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College of Management

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**AI-Enabled Marketing Plan**

**TP TEA**

IM3011 Marketing Management

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## 1. Executive Summary

We hope to sell not only tea but also happiness to our customers. Thus, feeling AI and machine learning become the most important techniques to help us grab the existing customers and promote our product to potential customers. We can find out our opportunities by analyzing behavior together and preference data. This will help us find our customers and determine our potential competitors. Based on that we can develop a competitive business plan with the advantages we have. We hope to make good uses of AI as a powerful tool to help us conduct marketing strategies and execute them.

Feeling AI would be a vital assistant combined with self-ordering machines to finish most of the processes in TP TEA stores, so that HI can pay more attention on delivering and providing better services to customers. In addition, insights and rules would be determined by human intelligence based on the machine learning analysis results. In this marketing plan, we tend to use AI to improve our services, and provide our taiwanese tea in more relational way.

## 2. Market Opportunity

### 1. Customer analysis

#### a. Existing customers:

Our existing customers are those who enjoy Taiwanese tea and hope to get it easily. They may be busy office workers, students, or anyone who likes Taiwanese tea. Thus, instead of buying a beverage in convenient stores, they may prefer buying a cup of tea in TP TEA stands which are famous for their high quality products and human touched services with an affordable price.

Almost every process including ordering, making tea, delivering order, the supply of material are now done by humans. The staff in the TP TEA stands is trained to give a warm smile to every customer.

- i. Self ordering machines could be applied, so that customers can order their teas only by their voice (based on conversational AI like Amazon Alexa) and the system would record their preferences by recognizing their faces and give them some hot recommendations of new products in new seasons.
- ii. Feeling AI is also used in the self ordering machines. By recognizing their faces, we can combined the weather with their personal preference data and other related data like mood, and provide them a cup of tea with proper sugar and ice level.
- iii. Feedback system built in the mobile app can help collect customer feedback on the services and tastes of the teas that they ordered. NLP/affective chatbot in the app can help solve customer problems and

ask for feedback. Those data can be analyzed with sentiment analysis and help us find out what most of the customers like to know and how we can improve our products. Some personalized adjustment can also be done based on the information given from customer's order history and feedback.

b. Potential customers

Potential customers may have ordered cup of tea in other tea shops in the past, and they may find better teas at TP TEA.

Other tea shops and tea stands have human staff to provide new product samples around the tea store to attract more customers.

- i. We can buy advertisements on youtube, facebook, instagram, and companies collecting data from users and discover user habits and preferences, so that we can target to those users and send them our advertisements.
- ii. We can also use services using AI to find the right influencers(based on their followers) which can promote our products.

2. Market analysis

- a. We can acquire data through surveys and collect data from lots of people who have bought a tea from TP TEA or other similar tea stand. Furthermore, we gather their preferences and find some special insight by analyzing huge amount of data to find out our advantages.
- b. Data that we need might include the service that the potential rivals provide to customers, the menu and taste of their products, the design of their tea stands, the discounts they may provide, their advertisements and more.

### 3. Marketing Strategy

1. Strategic positioning: We will use **relational service strategy** as our main goal is to have satisfied customers by providing high quality tea and services to them. AI kiosk in our ordering process will interact with our customers and provide better shopping experiences. This can be connected with our app to also show some recommendations and provide different payment options to the customers. We would also record customers personal preferences and mood data in order to provide relational interactions when ordering. Additionally, we would send personal advertisements to our potential customers for creating more opportunities.
2. Segmentation, targeting, and positioning (STP)
  - a. Segmentation of the market: We would like to provide high quality beverages with a little higher price then what our competition offers. So our main segmentation criteria are quality and price. We want to go a bit into the luxurious market segment rather than the budget segment.

- b. Target customers: people in all ages, genders, but with higher income and may be busier in their daily life.
- c. Value proposition:
  - i. Coming up with innovative/revolutionizing tastes.
  - ii. Maintaining high quality of our teas.
  - iii. Saving customer time when buying teas.
  - iv. Delivering better customer experience.
- d. Competitors and advantages: Our competitors are existing tea shop chains together with some small independent tea shops in Taiwan. Our advantages include:
  - i. Thinking AI can help us provide relational services and teas to customers, and they would feel more comfortable and delightful when buying a drink.
  - ii. Our products tend to be a little more expensive than other tea stand but would be higher quality due to AI implements mentioned above.
  - iii. We provide services like multiple payment options, multiple channels for ordering and giving feedback or solve problems, and self-ordering system with pre-ordering functions through the app which save their time.

