

Subconscious Surveys: Capturing True Consumer Perception

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A Study on Surpassing Conscious Bias in Survey Participants through a Case Study on Pizza Hut

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Introduction

Comprising a significant portion of international marketing, survey research is crucial to understanding and analyzing how different markets perceive a company's product or service. Especially at the international scale where the headquarters of a company are located in discrete areas from target markets abroad, it is quite important to create a solid grasp of the customer base so that companies are aware of how their products and services are perceived in a competitive market. Surveys are distributed to the public in the target region when a more a general perception of the brand is desired. However, when information about the specific company's customer service and product is required, the surveys are sent to people who actually use the product or service. As a result, the type of survey distributed is highly dependent on the type of data desired.

A major problem that arises in the field of survey research is that there is often bias surrounding the results. At the cross-section of marketing and psychology lies the analysis of survey bias, a discrete field of research that is pertinent to understanding the needs and the perception of the target market. Although survey analysis itself falls into marketing, overcoming survey bias requires psychological research, and the causes of this phenomenon are manifested in the subconscious brain.

Subconscious bias, in particular, will be the focus of this research paper. Given that each participant in a survey is free to answer how they want to a particular question, the results gained from such studies are not always entirely accurate.

Often times, participants answer opinion-based surveys based on how they want to be perceived and/or what they believe to be the “right” answer. Thus, this bias can often skew the survey data. As a result, it becomes more difficult for companies to perceive their brand perception and make marketing plans accordingly.

As a result, the purpose of this project is to analyze how conscious bias can influence results, and then research different types of questions that can overcome such bias. Given that one specific brand, Pizza Hut, was chosen for the purpose of this research project, the implications of this study and solutions for improving the company’s brand perception will also be included.

Background Information

In order to achieve a holistic understanding of how conscious bias can influence responses, different types of survey bias were researched so that a distinction could be established between the two main categories of bias: extrinsic error and intrinsic error. A more detailed discussion of each category can be found below.

Extrinsic Error

Largely due to selection bias, extrinsic error, or statistical error, is caused by the lack of an appropriate number of respondents who can accurately represent the overall population. Overall, bias caused by statistical error falls into three categories: undercoverage, nonresponse, and voluntary response.

Undercoverage

The most common reason for bias due to statistical error is undercoverage (Survey Sampling Bias, 2018). When survey results are skewed due to undercoverage of a population, it is largely due to the fact that the questionnaire focused on collecting data from a small sample of individuals who have a common factor. Therefore, certain groups and their viewpoints are alienated from the results. Often times, this type of survey bias is a trend seen in amateur surveyors, as they tend to distribute surveys to friends and family members. Demographic, socioeconomic, and psychographic factors all contribute to survey success, and it is important to keep a balance on such elements so that there is no error due to undercoverage.

Nonresponse

In addition, nonresponse rates are also a factor that can sway results one way or the other. Often times, given that surveys take time to complete, many individuals do not choose to participate. As a result, a high nonresponse rate signifies that a large percentage of the population is not represented, and therefore the results could be significantly different. Generally, approximately 80% of the sample size should agree to participate in a survey in order for the results to be deemed an accurate representation of the total population (Lahaut, 2002). In order to avoid this error, many large companies and professional organizations give incentives for filling out surveys. In addition, there are many third party businesses that use their base of willing participants to distribute surveys and gain a large number of respondents.

Voluntary Response

Another form of selection bias is voluntary response bias, which is essentially the opposite of nonresponse bias. Voluntary response bias occurs when the sample members are all self-selected, and as a result, the survey results are biased in favor of these participant. This may influence the results to fall into an extreme spectrum. This form of error is expressed more in group discussions, where such individuals are able to dominate over other opinions. The best way to overcome such bias is by ensuring that participants do not know how others responded until after the survey is concluded (Kelley K, e. 2018). By doing so, each participant feels comfortable with responding how they wish.

