shows how efficient restaurants are generating sales. This is due to the profit ratio of their occupancy of the restaurant to the rent they have to pay for the place. This ratio makes up an essential part in managing their profits. Therefore, when more people make a trip down to the restaurants, restaurants will **make a larger profit**, compared to just relying on delivery sales and takeaways.

When restaurants profit, the food and beverage industry also **does better economically**, resulting in the economy getting stronger. Hence, the government will also profit.

Community investigation: Qualitative Data (Interview with Singapore Food Agency)

SFA CRMS <noreply_CRMS@sfa.gov.sg>
to Chin ▾

Aug 12, 2021, 3:23 PM (2 days ago) ☆ ↶ ⋮

Dear Caleb,

Please see our inputs to your interview questions –

1. What role do you think technology plays in the Food and Beverage industry?

[Technology plays an integral role in the F&B industry especially in today's ever changing environment. It can expedite and enhance efficiency in terms of order and delivery of raw ingredients, facilitate consolidation and distribution, augment food production, ensure traceability, improve product quality and even customise orders for higher consumer satisfaction.]

2. Due to COVID-19, restaurants have been short on manpower and suffered financially. Do you think this will instigate more restaurants to incorporate technology (such as food robots) to speed up their business operations and efficiently operate in the future?

[Potentially yes, the manpower crunch due to COVID-19 restrictions will likely influence F&B business owners to rethink their business models towards adopting more manpower resilient options. There have been many tech options adopted by F&B businesses such as autonomous tray collection robots, robot baristas, omelette making machines and "Scan-Order-Pay" options which reduces the number of kitchen and service staff required. In addition, many restaurants have evolved their business processes through the adoption of technology such as advertising via social media and consolidating orders via websites/apps which would have been tedious to do manually.]

3. Some businesses, especially hawkers, have been reluctant to incorporate technology into their business, for instance food delivery apps like Grab. Why do you think they are reluctant to do so?

[Some businesses may not find the existing tech options viable for their business models. For example, if a hawker wanted to keep prices low by charging \$2.50 for a plate of chicken rice, they may not think that consumers would want to pay an additional \$4 delivery fee as it would push up the cost of the entire meal to \$6.50. This may in turn deter them for signing up with food delivery apps.]

4. Why do you think several F&B businesses suffer losses from incorporating food delivery services into their business operations?

[This would be similar to the example cited in response to Qn 3, viability of the service/tech to the business model. Besides having to deal with COVID restrictions, F&B business face the perennial problem of competition. Some F&B businesses may do better than others because of how they adapted to takeaways which would have allowed them to service new/further customers groups while others may not do as well because of their business model/product type e.g. BBQ, cold desserts, themed restaurants, etc.]

5. Do you think that restaurants will struggle to maintain the quality of food they provide, especially since the duration of delivering food to homes will cause the quality of food to drop?

[Many F&B businesses face challenges in adapting to changes in their operating environment and restaurants likely do too. However many restaurants have been very innovative in rethinking how they conduct takeaways, such as having consumers assemble the final food product themselves (e.g. separating soup from noodles so the noodles do not turn soggy), delivering the cooking apparatus itself (e.g. loaning the hotpot pot), or having strict food conveyance rules to ensure quality (e.g. instructing the delivery person to dispose the food item if not physically received) Operators of food delivery services are also responsible for ensuring that the food they deliver is transported in a manner that is hygienic and does not compromise food safety. This includes maintaining the cleanliness of the vehicle, as well as the carrier bag, receptacle and equipment used for the transportation of food.]

6. Finally, why do you think that leveraging on technology will/will not benefit F&B businesses in the future?

[Leveraging on innovative technologies would benefit F&B businesses as it would better aid these businesses in adapting and responding flexibly and efficiently to further changes in the future, even when faced with resource issues or changes in consumer demand.]

- From our interview, we found out that **technology plays a huge role** in the Food and Beverage industry and is essential in **improving efficiency** in the kitchen. The COVID-19 manpower shortage situation in F&B businesses has indeed stimulated F&B owners to **incorporate technology** to help with manual labour and lessen the manpower needed. While technology is still integral in helping F&B businesses to **efficiently gain profits**, there are several businesses, including hawkers, who **do not profit from technology** such as food delivery as it is **not a viable option** in their business operations. This dispels the belief that all F&B businesses profit from food delivery services. Furthermore, F&B businesses have **added responsibility** to ensure that the quality of the food remains high after a delivery, as the food may get soggy after an hour or so. F&B businesses also face a struggle in coming up with new innovative methods to **maintain the quality** of their food lest they receive complaints from customers regarding low quality food.