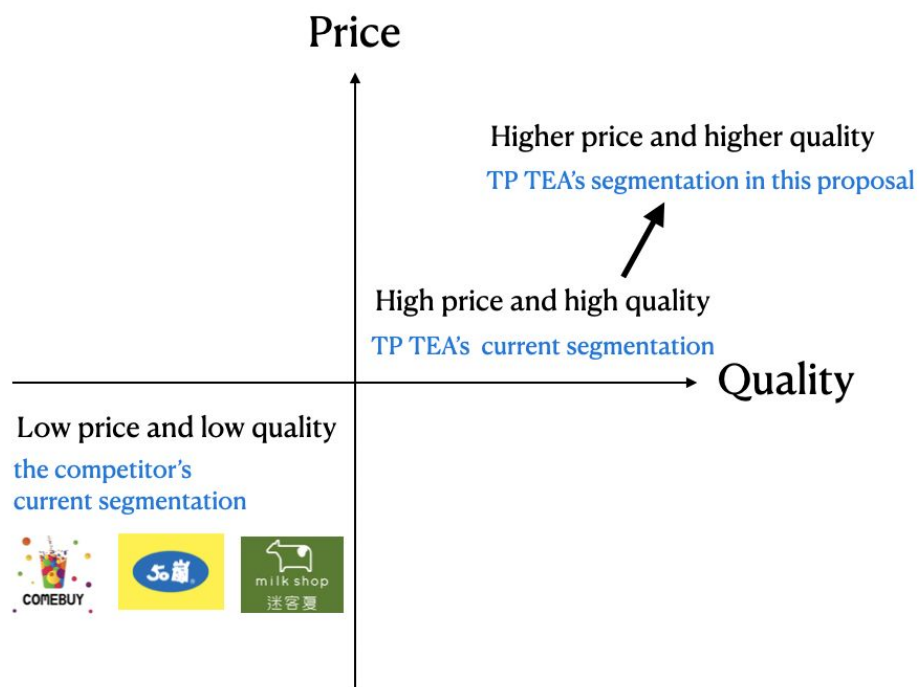


Figure 1. segmentation: high price with high quality products.

## 4. Marketing Action

### 1. AI / HI portfolio:

In assessing the AI/HI portfolio we have extracted all the necessary tasks to run a TP TEA stand and evaluated their HI/AI demands. An overview of the division can be found in Table 1. The upper four rows are functions in the frontend, which directly interact with customers. As TP TEA wants to give customers a high level of services we need to focus on building up relationship with customers. So in the order and delivery phase emotional intelligence is very important, because these are the main touch points with the customer. However in the backend, which are the latter three rows, TP TEA should place emphasis on AI to do marketing, supply management and customer service since AI outperforms HI in these parts.

Functions \ Intelligence	Human Intelligence	Artificial Intelligence
Ordering/Pre-ordering	+	++
Payment	+	++
Preparing	+	++
Delivering	+++	.
Marketing	+	++
Supply management	.	+++
Customer Service	+	++

Table 1: AI / HI overview table

Furthermore, we have visualized the individual tasks in the figures below.

#### a. Ordering/Pre-ordering

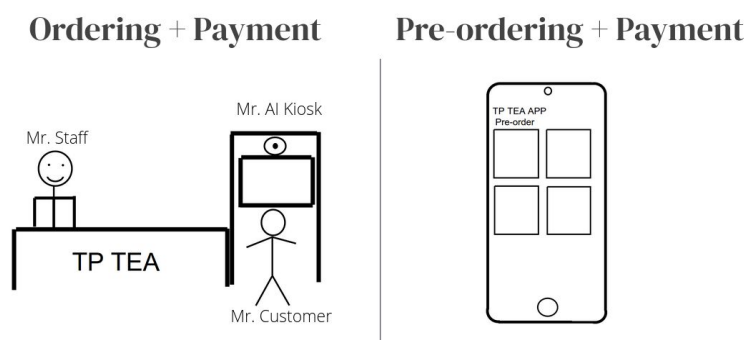


Figure 2. Ordering and pre-ordering

The TP TEA stand will use AI Kiosk to handle the ordering. This can be done either through the AI Kiosk or the mobile app. Pre-ordering will enable the customer to pay in app and schedule the pickup time of the ordered tea for a certain time. In this case his order will be prioritized and upon arrival he would be able to pick up the tea by scanning QR code in his app. If difficulties while ordering or technical problem occur then the staff can help the customer to solve the problem and eventually order through HI.

