Numbers are sections, letter a),b),c) are just examples for contents from our proposal

1 Introduction

1.1   Background Information

a)   McDonald's status as a fast-food giant in industry; <mark>mission & vision stuff</mark>

b)   Traditional marketing effort by McDonald

c)   Past innovative ideas in operations used by McDonald to stand out (maybe send out toys

with happy meal)

1.2   Current Situation

a)   Competitive environment in industry – competitors

b)   Industry is moving to marketing 4.0 era – digital marketing

1.3   Problem

a)   Traditional way – costly and imprecise

b)   Gap emerges – Lag behind by the era and competitors are adopting this

2 Project Idea

2.1 Description of project

   a) <mark>'Smart Mc' idea –new ways of mkting, new ways of servicing.</mark>

   b) <mark>Achieved via Messenger chatbot.</mark>

   c) <mark>The idea brings in new marketing strategy along with new service experienc</mark>e

2.2 Features

   a) <mark>Low cost</mark>

   b) <mark>High engagement rate</mark>

   c) <mark>Precise</mark>

   d)<mark>…..</mark>

2.3 Comparison with existing system NEW ONE

   a) briefly state the current status of Taco and Domino.

   b) identify the difference

2.4 comparison with existing McDonald's applications

3 Feasibility

3.1 Technology wise

3.2 Market-wise

3.3 Finance-wise and Policy wise

4 Benefits

Cope with features

5 Implementation

5.1 Establish chatbot system – including design, testing, maintenance

5.2 Manpower training

5.3 Trial and revise

6 Execution

6.1 Full function online with mkting, order, feedback etc.

7 Breakdown of cost/finances

8 Conclusion

9 Annex

10 References

ES2002
BUSINESS COMMUNICATION FOR LEADERS (BBA)

Project Assignment

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Introduction

1.1 Background information

As a leader of the fast food industry, McDonald's has always strived to modernize customers' experience and broaden accessibility to their brand so that consumers will enjoy maximum McDonald's experience. As seen in their iconic "I'm lovin' it" slogan, customer service has always been their core focus. However with the evolution of advertisement, there is a shift in the tastes and preferences of consumers. As such, McDonald's needs to reinvent its marketing strategy to not only appeal to but also retain its customers.

1.2 Current situation

With the advent of new technology, digital marketing has become the main channel where businesses advertise their products and McDonald's is no doubt one of them. In fact McDonald's current marketing strategy is a combination of digital marketing as seen by the adverts on social media platforms such as youtube and traditional marketing as seen by advertisements on televisions etc. However, despite the prevalence of digital marketing, its effectiveness does not just come from advertising through technological mediums but also from creating an interactive approach that is personalised to each user.

1.3 Problem

Over the years, McDonald's has spent over 2 billion dollars on advertising including advertisements on TV, paper media and online virtual network with little review (Vranica, 2017). While Mcdonald's is currently being recognised for its effective marketing campaigns, there are still opportunities to increase the effectiveness of their marketing dollar (QSRWeb, 2018). The current problem is that they are not fully maximising the potential of digital marketing and achieving the best possible marketing strategy especially when technological advancements such as artificial intelligence and

machine learning are available. Thus, McDonald's needs to reinvent its marketing strategies and an actionable approach is through a "Smart McDonald's" concept which utilises chatbot to create an interactive advertisement channel that adds a personalised touch to our digital marketing.

Project idea – 'Smart McDonald's'

2.1 Description of 'Smart McDonald's'

Aligning with McDonald's 'retain, regain and convert' growth strategy, 'Smart McDonald's' concept is an up-and-rising way of marketing and a comprehensive way of servicing through Facebook Messenger Chatbot.

Chatbot is a form of artificial intelligence which conducts a conversation with customers via auditory or textual messages. Various features can also be integrated into the chatbot to allow customization of the chatbot to achieve its purpose. For our chatbot, we included both new features and an improved version of McDonald's existing initiatives. As such, the added features together with the interactive nature of our chatbot can not only improve customer service but also allow McDonald's to extract relevant information from customers' activities on the chatbot. These data collected are then stored and analyzed with the help of machine learning to carve out personalized menus for each customer and aid in the implementation of customized promotions and deals.

Hence the Smart McDonald's idea renovates and addresses two areas of marketing: advertisement of products and brand marketing through improved customer service. This new marketing strategy can then help us regain lost customers and convert casual customers into raving fans.