Intrinsic Error

Intrinsic error, or conscious error, is often the result of either being influenced by external factors or misinterpreting the actual contents of the survey. It is often harder to overcome such oversight because these errors are largely a result of participant perception. Overall, bias caused by conscious error falls into two categories: question bias and desirability bias.

Question Bias

The way a question is worded may elicit a certain response from participants. Having too many negative or positive words in questions can cause participants to sway one way or another. In addition, having an even number of negative and positive answer choices is important so that all options are equally represented. In order to eliminate this error, the survey must simply be designed in a non partial manner that does not employ any strong tone words.

Desirability Bias

Desirability bias, which is often much harder to eliminate, is caused by a person's innate desire to represent themselves in a more positive light. As a result, many participants are unwilling to choose answer choices that would make them admit to having unsavory attitudes or activities. Even if a survey pledges to keep the survey results confidential, most participants have a lack of trust, thus causing the results to not accurately portray the surveyed population. This same desirability bias can also affect results in another manner. In order to fit in, many people may lie or express the exact opposite of what they believe in. A phenomenon known as reaction formation in psychology, this behavior can be responsible for why many participants stray away

from choosing strongly-worded answer choices (Pederson, 2016). Another sector of desirability bias, which is far harder to pinpoint, is the way in which participants may answer questions based on who they desire to be rather than who they really are. For example, society is trending towards eating healthy and exercising. As a result, many participants who desire to be healthier may answer on a restaurant survey that they wish more healthier options were available.

However, the participant will continue to not buy healthy options at the said restaurant even after such products are added to the menu. This comes back to the idea of how participants want to express themselves in the best light possible.

Although desirability bias is harder to pinpoint, research has been conducted on how certain types of questions can penetrate into the subconscious mind and extract the wanted information without being subjected to numerous forms of bias. The subconscious has been marked with responding to symbols and drawings more than direct questions. The archaic cavemen era engravings are proof that drawings dominated basic human communication for the longest time (Brenner, 2018). As a result, the brain is wired to respond and relate to symbolic drawings more accurately.

In addition, the human brain, being quite complex and creative, is more activated when responding to open-ended questions (Dutta-Bergman, 2006). Although from a surveying perspective, it may be hard to categorize or even define open-ended responses, such questions are more likely to create an accurate perception of the topic at hand.

Method

Participants

The population of interest for this study was mainly teenagers from the ages of 12 to 20 that reside in the United States and have at least a basic familiarity with Pizza Hut. The reason that the population of interest for this study are teenagers is because Pizza Hut is a brand that markets primarily to millennials, and over the next few years, these teenagers will be entering the age group of current millennials (20-35). As a result, this study sought to get insight on the future generation of customers, and see whether the perception of teenagers matched the perception of millennials. Given the time and financial restraints, the population accessible for the purpose of this study was limited to teenagers with access to internet, for the surveys were distributed using social media and texting applications such as WhatsApp. As a result, most of the participants are from a higher socioeconomic status.

For the purpose of this study, the target sample size was approximately 100 participants. Overall, there were 103 participants, and 89, or 89.3% of the participants fell in the age range 12-20. 9.3% of the participants were in the age range 0-12, and 5.6% of the participants fell in between 35-65. The remaining 2% of the participants were either 20-35 or 65+. As a result, this study overwhelmingly represents the teenage population.

Survey

The survey that was used for this study was created using Google Forms in order to ensure a uniform format and structure that would be familiar to most participants. Given that the main

goal of the survey was to acquire as many survey participants as possible, the questionnaire was kept short so that people would be willing to participate in this study.

Overall, the survey had a total of four questions, which pertain to either Demographics or Pizza Hut Perception. The only question asked in relation to demographics related to age, since this study was targeted towards teenagers. Using the research conducted about penetrating into the subconscious mind, two types of questions were conducted that could be used to measure the participant's perception of Pizza Hut. The first question asked "If Pizza Hut were a person, how would you describe him/her?". This question was open-ended so that participants had the flexibility to channel their creativity and thus stimulate their subconscious brain to answer accurately. The second question asked the same question, except there were 4 drawings of males, and participants had the option to choose one picture. In order to create some control, all of the drawings had the same facial features, and they only varied in clothing choice. The images used for the survey are depicted below.