b. Payment

Payment will be done within the AI Kiosk or the mobile app for better customer convenience and in order to enable the stand staff to focus on the delivery part and interaction with the customer. The HI can handle the payment if there would be some technical problem with the AI kiosk or the app.

c. Preparing/Making

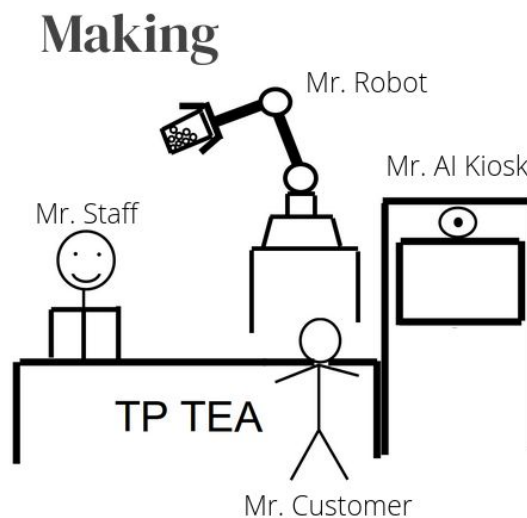


Figure 3: Making of the tea

AI will be used also in the case of making the tea. This decision is done in order to keep and standardize the quality of TP TEA across the stands. Furthermore, this will allow for increasing the hygienic standards by eliminating the need for direct physical interaction with the staff. This can help in times when diseases are spreading like the recent Covid-19. Another key value of AI in the making process is its speed and efficiency. As it will never forget an ingredient and can work tirelessly nonstop without increasing the time to make one tea.

d. Delivering

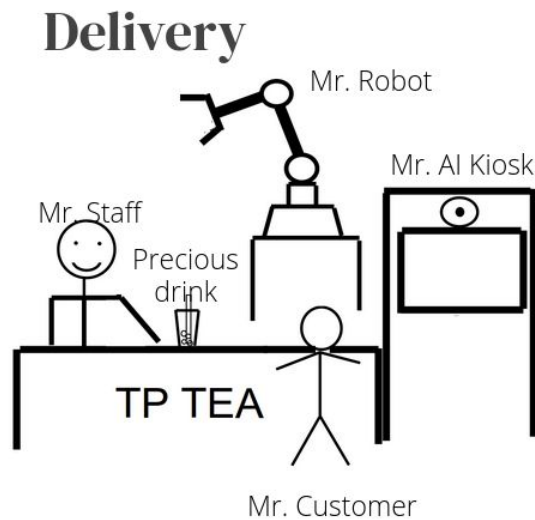


Figure 4: Delivery of the tea

The delivery part is handled by HI in order to add a human like touch to the whole process. The HI can also interact with the customer while he waits for the drink to be made. The HI will get brief information about the customer from the AI kiosk or from the app so he can address the customer by name and have a sense of customer mood.

e. Marketing

HI and AI are going to cooperate in marketing, where AI will be responsible for analysing and HI for decision making. Thinking AI will first conduct thorough marketing analysis based on data collected from Mechanical AI then human business analytics make decision based on AI analysis.

f. Supply management

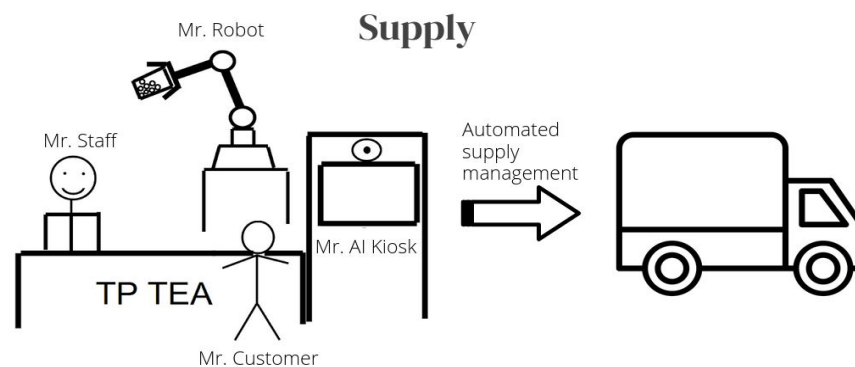


Figure 5: Supply management

As the process of making the tea will be in the hands of AI, the stock revision, prediction and ordering of supply can be automated so that the HI will have not to keep track of it.