2.2 Features

1) McPedia

McPedia includes all general information about McDonald's such as operating hours and frequently

asked questions with answers. It increases McDonald's efficiency in handling non-core activities

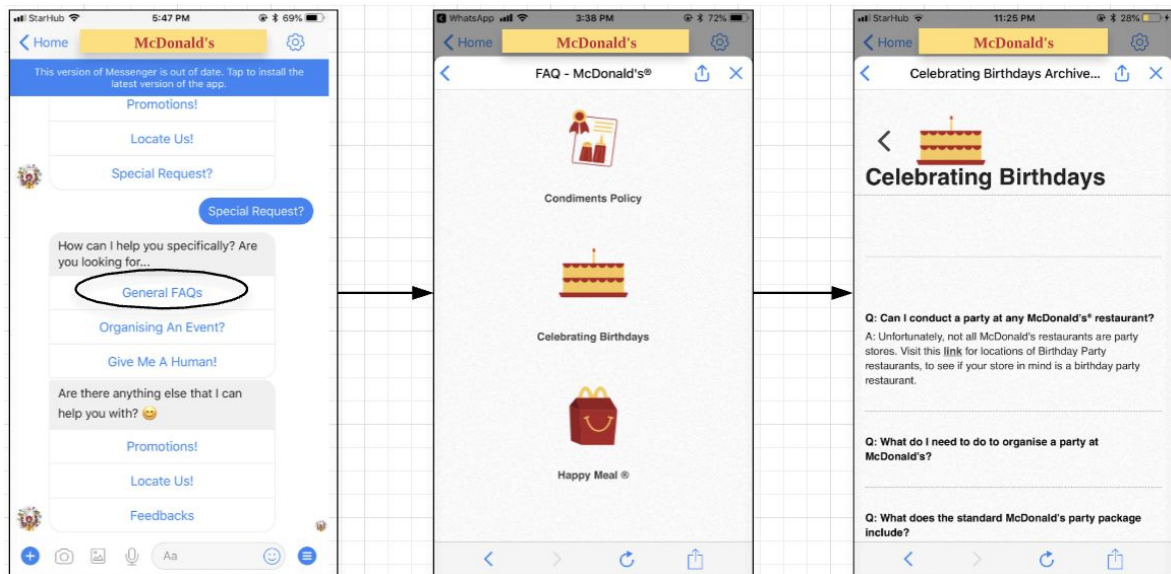and improves customer service.

Figure 1: Showcasing various FAQs in the chatbot

Customers can just click on 'General FAQs' to be redirected to a page which classifies questions

under different categories such as 'Celebrating birthdays' or 'Happy Meal'. Tapping any one of the

components would direct users to a list of FAQs and the answers would be shown accordingly.
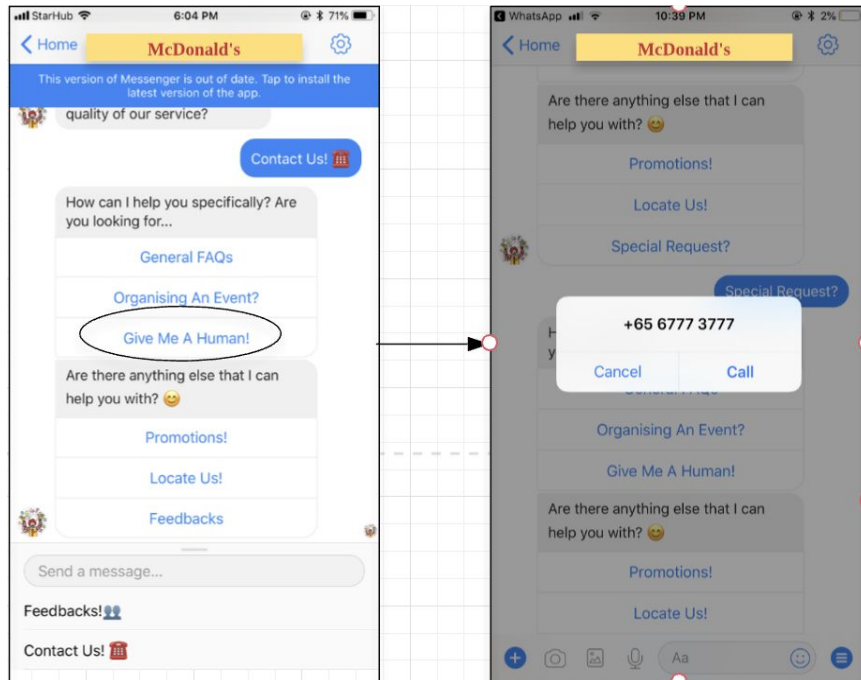
Figure 2: Showcasing a scene where users clicked on "Give Me A Human!"