Option 1**Option 2****Option 3****Option 4**

The last question on the survey asked “If Pizza Hut were a person, how old would he/she be?” Largely serving the purpose of providing supplementary information about Pizza Hut, this question was arranged in a multiple choice format where participants chose one answer. This question, although worded in a way that allowed participants to think of the Pizza Hut brand as animate, did not employ any unique approaches in surpassing survey bias, unlike the former two questions.

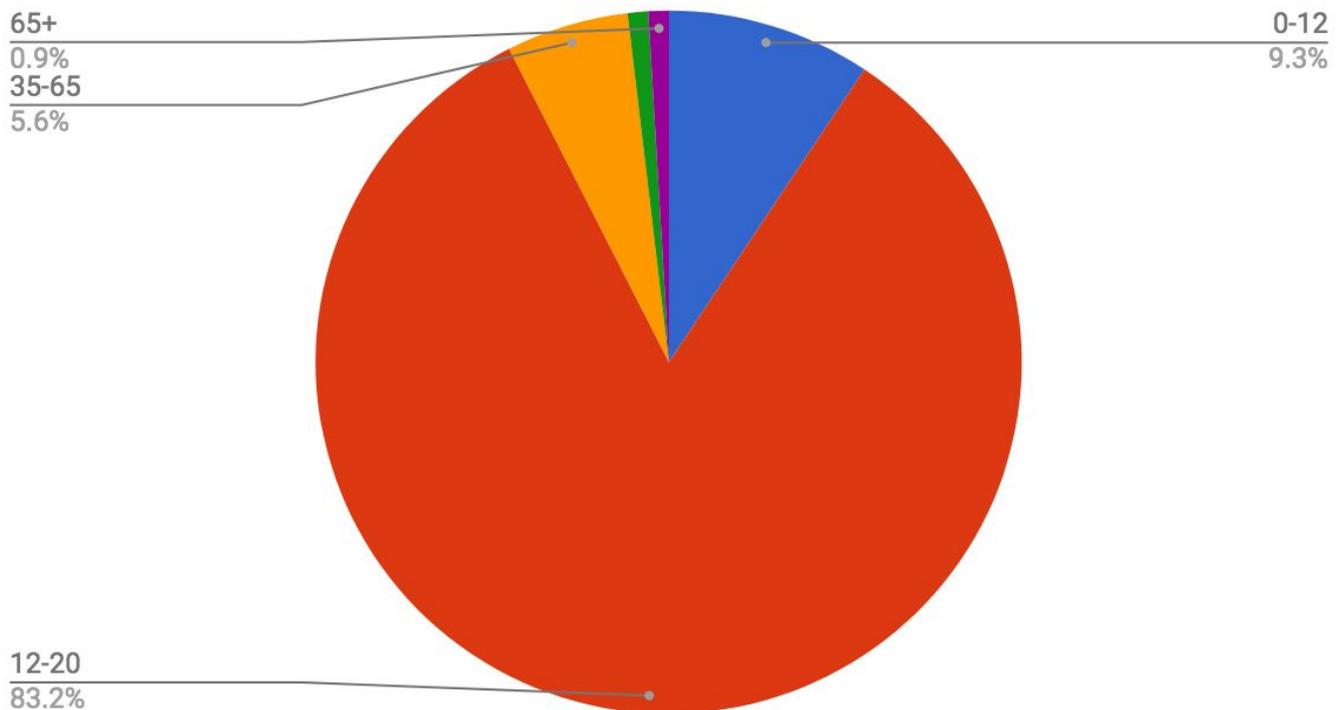
Results

The results of this survey are grouped by category: Demographics and Consumer Perception.

Given that the first question pertaining to the consumer perception of Pizza Hut was open-ended, a list of the responses will be included, but they will also be divided into twelve general groups.

