

INTODUCTION OF MCDONALD'S:

Founded in 1940, McDonald's is the largest fast-food chain in the world with locations in more than 115 countries. It serves an excess of 69 million customers in its approximately 34,000 outlets, a situation that makes the company a global mega-corporation. The company has grown tremendously over the years to become not only the world's largest fast-food chain but also one of the highly recognisable brands (Griskevicius & Kenrick 2013). The business started as a roast cafe owned by Maurice McDonald and Richard. In 1948, the McDonald's recognised their business as a hamburger stand that used the "Speedee Service System", which established the principles of modern fast-food restaurants.

However, Ray Kroc who became a stakeholder in the business in the mid-1950s as a franchise representative facilitated the expansion of the company into a worldwide business. The agent went on to purchase the company from the McDonald brothers (Hollensen 2007). Following the model introduced by Kroc, the company's eateries are run by a

franchisee, an associate, or directly by the business. The corporation obtains its revenues from the rent, royalties, fees paid by the franchisees, and from the company's operational restaurants (Werth & Foerster 2007). In 2010, the company's revenue stood at USD\$ 24.08 billion. This figure grew gradually to peak at USD\$ 28.11 billion in 2013 before shrinking to USD\$ 25.41 billion in 2015 (De Vries 2008).

The company, which operates fast-food restaurants, offers various products that primarily include French Fries, chicken, hamburgers, cheeseburgers, soft drinks, shakes, breakfast products, and desserts (De Vries 2008). The menu has also been expanded to include other products due to consumer demands and tastes such as salads, smoothies, fruits, and wraps. The company's target is wide and not limited to a single group. It targets the working class, families, and virtually all individuals who would like to have fast food.

Operating successfully in any industry requires companies to not only offer the products that are demanded by customers but also demonstrate the ability to determine and understand consumers' buying behaviour (Oyserman 2009). Such an approach is very important since it allows a business to anticipate and prepare accordingly for the emerging consumer preferences and trends while at the same eliminating redundant business practices to guarantee the profitability of the company (Light & Kiddon 2009). However, the consumer buying behaviour is influenced by many factors, which vary from one industry to another. This paper will analyse the buying behaviour of consumers

PSYCHOLOGY OF BUYING BEHAVIOUR:

The market economy has two major players, namely, the buyer and the seller. The two parties interact with each other through a relationship referred to as a *market exchange*. Through this exchange, they assess and determine relative trade-offs that they must make to meet their respective needs and wants (Warner 2006). The seller or the company is guided by policies and objectives. For example, a company may decide to offer a given product only if it can bring a margin of +10% or greater (Kincheloe 2011).

On the other hand, the consumers or buyers have their policies and objectives, which guide their responses in the exchange. However, buyers do not have written principles and policies that can guide their decision to buy or not to buy a product. Sometimes, lack of understanding prompts buyers to behave in a particular manner when purchasing a product.

This aspect presents sellers with a "black box" of buyer behaviours that make the exchange process unpredictable and difficult for marketers to anticipate and/or understand (Kincheloe 2011). Despite the unpredictability of the buyer behaviours, marketers are very essential to

the marketplace to the extent that they cannot be wished away by the seller. Hence, studies and theories to explain and understand buyer behaviour have been put forward.

Promotion of a company's commodities and services initiates with the clients' demands and reaches the climax when the extent of buyers' contentment is addressed. Since this exchange revolves around the ability of the seller to anticipate and satisfy the needs of the buyer, the study of buyer/consumer behaviour is very essential and a necessity for sellers (Wright, Frazer, & Merrilees 2007). In the fast-food industry, consumers have a great variety of products and fast-food outlets to choose from.

Therefore, it becomes important for companies to persuade customers via various marketing strategies that have an impact on their buying (Wheeler et al. 2006). Accordingly, consumer behaviour is affected by various factors, which include cultural, social, personal, and psychological factors. In the study of consumer behaviour for McDonald's, this study will focus on the psychological factors. The psychological factors that influence buyer decision include motivation, perception, learning, attitude, and personality.

RESEARCH PROCESS:

1.origin and formulation of research problem:

McDonald's corporation or rather the CEO, Mr. Greenberg realized there

was a major problem arising within their corporation when their earnings declined in the late 1990s till the early 2000s. Their net income not only shrunk to 17%, but also suffered from slow sales growth below the industry average during that period of time. Although their market share was well above their competitors such as Burger King and Wendy's nevertheless there was a slow share growth.