For those who require detailed enquiries, a 'Give Me A Human!' button is designed so that our customers can be directed to a real-time helpdesk with just a single click. No typing of phone numbers is required.
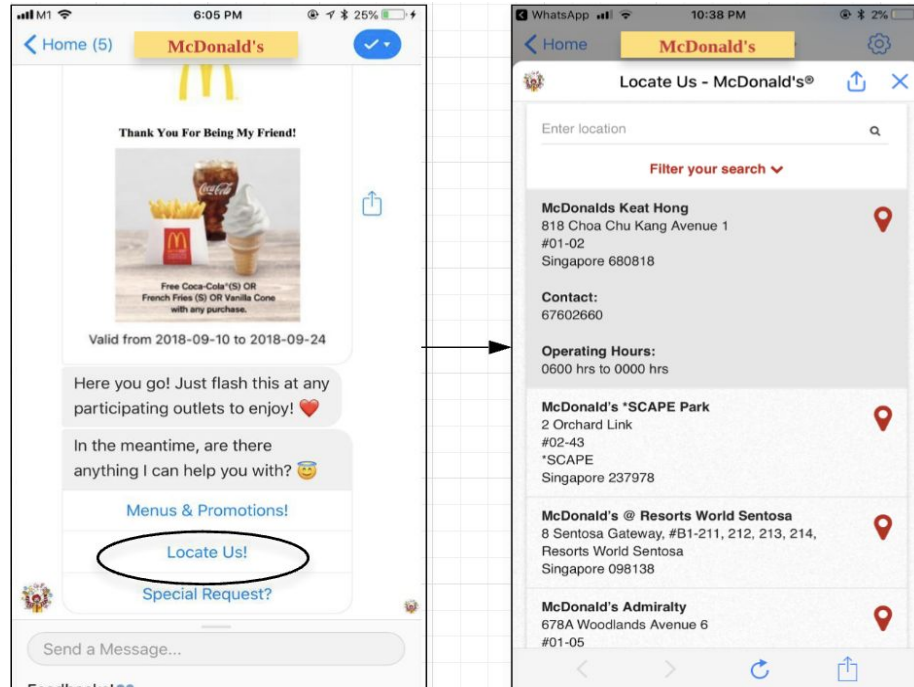
Figure 3: Showcasing the 'Locate Us!' function in the chatbot.

Also, users can just click on 'Locate us!' to be redirected to a page showing different McDonald's outlets where necessary information of each outlet such as proximity and operating hours is displayed.
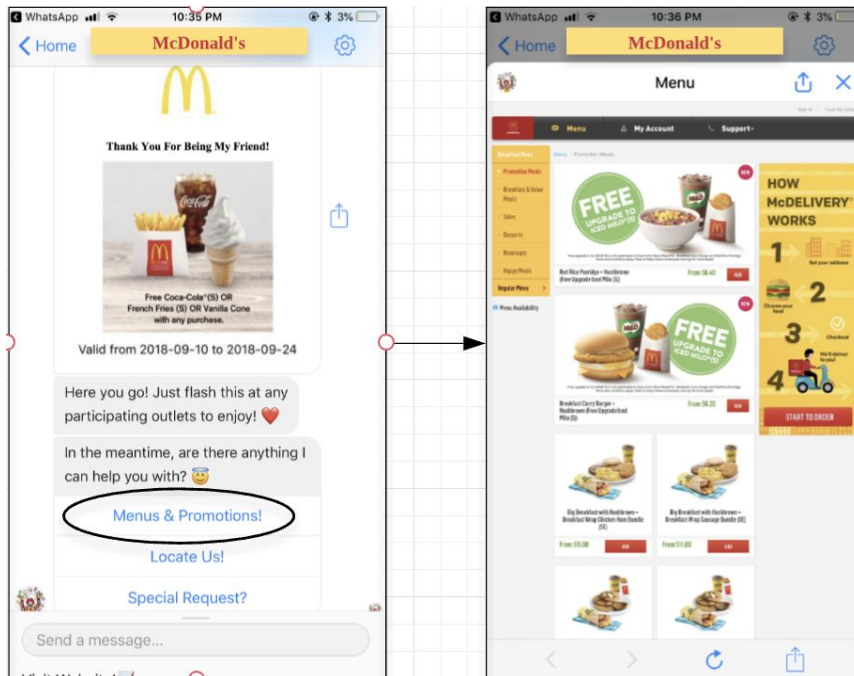
2) **Online Delivery System**

Figure 4: Showcasing the "Online Delivery System" of the chatbot.

The chatbot utilises machine learning to craft out suggested personalised menus from order histories. To order, users can simply tap on "Menus & Promotions" and their frequently ordered food would appear at the top of the menu alongside the general menu at the bottom. Such customised menu creates convenience. Subsequently, the chatbot will automatically ask for any necessary information to fulfil the order.