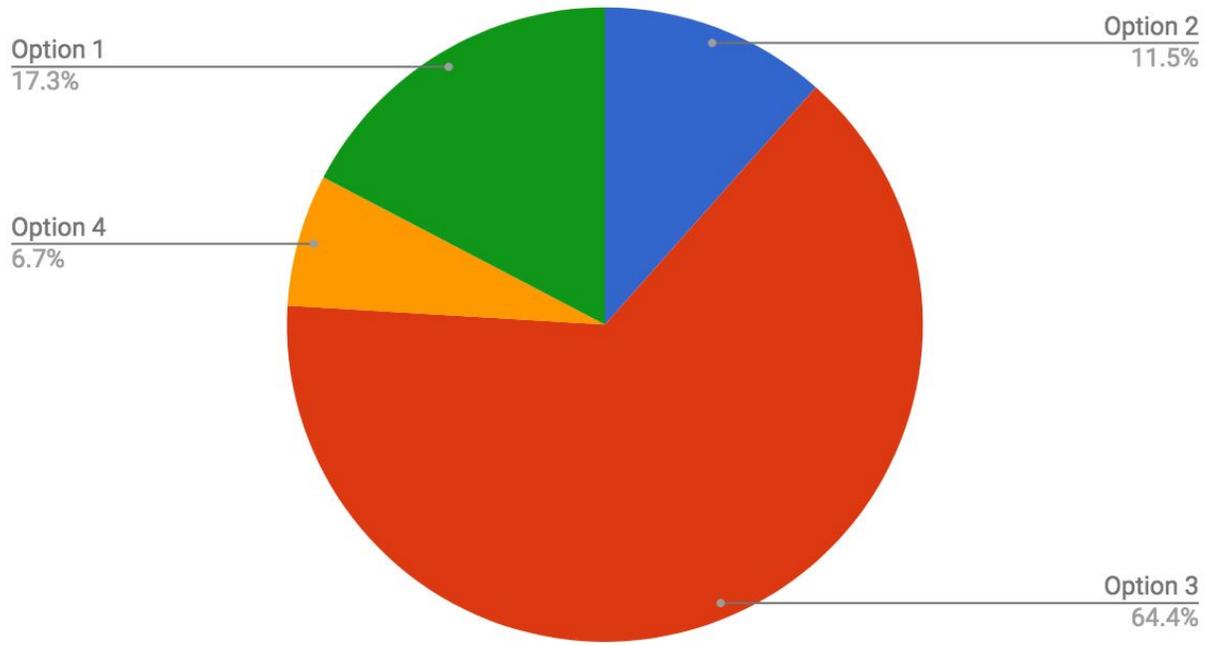
Demographics

Pizza Hut: Age of Survey Participants



Consumer Perception

Which Image Best Represents Pizza Hut?



Option 1

Option 2

Option 3

Option 4



Characteristic	Number of Participants	Characteristic	Number of Participants
Trendy	18	Casual	34
Young	6	Old	8
Healthy	0	Unhealthy	30
Happy	20	Sad	0
Extroverted	32	Introverted	6
Lazy	33	Motivated	3

Through this summary of results, it becomes apparent that a majority of the participants viewed Pizza Hut as a casual, extroverted brand that is unhealthy and “lazy”. All of the responses can be found below, and the noteworthy answers that provide more insight on consumer perception have been highlighted in orange.

triangle
hat and red shirt
Greasy, but happy.
Most likely on the chubbier side, but very extroverted.
young, trendy

Tall, snobby, and unlikeable. Maybe sexist, racist and homophobic
Trendy, always fitting in with the mainstream and what's popular for the time being.
a guy wearing red who was really nice
Hot
a guy with cool clothes and a loving personality
A chocolate covered lady on a summer afternoon in a pool full of strawberries
a homeless man that's unreliable and looks shaggy and disgusting
Everyone hates him but he's actually the best person ever
wears supreme and is a straight winner at life

a girl who wears too much makeup and is super insecure and also kinda weird
pizza
we can't define people by words and mental structures, everyone must be unique and free of all statuses
In uniform
it looks like kylie jenner bc it's trying too hard to be like kim kardashian (dominoes)
Cool hipster
Out of college person wearing a tuxedo T-shirt and a hoodie, modern looking haircut, nice friendly person always willing to help.
Red