Therefore the question of what caused the Big Mac Attack is raised. It is observed that there was a growing trend of customers moving to non hamburger meals which is being offered by indirect competitors such as KFC, Subway (dominating the market with more than 13,200 US outlets) and Pizza Hut as an alternative choice. Sandwiches and a variety of microwaveable meals are being offered at supermarkets, convenience stores and even at petrol stations. This convenience has caused many patrons to switch away from the fast food outlet.

Besides that, there seems to be an increasing trend in fast casual dining which has affected sales for McDonald's. Patrons are now more willing to spend extra for the traditional fast serving but with a better and classy ambience. Due to this 'phenomenon', the growth for fast casual segments grew from 15 to 20% compared to only 2% growth from fast food chains. Taco Bell for instance had an outstanding 19% increases in their profit which proves that higher priced outlets are still in demand.

Furthermore, the eating trend among the youth and the older generations has undergone significant changes. Many patrons are becoming more health conscious and tend to be picky in determining their daily consumptions. This group of people has also expressed their dissatisfaction on the quality of food which is being served by both McDonald's and Burger King. It is an obvious fact that burgers served soaking with fat and oil is bound not only to affect patron's health but their conscience as well. Besides health reasons, many Americans' eating habits have changed towards the concept of eating out. Recession during that era has taken a heavy toll on many citizens causing them to be thrifty and have returned to home cooked meal instead.

2.choice of research design:

The sale of 100 millionth hamburger for McDonald's in 1958 was followed by the opening of 100th restaurant the year after. Ray Kroc buys McDonald's from founding brothers in 1961 and after two years the company sells its billionth hamburger and opens its 500th franchise in Ohio. Initial overseas McDonald's opened in Canada and Puerto Rico in 1970. In 1971 McDonald's expanded to Japan, Netherlands, Germany and Australia. McDonald's revenues reached \$1 billion and 2000th restaurant opened in 1972. And it was followed by the invention of Quarter Pounder and Egg McMuffin and opening franchise in Stockholm. The years of 1974 and 1975 witnessed the expansion of McDonald's to the United Kingdom, opening of the first Ronald McDonald House and introduction of Drive-Thru. Also, the company expanded to Japan and Singapore and Happy Meal was introduced during the remaining part of the 1970's.

During 1980's McChicken sandwich and Chicken McNuggets were introduced and restaurants were opened in Philippines, Malaysia, Italy, Mexico, Belgrade, Yugoslavia, Budapest and Hungary. McDonald's continued worldwide expansion during 1990's opening shops in Moscow, China, Africa, Morocco, Saudi Arabia, South Africa, Belarus, Peru, India and Georgia.

Difficult time began for McDonald's in 2000's starting with the launch of a book called Fast Food Nation written in 2001 by Eric Schlosser which criticised McDonald's for selling unhealthy food. It partially resulted in the first quarterly loss in company's history in fall 2002. Global marketing campaign is initiated within company promoting healthier McDonald's image with the slogan "I'm lovin' it"

The company suffers more blows caused by the documentary Super Size Me, in which the director and star Morgan Spurlock proves that eating McDonald's ass the time has bad consequences for a person's health, and the company is forced to remove Supersize options from the menu. One of the changes the company undertook in 2006 was including nutritional information on all packaging for all products. New products – McSkillet burrito, Chicken Biscuit and the Southern Style Chicken Sandwich are introduced in 2008, together with new design for the food containers and a new menu board design. The practice of introducing new products continued in 2009 with the introduction of new versions of Angus Burgers – Angus Deluxe, Angus Bacon and Cheese and Angus Mushroom

and Swiss.

The first McDonald's restaurant opened in UK in 1974 and since then, due to efficient strategy, flexibility and intense marketing strategy the brand has become a part of British culture. McDonald's has 1193 outlets in UK, which sales rose 11 per cent in 2009 (Hall, 2010). However, it was a successful year not only for McDonald's, Domino's pizza sales increased by 15%, sandwich chain Subway announced to open 600 new stores in UK and Ireland, and KFC fried chicken chain opening 300 new restaurants (Mirror, 2010) – all due to recent financial crisis. According to King (online, 2010), in 2008 and 2009 there were an estimated 130 million more customer store visits, which has contributed around £465 million to the company sales revenue. Also, King (online, 2010) attributes the success of the company to the replacement of American McDonald's chief executive in Britain with British born Steve Easterbrook in 2006, which resulted in McDonald's becoming more local in all parts of UK.