3) **Feedback Function**

Figure 5: Showcasing the feedback function of the chatbot

McDonald's values the suggestions from customers and thus the interactive Feedback feature is weaved into the chatbot as seen in figure 5. This enables McDonald's to receive valued feedbacks which allows us to get customers' reviews so as to improve our services to better cater to their needs.
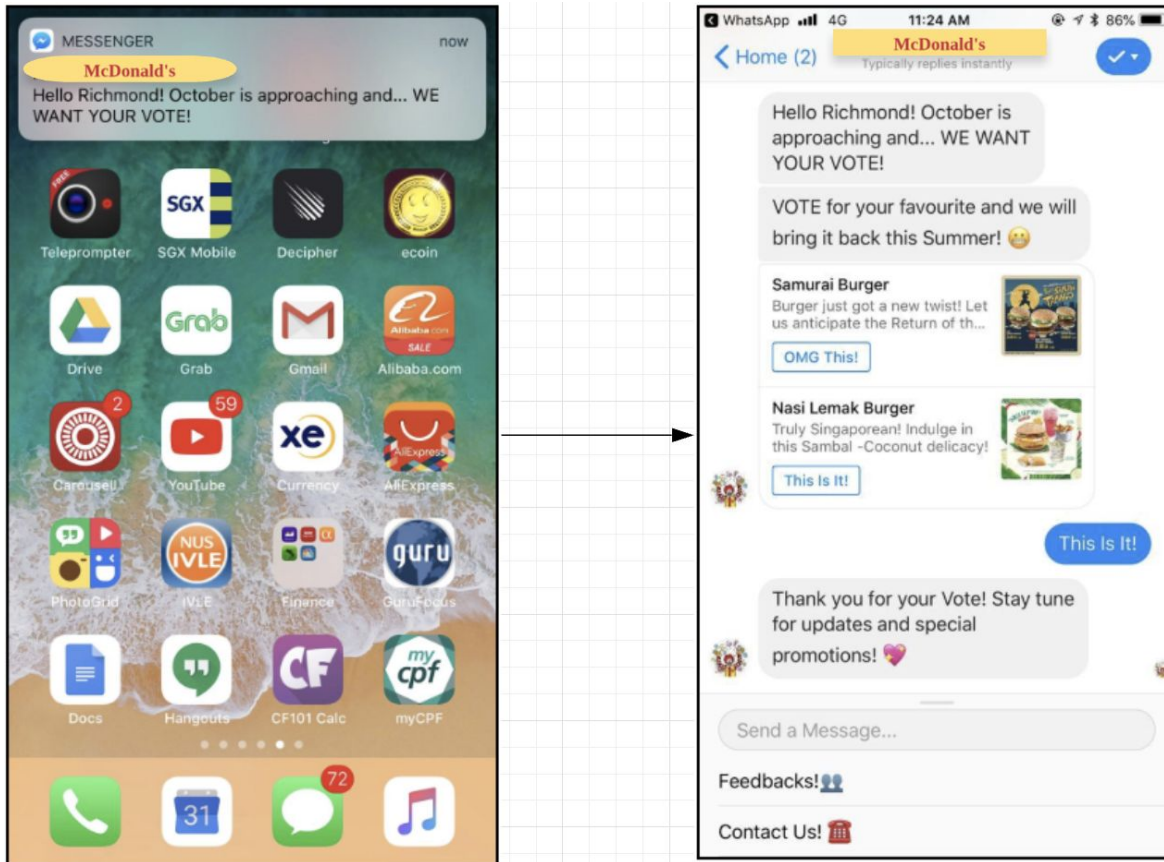
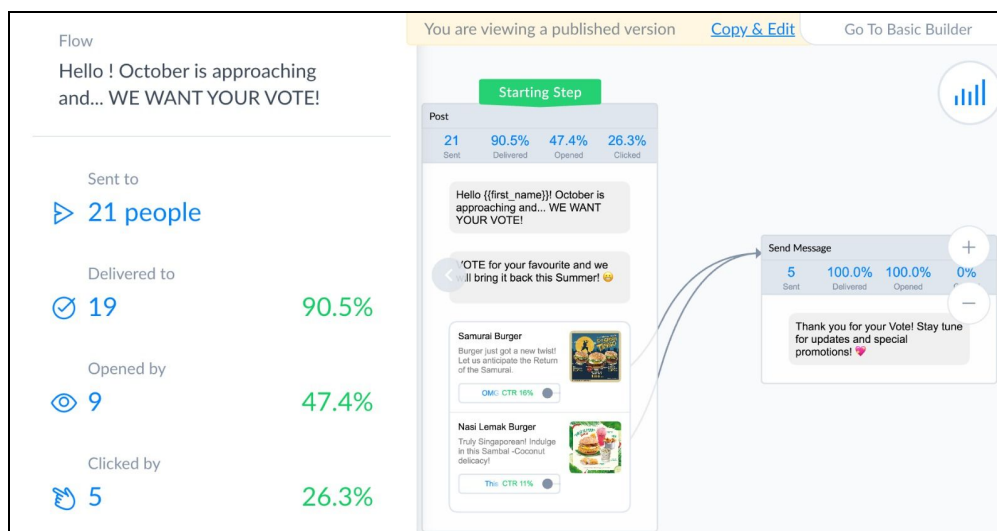Figure 6: Illustrating a promotional broadcast from a customer point of view

Figure 7: Showcasing the backend system of the chatbot where statistics are presented

4) Promotional Broadcast

The most notable feature of the chatbot lies in its ability to directly send targeted promotions to consumers with a high visibility rate at zero broadcasting cost. For example, McDonald's can structure their promotional broadcast in the form of a voting system. From Figure 6, McDonald's can indirectly promote their products by asking the audience what kind of burgers they prefer. Their voting responses are recorded, analysed and sorted by our backend AI algorithm. We will also have a snapshot of who received McDonald's message, and how many people clicked on which options as seen in figure 7. After which targeted promotions and relevant advertisements following customers' food preference can be broadcasted through the chatbot. Therefore marketing is no longer just about general deals but rather personalized recommendations to each customer.

2.3 Comparison with existing counterparts

In light of the increasing popularity and effectiveness of Chatbots, there is a need for McDonald's to go a step further in redefining customers' experience in such fields. Some of the biggest players alongside McDonald's in this industry that utilizes Chatbot technology includes Subway, Domino Pizza and Taco Bell (TODAYonline, 2018).