Probably normal clothing (T-shirt, jeans, converse type shoes), somewhat mediocre looking with an amazing personality
Pizza Hut would be happy and jumping around being red and handing out free pizza. The clothing would of course be pizza like.
Red and black clothes
black pants & red shirt. well maintained & neat. white. blonde.
A casual kid who wears black and read a lot. Wears like vans, thrasher, adidas
Greasy
He would be wearing a black coat with a red hat on, can't see his face
Fat, cheesey, smelly, crusty, and hot.

They would be a normal teenage aged kid with casual clothing and a red shirt on.
Red
Sorta preppy, maybe hipster, chill as hecc
fun
Person with a pizza and a hut
Causal and a chill person
red clothes, shaggy hair, tennis shoes
Nosy and in your face
A bit crusty (no pun) and sort of like that middle aged guy who is trying to stay young and popular but is still tasty which is why people still go to him.
mike shorts. tank top. hat and sandals. they're kind of rude but have a great smile

super casual, lazy, greasy
cheesy
Fat man in a big red shirt and a backwards ball cap who can't lift himself off the couch
Red hoodie with shaggy blond hair, ripped jeans, laid back, green eyes
Middle aged man with a cowboy hat.
Greasy, ungroomed, kind of fat
A greasy, chubby hairy person
Nosy and in your face
Clothing would look clean, looks would be American, personality would be capitalism
Not well dressed but good personality & attitude (basically describing my

perception of an
employee)

The person would be nice
and the person would wear
jeans and a shirt

If Pizza Hut were a person
he would look like a 50s
greaser straight out of
Footloose. Pizza Huts
clothing would consist a
leather jacket and a sexy
unibrow, with a collared
shirt just open enough to
see three chest hairs. He
would also have a tattoo of
his mother, and next to it a
phrase saying "Pizza is
love, Pizza is Life"

A fun person who is
looking to relax with his
friends.

a chubby man with a
triangular face and

pepperoni for eyes, super fun to be around
very energetic and yummy
A middle age man with glasses who wears a suit
A person with a very light personality that looms very casual and with normal clothing.
They'd tell lots of CHEESY puns
Some who is go-with-the-flow
Greasy stained clothes, unshaven face, too laidback and easygoing
I think that they would wear casual clothing and be a bit overweight.
A creative person who wears casual clothes.
Older and friendly, a bit overweight and lazy. Still lots of fun at parties.

<p>Pizza Hut would be friendly and always trying to help. They would wear not the newest clothes, but they would still be nice.</p> <p>Pizza Hut would be tall and slightly overweight or obese. Lastly, the person wouldn't be rich, but not poor.</p>
<p>Someone who enjoys eating pizza.</p>
<p>Casually dressed, fun, outgoing</p>
<p>I imagine Pizza hut as a senior in high school that's not very motivated to do well in school and shoplifts from the mall.</p>
<p>Just a person who probably skates.</p>
<p>hat and red shirt</p>
<p>Greasy, but happy.</p>