McDonald's success in UK fast food market and worldwide can be partially explained by its management structure, which is hierarchical, with several layers of management and every employee has a clear idea about their role and responsibilities. Also, standardisation of all business processes has been taken to a high degree which saves time and resources in operations.

Fast food has firmly identified itself as part of British culture with McDonald's leading the way. It has both positive and negative affects on

when consuming fast food, they don't cost much money and can be found round the corner. Unfortunately, currently its negative affects prevail which are the facts that alarming number of UK population is overweight or obese due to regular fast food consumption and communication between family members, and friends are missing which were previously conducted over dinner table. Moreover, along with the increasing popularity of fast food chains like McDonald's, the opposition to them is also increasing in commoppositions sometimes are aimed at a specific brand, in other cases they are aimed at fast food industry in general. But, nevertheless the damage they are causing to companies like McDonald's is overwhelming.

Companies operating in fast food industry in UK and worldwide in general and McDonald's company in particular should behave proactively in order to guard their image against "attacks" from non-government organizations, individual people and others, who criticise the fast food industry and specific companies, in many cases justifiably for damaging the nation's health. Being proactive means investing in research and development in order to invent menus containing the amount of fat and salt which is within the limits of healthy eating.

3. Determine sample design:

McDonald's from the beginning has been committed to doing the right thing. They believe that the customer comes first and their experience will bring then back. They have a global strategy called plan to win, which centers an exceptional customer experience including: people, products, place and promotion as well as being committed to continuously impproving, enhancing the customers experience and giving back to the community. so when it comes to finding out ways to improve upon the restaurant or menu, they speak with the people who matter most the customer.

Today McDonald's is one of the world's leanding global fast-food restaurants with more than 33,500 location and serving nearly 68 million customers in 119 countries each day.but let's base it on the mcdonald's case study at 32000 store in 117 countries and they wanted to find out where they rank according to fast food excellence.Let's say that they want to survay 12,50 of their restaurants world wide outof the 33,500, including the usage of at least four location in each of the 117 countries where they are locatred. what needs to be determind is if the 1,250 gives them the 95% confidence level of covering 4 stores from 117 countries representing their 32000 stores.

4. Data analysis:

The scripting language Python currently available in 2 different versions, python 3.4.3 released in February 2015 while python released in December 2014. Many data analyst use python for analysis of data-sets. So python has certain features which

enables it to be used for data analysis purpose.

- 1. Purpose -Python focuses on productivity and code readability.
- 2. Used by -It is used by programmers that want to dive into data analysis Or apply statistical / mathematical techniques And by developers that turn to data science
- 3. Usability -Coding and debugging is much easier to do in Python because of simple syntax and terminology. The indentation of code affects its meaning.
- 4. Flexibility -It is flexible for doing something that has never been done before. Developers can use Python for scripting a website or other applications.

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- 5. Ease of learning -Python makes learning curve relatively low and gradual, So it good for starting programmers.
- 6. Set of Libraries -In python there are many libraries which we can use as per use for extracting analysis from data-sets. There are many libraries , some of main libraries that are most

commonly used libraries are NumPy (Numerical Python), SciPy (Scientific Python), Matplotlib, Pandas, Scikit Learn, Scrapy, Bokeh, Pygal etc.

- 7. Python IDE's -There are many Python IDE's, most popular are Spyder and IPython Notebook
- 8. Python Testing Framework -Python's testing framework guarantee that code is reusable and dependable.
- 9. Open Source -Python is free to download for everyone so good for developers, programmers and data analyst.

SWOT ANALYSIS:

I] STRENGHTS

➤ GLOBAL BRAND :

McDonald's has a very well – established global brand that appeals to all age groups and customer segments. In 2005, McDonald's placed ninth in the top 100 global brands ranking of the "Business Week Magazine and the Interbrand".

> STRONG OPERATIONAL CAPACITIES :

McDonald's has strong operational capabilities which

allows it to provide high quality products and customer services across its restaurants. It has a world – class supply chain and standardized process to deliver products of uniform quality across all restaurants, regardless of their locations or nature of operation (company – owned or franchise - oriented).