	Existing chatbot counterparts	**Smart McDonald's Chatbot**
Function	Strictly limited to just fulfilling online orders	All-rounded platform which integrates other features apart from the ordering system
Value-ad d	Just another substitute for self-payment kiosks and delivery application.	AI able to recognise preference and provide personalised menu on top of self-payment.
Platform	Slack, Kik and other third party platforms.	Messenger

Table 1 : comparison with existing counterparts

Firstly, while other chatbots are strictly limited to merely fulfilling online orders, our chatbot system under 'Smart McDonald's' concept stands out as it creates a one-stop experience where everything needed about McDonald's is integrated into the chatbot system. Hence our chatbot is more of an user-friendly and all-rounded platform, allowing us to regain lost customers and convert new customers by providing a great extent of convenience.

Another difference lies in the personalized services 'Smart McDonald's' provides. Every individual is called based on their first name, which provides a sense of personal touch into the services.

Lastly, Messenger is adopted as the platform for chatbot because alternative options such as Slack do not enjoy a circle of users as large. The common existence of Facebook Messenger ensures that our system will be noticed by a wider group of people.
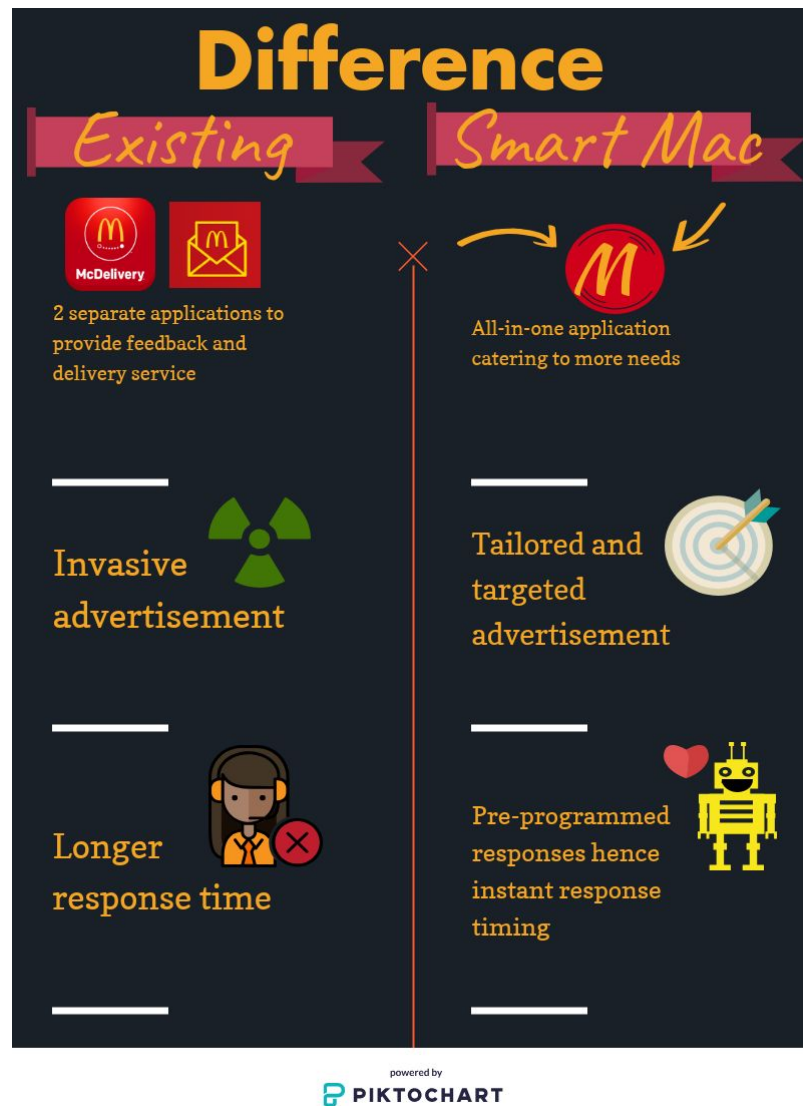
Figure 8: Overview of existing McDonald's applications and Smart McDonald's Concept

Currently, McDonald's has implemented several mobile applications namely "McDelivery" and "My Feedback" which can be streamlined and integrated into a single application. Moreover, the majority of McDonald's marketing still adopts traditional approaches with invasive advertisements to mass audiences without any feedback mechanism from consumers. Lastly, a relatively long

customer response time is a problem haunting most of the companies and McDonald's is no exception.

Admittedly, to completely solve all the problems is a challenging task, but the 'Smart McDonald's' concept eases the problem in a certain way. With Mcpedia, all-in-one application is created to cater various kinds of needs ranging from general enquiries to special requests like events planning. Besides, marketing strategy is upgraded with tailored advertisements broadcasted to individual users respectively. Delay in response time is cut down to minimal as AI will handle most of the general inquiries instantly.

