

University of Michigan - Understanding and Visualizing Data with Python

1. Determine what will be your pizza company's strength. Do not select service time as measured in the previous example. Perhaps it could be about cost, or something regarding pizza ingredients/toppings/options, or it could focus around customer satisfaction, etc. Be creative! This step will help you form your proposed research question.
2. Then, determine your proposed research question. The question should align with the strength of your company and the answer to this question should be able to be used to make the company stand out from the competition in its upcoming advertisement.
3. Next, determine *what* data you would need to collect to help answer the research question and describe *how* you will collect/measure that data.
4. Then, based on the type of data that would be collected, determine what graphical and/or numerical summaries would be appropriate to help answer your research question.
5. Finally, draft your memorandum for the small pizza company's CEO, who has the basic statistical literacy needed for reviewing your written study proposal. You should not include your name on the assignment (to keep the peer review anonymous).
6. Your memorandum is expected to be between 350-500 words (excluding header, footer). If you need a review of what memorandum (or, "memo") format looks like, here are some references:
https://owl.purdue.edu/owl/subject_specific_writing/professional_technical_writing/memos/index.html
https://owl.purdue.edu/owl/subject_specific_writing/professional_technical_writing/memos/sample_memo.html
7. After your draft is complete, give it a final proofread/review.

The pizza company strength

From the question and selective criteria for this course the pizza company's services depending on coverage area, time with satisfactions, pizza food and combination, promotion and seasonal active campaign, customer royalty program and customer relationship management program. A new creative way in Thailand is to create attention bug for promotion renewable orders for customer to order some seasonal dishes menu or combination whenever they want. This seems to work as leaks mistake of developer and spreads on groups of IT and education related communication and wide spread across automatic systems. I have experience someone try to automatic order food with similar menu repeating, we are not filter only costs, action, merchant, sources and items but reasonable too.

(1) 🍕 x 1 🍪 x1 🍫 x2 ATM

(2) 🍕 x 2 🍪 x3 🍫 x1 ATM

(3) 🍕 x 1 ATM

(New) 🍕 x 100 ATM !!

The new strength of the pizza company is their food deliver always have target or they are desirable by people. This food can deliver to children or senior hands when it is overdue or cancel or deliver had this food and share with friends or learn about the method, they made to help promotion by bake pizza at home. Food and kind services always acceptable by any house.

The purpose of research question

We are study of queue delivery and value of the order when they are baked and release promotion campaigns are active and recognized by customers and potential customers. One pie of pizza creates enjoyable to family when they are working on house cleaning during weekend or IT team working overnight for new project campaign release in time of the business line target. They had more value when it is lack of time for transporting or it can carry by hand when all tasks are setup and working as plan and create local values such as soft-drink, candy, ice packs, and snacks they are setup table together.

Higher values are customer recognition and it is in the top list of delivery menus and carry by hand menus and fast turn table setup menu if the pizza company create a good relationship with the customer. From the historical the pizza company in Thailand start at a restaurant opposite of Thailand banking office before new business pizza company opened at Central Rama II and create of new business Pizza Hut, 13th coins restaurant and Narai Pizza and trends create Domino Pizza and more. First start with bakery restaurant where they are films movies because of the street is not like any place in Thailand because they had sideway of the road and blocking as in some country. The special for this place is no many people know even it is in middle of the city and surround by large building area and companies with connected roads and fast lanes street.

The values of restaurant are more than selling food or delivery but customer satisfaction and some restaurant had storytelling and known place for people and family when they are also a place for waiting for someone or events in the past. I had a chance again to visit there when I

go to Thailand bank for visit my thesis reference working at Thailand bank and I recognized of the story once I see of the street and sideway of the road that I never visit of this place again after I had age older than 4 – 5 years. There are many kinds of restaurant open today and we are not selected frequently pizza a delivery menu but about time a pizza company survive and they are become one of our favorite choices again when we found staying at home during weekend with family is a kind of happiness. 

A pizza restaurant or a pizza company can have their history and matching activities for people and family that they do not need to create more services and cost cutting fight in the market.