> SUCCESSFUL ITEMS:

Some of its products such as Big Mac, Chicken McNuggets have become brands in their own right. Strong brand draws customers to the company's restaurants and provides it with a well-recognized brand currently in new markets.

> QUALITY PRODUCTS :

McDonald's is the symbol of quality with respect to its offering.

II] WEAKNESS

> WEAK REVENUE GROWTH:

Low revenue growth suggests that the company has not been able to expand customer traffic at existing restaurants thanks mainly to the maturation and saturation of its key markets.

>WEAK PRODUCT DEVELOPMENT:

Marketing Strategies at McDonald's McDonald's faces a strong competition and its weak prodct development creates problem.

III]OPPORTUNITIES

EXPANSION

There is a large market for McDonald's still to serve. Furthermore it has few outlets within cities in which it is currently serving, so McDonald's also has opportunity to expand within cities.

> FRANCHISEE - OPERATED RESTAURANTS

McDonald's intends to sell about company – operated restaurants to franchisees. The operating margin of franchisee – operated restaurants is higher than that of company – operated restaurants. The sale of company – operated restaurants to franchisees is likely to increase the overall profitability of McDonald's business.

➤ GROWING DIVING – OUT MARKET

As the lifestyle trends of consumers are changing, the dining out market is growing, that would serve as an opportunity for the McDonald's.

IV] THREATS

> INTENSE COMPETITION

McDonald's restaurants face intense completion from international, national, regional and local retailers of food products. The company competes on the basis of price, convenience, service and quality of food products. the company's competition includes

restaurants, quick service eating establishments, pizza parlours, coffee shops, street vendors, convenience food stores, delicatessens and supermarkets.

> GROWING HEALTH CONSCIOUSNESS

As the education level has increased, health consciousness has also increased. A growing consciousness of health matters could reduce McDonald's.

> INCREASED SALES TAX

Sales tax has increased which results in the increased customer prices and reduced sales level.

5. Hyposthesis testing:

In class professors usually give very boring examples to explain statistical testing. Why would you care about the average height of men and women? Or the weight of elephants? Let's perform hypothesis test on something that is more fun and useful in real life. Burgers.

There exist a lot of burger chains in the US, and maybe I will compare more of them with each other later (ANOVA?), but for now let's focus on a simple T-test to compare two means. We have Shake Shack (my personal favorite) and its competitor, McDonald's. I found the table with nutritional information about their menu items and decided to check if Shake Shack's food is lower in calories, cholesterol, fat, etc. and higher in fiber than food in McDonald's. Because that would be an indication of a

statistically better fast food.

So, let's state the Null Hypothesis: There is no significant difference in calories, cholesterol, fat, etc. If you want a burger, either of the chains are equally harmful to your health.

Alternative Hypothesis: SS is better than McD, and if you want a burger, go there for a healthier option.

In order to accept the alternative hypothesis we need to perform the T-test comparing two means, and get the p-value. Let's recall: if a p-value is small (p<0.05), we can safely reject the null hypothesis and conclude that SS is healthier. If it is large, we can't reject the null and are forced to assume that all fast food is equally bad. But let's look at the distributions first!

6.Data collection:

Many would associate the use of big data with huge technology corporations such as Google or Microsoft. However, even global food service retailers like McDonalds use their customer's data to create meaningful insights and leverage themselves against their rising competition.

With their daily customer traffic reaching numbers as huge as 60 million in over 100 countries, it's clear that McDonalds has a wealth of data on their customers just waiting to be turned into measurable metrics for analysis.

McDonalds have evolved into a more information-centric company that is inherently driven by data based decisions. By combining data across every McDonalds store and creating data visualisations, the chain were able to create more comparable insights that would help garner a more holistic view of their customers. This meant that they were more able to create relevant and actionable outcomes, resulting in time and money saved.

One aspect of McDonalds that has been optimised thanks to big data and analytics has been the drive-thru experience. By knowing three different factors: design of the drive-thru, information that is provided to the customer during the drive-thru and the people waiting in line to order at a drive-thru, McDonalds are more able to create a more enjoyable drive-thru experience.

For example, knowing what times of day customers are more likely to go through a drive-thru will help them prepare and improve efficiency for the spike in demand ahead of time. Finding the optimal solutions for the design, information and people is an ongoing process that changes over time, context and cultures.