g. Customer service

## Customer service

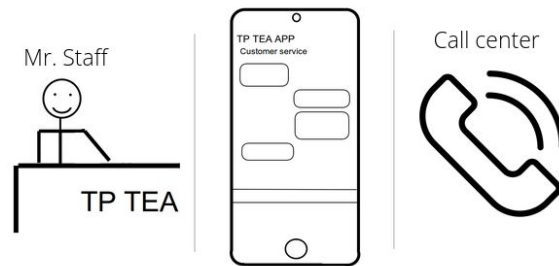


Figure 6: Customer service

Customer service in lot of cases works with emotions as the customers are usually frustrated from encountering problems or angry, because there is something wrong or not as expected. So we would like to have HI in the first line to help the customer solve the issues right at the stand. Furthermore the TP TEA app would include a chatbot with NLP/affective recognition to effectively handle the issues. In case of more serious problems a phone number will be available where an operator with the help of Cogito can handle the issues. But as we don't assume there would be lot of serious issues requiring calling, then the focus will be mainly on the in app customer service chatbot and the HI at the stand.

## 2. AI Intelligence

### a. Mechanical AI

- i. Robots arms: Since making teas is a standard procedure, TP TEA should use robot arms (mechanical AI) for standardizing. The benefits of robot making tea are fast, owing to robots will not be tired, and it is also hygienic, which is especially important in the coronavirus pandemic situation.
- ii. Automatic payment: this function should embed in our mobile app, customer only need to register an account and bind their credit card or other payment methods then they can pay automatically. When they order some tea, the kiosk will request payment toward their account. just like how uber or ubereat does it. Automatic payment is fast, simple and also quite important now since people want to keep a social distance from each other.



- iii. Facial recognition: In order to build up relationship with customers, TP TEA have to recognize them first. Facial recognition embedded in AI kiosk is the solution. Customers need to register accounts with their face and our database will store all the information of customers we have. Next time customers come to our stands, the AI kiosk or staff can recognize them at ease and can greet them just like people see old friends.
  - iv. Customers data collection: Mechanical AI gathers data from TP TEA mobile app, sensors in AI kiosks, feedback from customers, etc, at a regular time. These data enable further thinking and feeling AI analysis as well as implementation.
  - v. By utilizing mechanical AI in the above functions, the clerks in TP TEA can engage more in customers interaction and thus reinforce our relational service strategy.
- b. Thinking AI
  - i. Predictive model for supply management: by analyzing the data mechanical AI collects, TP TEA can design several thinking AI model for predictive supply management. The model will help managing the inventory of each tea ingredients and thus prevent under or over stocking. It can also predict overall customers consumption pattern and can optimize HI scheduling.
  - ii. Innovative tea: a thinking AI can combine sales statistics and tea making records to find out what general customers like to drink. Then it can create new tea flavors based on its analysis, which may be some drinks humans can never come up with.
  - iii. Tea recommendation: using customers buying history to personalize tea recommendation. If customer order teas by AI kiosk, the feeling AI will suggest them to try the recommended tea and will provide some minor discount if they order it. If the customer orders through the staff, then he can get tea sample to try the recommendation. The accurate tea recommendation can spur consumption and also enable relational service by letting customers know we understand what they love.
- c. Feeling AI
  - i. Feeling AI will be used within the ordering kiosk. This AI will recognize the customer, assess their mood and chat with them a little bit. This data will be then send to the staff delivering the tea, so the staff can address the customer by name and cheer him up if the customer has a bad mood.
  - ii. NLP/Affective chatbot will be used within the TP TEA smartphone app to provide customer service. Otherwise the customer service will

be provided by HI available at the tea stand. Moreover Cogito can be used to help handle customer calling through phone call.

## 5. Reference

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Supply management: [https://www.youtube.com/watch?v=ypEsI\\_en5fs](https://www.youtube.com/watch?v=ypEsI_en5fs)