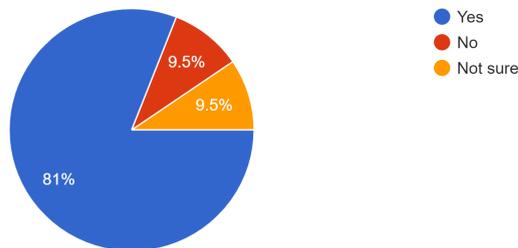
Community investigation: Quantitative Data (Research)

- According to an article by CNA, it explains about the situation of dining out here in Singapore during the pandemic. It shows how delivery alone is **not a sustainable source of income** for restaurants to solely depend on. It was shown that deliveries that only make up **30 percent of sales**, said Pho Stop's co-founder Tomy Chen, while the remaining 70 percent come from its dine-in spot at Downtown Gallery. At Ka-Soh's two other outlets in Bukit Timah and Outram, owner Mr Tang said that deliveries and takeaways made up only 20 percent to 30 percent of sales.
 - This shows that 5 years from now, the f&b industry **requires assistance in enticing people** to dine out in order to stay relevant. Hence, this is a great chance for us to give the F&B industry a **good nudge in the right direction** through our dining-in initiative. Hence, there is a chance that a larger proportion of restaurants would support the initiative to give themselves the boost in profit, and prevent reverting back to a delivery dominant industry again.
- According to research presented in an article by Straits' Times, on the effect of delivery only on high end restaurants. For example, Picanhas', a steak restaurant in Club Street, is looking at \$8,000 to \$12,000 worth of **perishable ingredients** that need to be used up, or The FOC Group, which runs Spanish restaurants in Hongkong Street and Sentosa, says it is looking at thousands of dollars' worth of ingredients it cannot use for its takeaway menus. Restaurants are all **expecting huge losses** as they have already ordered ingredients such as seafood to cater to the dine-in crowd and cannot use them for delivery.
 - This shows that in 5 years time, since the Covid-19 is endemic, the situation of ordering less expensive ingredients and having to cope with unsuitable food for takeout may become the norm, changing their whole restaurant operations even though dining out is available in future. Hence, with the dining out initiative, high end restaurants will definitely see a **huge boost in sales** and shift their focus back to dine in food and resume normal and comfortable operations.

Community investigation: Survey analysis

Do you think that COVID-19 has sped up the incorporation of technology into the F&B industry?
(eg food delivery, cashless payments)

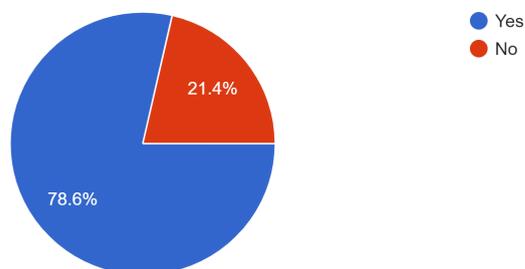
42 responses



- A large majority of our respondents (81%) feel that COVID-19 has led to **more F&B businesses incorporating technology** into their business operations. This could be because F&B businesses operated at lower efficiency and experienced manpower shortages during the COVID-19 period, leading to many businesses opting to use some technology (aka kitchen robots) as a viable solution for **efficient service and affordable wages** in the future.

With the rise of technology in the F&B industry, do you think more and more people currently working in the F&B industry will lose their jobs?

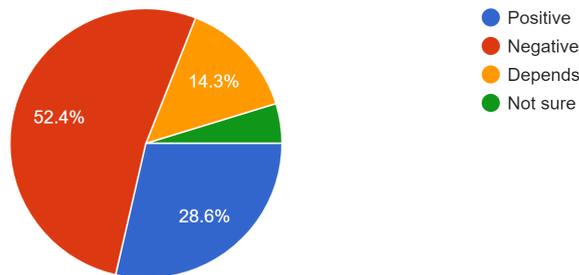
42 responses



- In relation to our previous question, the incorporation of technology into F&B businesses could lead to a **loss of jobs for many workers** of manual labour in the F&B industry. This is noted in our Challenge 2 as well.

Do you think Food Delivery services has a positive or negative economic impact on F&B businesses?

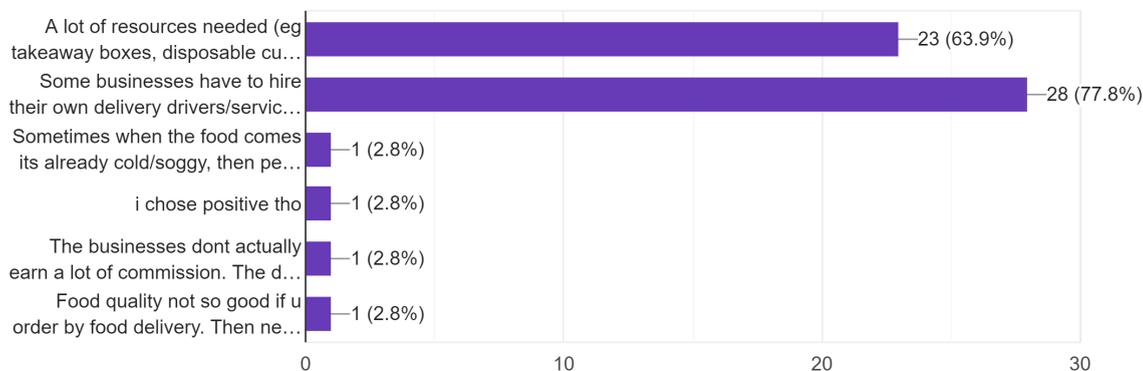
42 responses



- Slightly more than half (52.4%) of our respondents agree that food delivery services have a **negative impact on F&B businesses**. While we concede that several F&B businesses do economically benefit from incorporating food delivery services in their business operations, there are still a handful of businesses who instead **suffer losses** when they incorporate food delivery services into their business operations. This challenge is in relation to our Underlying problem, which is how we F&B businesses can leverage on technology without compromising on revenue.