Other information that McDonalds collects includes in store traffic, customer interactions, flow throughs in the drive-thru's, ordering patterns, point-of-sales data, video data and sensor data. These factors impact every part of the McDonalds empire from refining their menu design to optimising their training programmes.

7. Generalization and intepretation:

Abstract:

It is shown that McDonald's generalization of classical Principal Components Analysis to groups of variables maximally channels the total variance of the original variables through the groups of variables acting as groups. A useful equation is obtained for determining the vectors of correlations of the L2 components with the original variables. A calculation example is given.

8.QUESTIONAIR:

MCDONALD'S

AGE:

BRITHDAY YEAR:

OCCUPTION:

- 1. WHICH FAST FOOD JOINT DO YOU PREFER?
 - [A] MCDONLDS
 - [B] DOMINOS
 - [C] PIZZA HUT
 - [D] NIRULAS
- 2. HOW OFTEN DO YOU EAT AT MCDONALDS?

[A] ONCE A YEAR
[B] ONCE A MONTH
[C] ONCE A WEEK
[D] EVERY DAY
3. WHY DO YOU EAT AT MCDONALDS?
[A] TASTES GOOD
[B] CHEAP
[C] CONVENIENT
[D] I DON'T EAT MCDONALDS
4. WHAT TIME OF THE DAY DO YOU PREFER TO EAT THERE
[A] BREAK FAST
[B] LUNCH
[C] DINNER
[D] DESSERT
5. WOULD YOU SAY THAT MCDONALDS IS HEALTHY?
[A] YES
[B] NO
[C] NOT SURE

[D] ONE OF THIES
6.IN MONTH, HOW MUCH WOULD YOU ROUGHLY SPEND THERE (IN RS)?
[A] 0-200
[B] 0-300
[C] 200-500
[D] MORE THAN 500
7. WHICH IS YOUR FAVORITE PRODUCT AT MCDONALD'S /
[A] FRENCH FRIES
[B] BURGAR
[C] MC VEGGIE
[D] OTHER
8.WHAT MEAL DO YOU PREFER AT MCDONALD'S ?
[A] VEG SURPRISE MEAL
[B] MC SWIRLS
[C] HAPPY MEAL
[D] MC VEGGIE MEAL
9.IN THE PRODUCT LINE IN MCDONALD'S ADEQUATE?
[A] YES

[B] NO
[C] IT'S OK
10.WHAT IS THE MAIN PROBLEM YOU FACED AT MCDONALD,S?
[A] LONG QUEQES
[B] WORNG ORDER
[C] BAD MUSIC
[D] OTHER PROBLEM
11. WHICH AREA DO YOU THINK NEEDS THE MOST IMPROVMENT
[A] BETTER MUSIC
[B] MORE SPACE
[C] HOME DELIVERY
[D] MORE VARIETY
[E] LOW PRICES
12. WHAT ARE UNIQUE SELLING PROPOSITION OF MCDONLD'S?
[A] FOOD
[B] HIGIENE
[C] AMBIENCE
[D] QUICK SERVICE

[E] LOCATION
13. WHAT IS THE LEAST LIKE MENU ITEM AT MCDONALDS?
[A] FRENCH FRIES
[B] VEG BURGERS
[C] NON - VEG BUEGER
[D] MC SWIRLS
[E] OTHERS
14. HOW IS THE DINING EXPERIENCE OF MCDONLDS?
[A] EXCELLENT
[B] GOOD
[C] AVERAGE
[D] BELOW AVERAGE
[E] POOR
15. HOW DO YOU RATE THE SERVICE PROVIDED BY THE EMPLOYEES
OF MCDONALDS?
[A] EXCELLENT
[B] GOOD

[C] AVERAGE

[D] BLOW AVERAGE
[E] POOR
16. WHAT IS THE MAIN PROBLEM YOU FACED AT MCDONALD'S?
[A] WRONG ORDER
[B] LONG QUEUES
[B] NOT ENOUGH SPACE
[C] HYIENIV PROBLEM
[D] NOTHING TO COMPLAIN ABOUT
17.DO YOU USE SPECIAI OFFERS/COPUPONS FOR YOUR ORDER AT MCDONALD'S ?
[A] YES
[B] NO