Feasibility

3.1 Technological feasibility

The technology needed for construction of the chatbot is mature and easily accessible. Chatbot builders are already available on the internet. Some popular examples of chatbot builders include Manychat and Chatfuel (BloggerLocal, 2018).

We utilised Manychat's chatbot technology in this proposal. Since the launch of Facebook Automated Chatbots in April 2016, there are currently more than 100,000 Chatbots in existence suggesting that chatbots are increasingly gaining popularity(Johnson, 2018).

As for the backend data consolidation and analysis, technological developments such as Artificial Intelligence and machine learning are already well developed and accessible (SAS, 2018). Companies that are already using mature backend data analysis include Amazon and Taobao.com where front page recommendations are generated based on past purchases and search histories. By adopting similar technologies albeit across different industries, we are able to provide targeted and tailored advertisement to our customers.

3.2 Market feasibility

Singapore's market is ready for this shift in operation of McDonald's. In Singapore, Facebook is still the most popular social media channel as of 2018, with 3.5 million users (Shahari, 2018). Most Facebook users also already have their in-built Messenger application installed. Hence, they do not have to go through the trouble of downloading a third-party application to use the chatbot. Moreover, consumers are shifting to online shopping and digital mobile payment therefore using our chatbot will not be difficult for these technologically savvy individuals. (TODAYonline, 2018)

3.3 Financial feasibility

Designing the chatbot requires an affordable one-time off cost which makes it financially more sustainable than traditional marketing methods in the long term. Also, the advertising cost through chatbot is minimal as we are able to reach out to customers who are already retained in the system at zero cost. If McDonald's is able to finance their current marketing campaigns, using a fraction of that budget to create a chatbot that can potentially reduce marketing expenses in the future should not be an issue. Further breakdown can be found in Section 7.

3.4 Policy wise

The Smart McDonald idea adheres to both local laws and company policies. Singapore enacted the Personal Data Protection Act (PDPA) act in 2012 to protect personal data and uphold privacy. The chatbot does not violate PDPA as it is an authorized function for third-party providers, which must comply with all of Facebook's terms and conditions including necessary local laws. This ensures that all users allow their personal profiles to be used for developmental purposes. Customers can also unsubscribe easily by typing "unsubscribe" in the chatbot.

4. Benefits

As seen from the innovative features of 'Smart McDonald's' proposal, it comes with many tangible monetary benefits and intangible benefits such as customer satisfaction. Revamping and improving on existing strategies, Smart McDonald's not only delivers tailored services but also streamlines current operation, which creates a win-win situation for both customers and the companies.

<u>4.1Benefits for customers</u>

1) Chatbots are operating 24/7 and customers can easily engage the personalised chatbot to assist them with their queries rather than googling their questions and being presented with irrelevant answers. It also saves waiting time in speaking to a service staff for general enquiries.

2) All customers being addressed by their first name in the bot greatly enhances the relationship McDonald's have with its customers. A chatbot is personalised and is designed to be conversational and engaging. This reinvents the way information is delivered and marketed. Customers will only receive targeted promotions that are relevant to them based on their historical responses with the chatbot, regaining their trust with non-invasive adverts.

<u>4.2 Benefits for company</u>

1) Boost revenue through personalised services
A conversational chatbot is more than just a medium of communication. Once a conversation is established, our customer's facebook data are retained. This, along with their ordering patterns or their responses to a voting broadcast, can be analyzed with the help of artificial intelligence and machine learning for personalised marketing which will potentially bring in more revenue to McDonald's as catered information is provided (Susan, 2018).

2) Effective reach of advertisements
All promotional broadcast will be sent directly to our customers. They will receive such broadcast in the form of a notification on their mobile phones as seen in figure 9. This is a powerful form of advertisement with great visibility. Furthermore, we are able to indepthly track the details of the results. These information helps to improve future promotions as there is a feedback mechanism.

3) Cut cost via chatbot marketing

As shown in the later section in finance, the expected cost of chatbot system is considerably lower than traditional marketing strategy. Furthermore, an automated chatbot system would reduce manpower required as only higher-order queries are answered by McDonald's employees, saving labour cost.

4) Creates foundation for future developments

The maintenance cost of the software system is low and it can be upgraded and scaled to accommodate future growth. Furthermore, the information that it retains enables McDonald's to market any future promotions and initiatives directly to customers, updating and converting them into potential supporters.

5 Implementation

Figure 9: Estimated timeline for different phases

5.1 Set up phase

Setup includes designing the User Interface (UI) and User Experience (UX) of the chatbot system and importing relevant information into the database. All designed features is incorporated into the chatbot system in this stage.

5.2 Training phase

Training phase includes informing employees of the respective promotions and deals that comes with the chatbot. It also enables the IT Support Engineers to link up to Manychat providers to test the system to troubleshoot any potential issues.

5.3 Rollout and revision

Upon rollout of system, periodic review every 6 months will be conducted to collate and analyze the data collected. Any feedbacks collected will be used to tune and calibrate the software to better serve customers. Promotional contents can be created to be broadcasted out for the next season.

In the meantime, backend system automatically calibrates machine learning model according to test data to ensure prediction are robust.