Data Collection

In this research data collection is delivery order and customer satisfaction when social media and conversation in public is wide and need time to create filter and re-formatting. Order to questionnaire or surveys can be lunch but for creative campaign we are planning to collect of working project or activity you are working when you order the pizza and campaign. This is straight to the point that we need of the activities and orders to determine of how much and what types of pizza you order. This plan is simple and direct but it creates follow up by challenging project with pizza domino games and many positive feedback campaigns and pizza order hacking is one of the campaigns at that time.

We are not support of cross team order pizza challenge because of food has values but the initial information can create new campaign the data gliding campaign. A puzzle campaign to find conversation topics about pizza order and message because carrying message is not costs and can maintenance by system with puzzle algorithms. When order the pizza we provide one code as communication room and everyone had information from this room can leave messages for thank you can conversation with room meeting owner privately or within group. To prevent of dividing communication a message is print out and deliver with the pizza delivery next time we group from information with the code and password to unlock of the message. The unlock message codes can have multiple layers or multiple passwords and they can unlock to multiple messages from the same message depending on the password code they own.

The communication game creates by the leave the message and challenge of anyone can resolve it when there are multiple of passcodes and they can try with their own passcode or in group passcode to unlock of the message. The communication games are saved and there always had master code for police to safe every people that is not criminal actions but communication and public lockers we found today. You can spend your weekend with pizza when figure out what is your friend favorite actors and create of your response and this message will reply backward and forward multiple times to see that is correct answer, they setup at the game start or not?

Data collection is activities and influence action or event create of their order.

Graphical and numeric data for this research

We can instant create graphical of activity categorize and mapping category we focus to determine of the active campaigns effective. Further we known about communication games we known about their area or work, occupation and friends' relationship that help us to find the trend of their favorite and activities they are interest. We can create decoration or smart message response for some topics of interest or social public activities that sometimes is not consume a lot of costs but create effects such as gearing or create costume for your pizza deliveryman online or items. Questionnaire or smart topics or assistance people who need help about internet social or exchange skills and conversation. Online wallboard or scores and badges can deliver to online account data for donation or assistance activities that is more than give away money but asking for help for actives that can exchange with an order menu.

For myself working online sometime they are not protected and many of job they posting are not paying at work labor rates or hourly. Pizza exchange is a good method for develop of communication because of there is some badges and royalty development.

When people talking about work from home job or online job that is not always a facilitate say that some job is not a skills job or some job is IT duration job that may work about 2 days but the pay rates is setup with no control about 500 Baht. Develop of communication can help because of job seeker still require a job and the payrate is unfair.

Information to display has many phases by categorizes or order input parameters and interactions and development of campaign and feedback, social and public recognition, trust and relationship development and games or community exchangeable.



Memorandum

To: Miss Alice

From: Research study advisory requestor.

Date: June 14, 2024.

Subject: Request an advisory for the research and study.

There is a requirement from business department to raise of the product values and brand recognition with new in trend technology to support of new generation interesting and open data platform. The business team will provide business requirement for the IT process and working together thought out the project with satisfaction return on number of customer satisfaction and brands recognition will be increase in short term and long term about 0 – 6 months and 1 – 3 years after the campaign lunched and hit the setup target measurable criteria. The criteria are increase in brands recognition 20% from current rates and customer satisfaction positive rates at least slightly increase in number for that period more than 6 months.

Objective of this project is to base on the current campaign and resources but development from the system with new capacity from the same resources of the previous project by adding message communication games with ability to encryption message with passcode for several message generation and create of communication room and topics when data collection from activity, occupation and favorites. Communication creates of positive and negative story but from categorized and monitoring support of the statistics will provide social, activity and community development to added value of communication and create of customer royalty program with social help and support activity by brands recognition and path recognition such as badges and costume comment games and items for pizza deliveryman and restaurant decoration.

Conclusion data collection and feedback action design with creation of monitoring system and development of dataset and communication method, working with social media and community engagement and activity from customer. Development of customer royalty program.