If you chose "negative" as your answer, could you explain why?

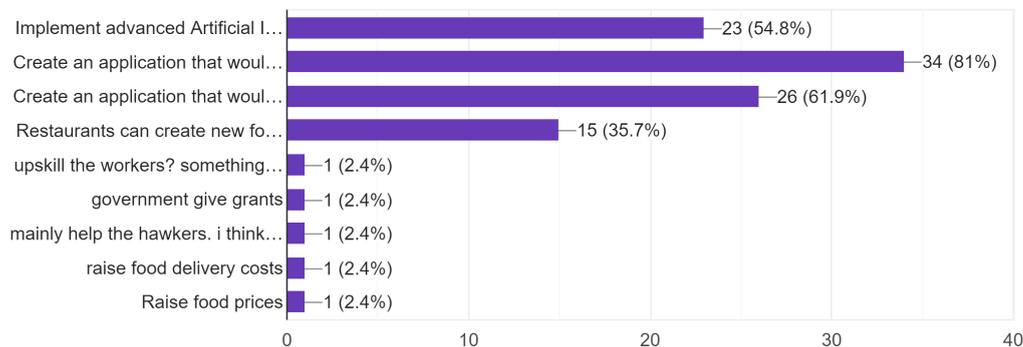
36 responses



- Majority of our respondents feel that F&B businesses suffer economically when they incorporate food delivery services into their business operation because of the **additional resources required** (e.g. takeaway boxes) and, more prominently, having to hire their own delivery drivers. Another possible reason stated by one of our respondents is that F&B businesses **do not earn a large percentage of commission** from the extra money paid by consumers for the food, as the majority of the money goes to the food delivery service, thus F&B businesses suffer losses instead.

Given that many F&B businesses are generating lesser profits as technology (eg food delivery) gets incorporated into the F&B industry, which of the following F&B businesses continue to operate at a profit?

42 responses



- The question we asked was “Given that many F&B businesses are generating lesser profits as technology (e.g. food delivery) gets incorporated into the F&B industry, which of the below solutions do you think will be able to help F&B businesses continue to operate at a profit?”
- The most effective solution to allow businesses to continue operating at a profit is to create an application that would **encourage people to dine out** more often. A staggering 81% of our respondents picked this as a viable solution. More than half of our respondents also feel that implementing advanced Artificial Intelligence into restaurant systems to help restaurants analyse their sales and maximise profits as well as creating an application that would **expose hawkers to technology** and allow them to have a greater reach to customers would be viable solutions to allow F&B business to continue operating at a profit. This renders Solution 1,2 and 3 practical, and shows that our chosen solution for our action plan is very feasible as well.

Consultation with organisation regarding our action plan:



SFA CRMS <noreply_CRMS@sfa.gov.sg>
to Chin ▾

Sat, Aug 14, 12:57 AM (2 days ago) ☆ ↶ ⋮

Dear Sir/Madam

Thank you for contacting the Singapore Food Agency.

We will respond to :

- general enquiries within 3 working days
- complex or case-specific issues that require further assessment and review within 15 working days

We seek your understanding that cases that require investigations may require more time to be completed.

Please keep your case number, SFA-20210814-0003, as reference in your future correspondence with us.

We wish you a pleasant day.

Yours sincerely,
SFA Contact Centre

Enquiry Submitted

Dear Sir/Mdm,

We are a team of Secondary Four students from Hwa Chong Institution working on a project to investigate the effects of Covid-19 on the Food & Beverage industry. This is a follow up email from case number SFA-20210807-0046. After analysing your detailed responses to our interview questions and doing extensive research, our team has crafted an Underlying Problem with regards to the challenges the Food and Beverage industry has been facing due to COVID-19. We have also come up with a Solution as well as an Action Plan to answer to our Underlying Problem. As our Action Plan involves the Singapore Food Agency as the main organisation carrying out the Action Plan, could you help us vet and provide some detailed comments about the feasibility and flaws in our Action Plan? This would help us to understand the viability of the Solution we came up with. Attached is a link to the document of our Action Plan.

<https://docs.google.com/document/d/1SEOWB55PBpjH8pBwQS5avDWgfw0rKtbvpUquW65qQVs/edit?usp=sharing>

We have also included a PDF version of the document under the "Attachments" section in case the link above cannot be accessed. Feel free to type out your comments and email it to us if commenting on the document is troublesome. We hope to hear from you!

Yours faithfully,
Caleb Chin
On behalf of Yeo Yue Long, Loh Tai Kiat and Gan Rui Cheng

- We have contacted the Singapore Food Agency to review our Action Plan on Friday (13/8). However, we have not received a reply from them before the due date of the written report. We will include their comments in our Final Evaluation presentation should they reply to us.

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Cite the resources you consulted using the APA format.

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