6 Execution

'Smart McDonald's' campaign is launched upon completion of the chatbot.
To get people enrolled into the chatbot, two approaches are adopted, namely the online and offline method of outreach. Further illustration can be found in table 2
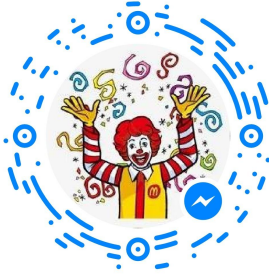
Method	Access approach	Description
Offline Method		A Facebook customized code will be created and displayed at the ordering counter of McDonald's as well as every table. Our customers can scan the code with their phones to receive a free WIFI access and a complimentary Ice-cream or Small Fries upon order.
Online Method	Link: https://m.me/464544010664540	Customised link shared on McDonald's website, Facebook page, Instagram. Just click on that link and you will be redirected to our friendly chatbot. The Chatbot will then give them a complimentary Ice-cream or small fries and free wifi access.

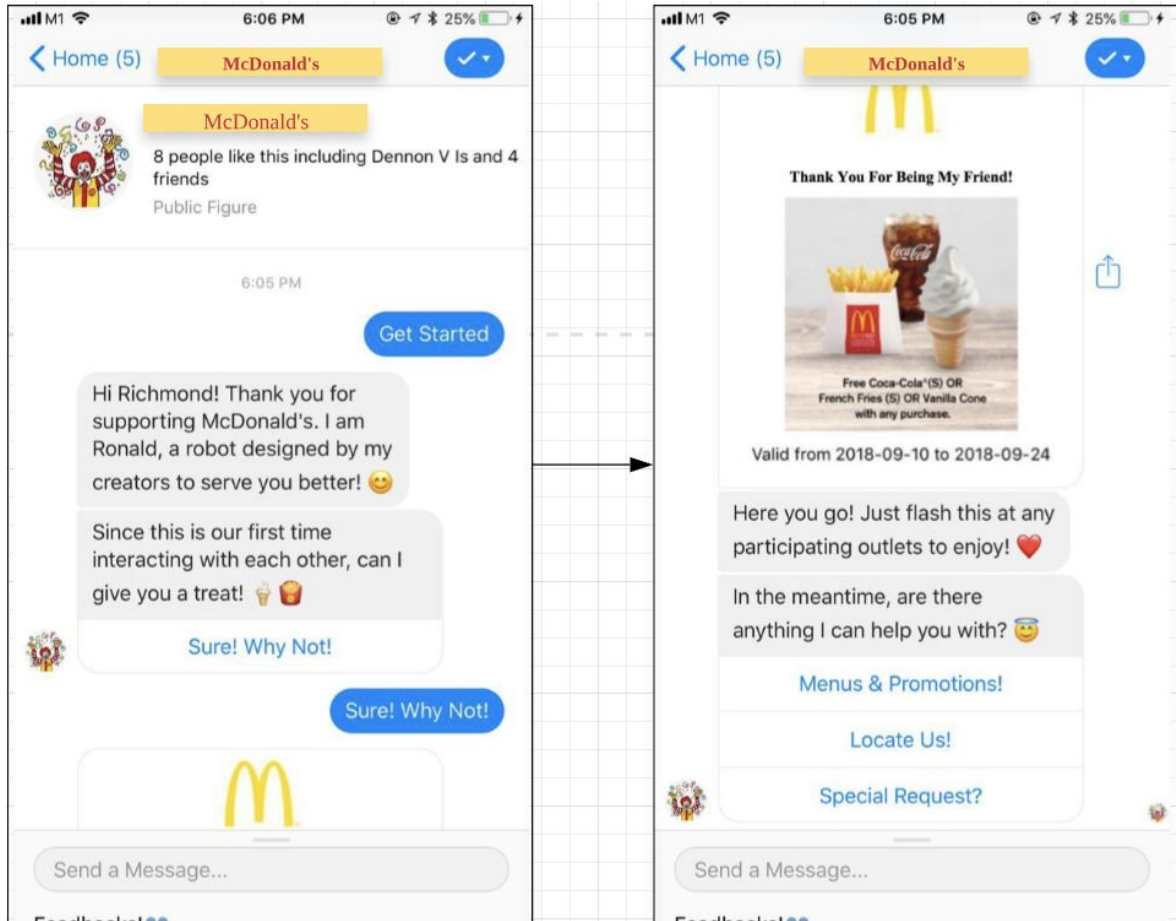Table 2: Illustrating the two modes of entry into the chatbot

Figure 10: Illustrating what a customer will experience upon interacting with our chatbot

Once enrolled into the chatbot system, they will be greeted with a personalised message from the chatbot as seen in figure 10. The profile of our customers will be collected from their Facebook page. Subsequent promotional broadcasts can then be made to these subscribers from backend of the chatbot.

7 Finance – cost breakdown

The beauty of the Smart McDonald's concept lies in the fact that most of the cost is low and up-front. This meant that once a registered user converse with the chatbot, subsequent promotional broadcast can be done without any additional cost. This is possible because McDonald's now owns their information.

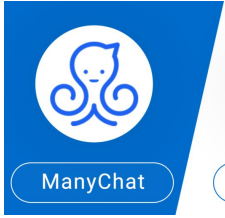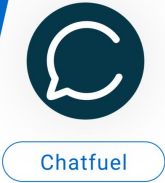| Subject:	Cost:	Remarks:

Data Storage and Application	SGD$22,968	At USD$145 for 25,000 subscribers for Manychat services . A conservative estimate of 3,000,000 subscribers in Singapore would cost approximately USD$17,400 (Manychat.com, 2018). That equates to SGD$22,968 per month.
IT Support Engineers x 3	$2,500 x 3 = $7,500	Manychat servers are outsourced with their own dedicated technical team, so just 3 local Engineers to respond to urgent troubleshootings will suffice (Stjobs.sg, 2018).
Social Media Advertisement: Facebook and Instagram	$1,500	Designed Posts on McDonald's public account
Freebies: Ice-Cream and Small Fries	Miscellaneous	These are items that McDonald's are already giving out and doing as a marketing bait to encourage people to give feedbacks. So the cost of our project is minimal in this aspect.
Wifi Access	Miscellaneous	McDonald's currently provides Free WIFI Hotspots in their restaurants in exchange for customer's email. We can grant them WIFI for chatting with our bot.

Table 3 : Cost breakdown

According to Annual reports of McDonald's from 2014 to 2017, advertising costs have been showing an increasing trend since 2013 and reached 100.2 million dollars globally in 2017. With a market size similar to US, we assume Asia Pacific markets generate comparable marketing expenses. Although Singapore market, as a fraction of Asia Pacific market, will induce a lower market, the 'Smart McDonald's' proposal is still cost effective with less than $100000 spent annually. Thus, it can be a good enhancement for McDonald's current marketing campaign.
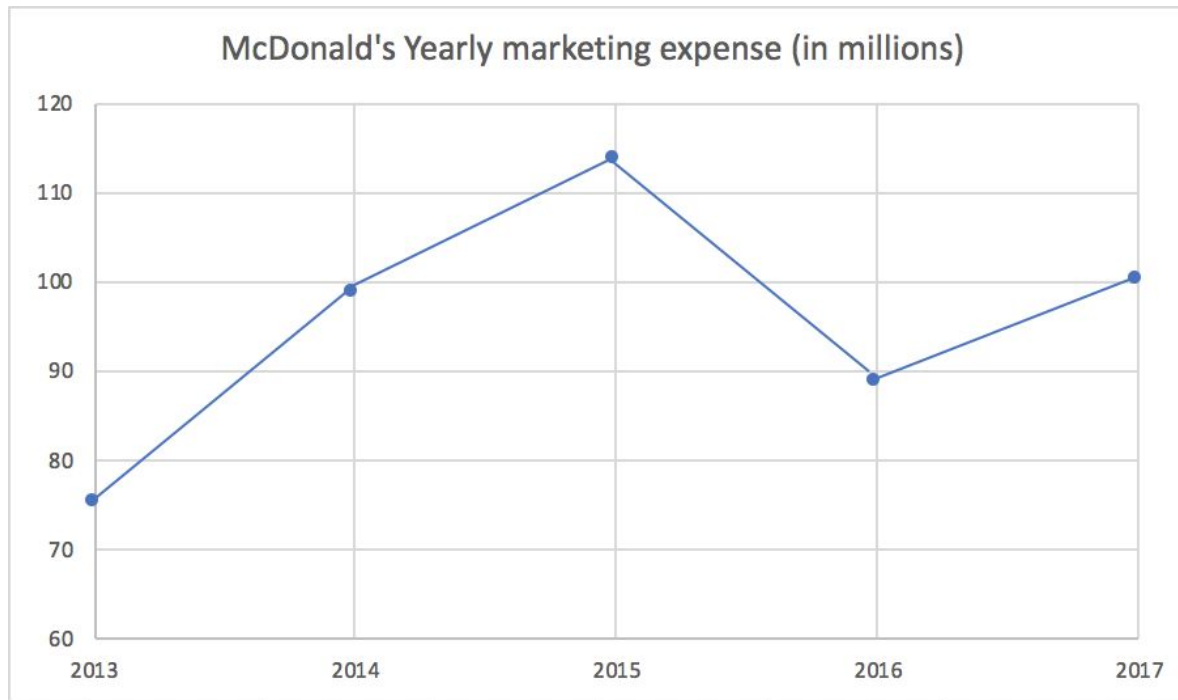
Fig 11 : McDonald's yearly Marketing Expenses from 2013 to 2017

8 Conclusion

As Bob Rupczynski, McDonald's VP of global media and customer relationship management put it, "We are looking at ways to make our marketing dollars work harder, whether that be through more efficient media spending or finding more effective ways to connect with consumers". Keeping in mind of this and McDonald's digital growth strategy - retain, regain and convert, 'Smart McDonald's' concept continues to innovate by taking advantage of the trend of advancing technology and providing a novel landscape for McDonald's to conduct its marketing campaign.

Annex

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