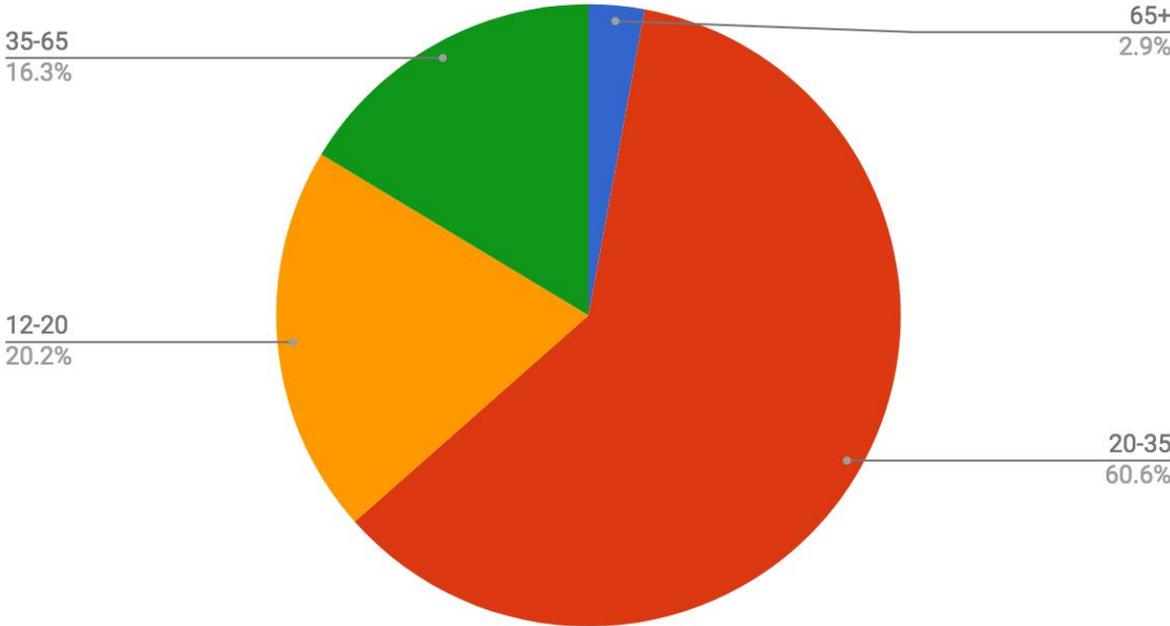
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If Pizza Hut Were a Person, How Old Would He/She Be?



Discussion

Upon the conclusion of the survey, the responses to the different consumer perception questions were analyzed to see the strengths and weaknesses of each format.

Consumer Perception Question #1

64.4% of the participants chose Option 3, the overweight man, as best describing the Pizza Hut brand. Thus, it becomes apparent that consumers perceive Pizza Hut as an unhealthy brand that has a casual organizational subculture. Given that Pizza Hut does primarily sell pizza, it makes sense that consumers perceive the company as being unhealthy. However, if Pizza Hut chooses to attract more healthy consumers, the brand perception must be changed.

Overall, analyzing the results for this survey did not take ample time, because the multiple choice options helped tabulate the results quickly into a pie chart so that results could be viewed easily. As a result, using drawings in conjunction with multiple choice questions to test consumer perception is ideal because it allows participants to view the brand as more animate, and therefore they answer more accurately. In addition, when testing large samples, this method is far more efficient in gaining a general perception in a limited amount of time. The only downside to this type of survey question is that consumers are limited in their options because a brand can be represented in many different ways and combination of characteristics.

Consumer Perception Question #2

Because this question was open-ended, results were analyzed by grouping them into different categories. There were a total of twelve categories, and if a response contained elements that related to more than one category, the response counted towards all applicable categories.

Overall, the majority of the participants saw Pizza Hut a casual, friendly brand that was unhealthy and lazy.

This question allowed participants to get more creative, and because the question was worded in a way that made the Pizza Hut brand seem animate, the subconscious mind was activated, thus allowing the responses to be more accurate. As a result, some traits that were unable to be expressed in the former question came to light through this question. For example, from the first question, it was impossible to deduce that consumers perceived Pizza Hut as lazy yet friendly. Thus, it becomes apparent that open-ended questions allow for more personality traits to be shared.

One downside to open-ended questions, however, is that they take ample time to analyze. Each response must be read in order to categorize the data. As a result, for surveys with large sample sizes, it may be hard to efficiently make conclusions. Ample time and effort must be dedicated towards gaining information. Nonetheless, open-ended questions allow for a more detailed analysis, so it is worth using if more information about the brand image is wanted.

Pizza Hut Analysis

Using the data acquired from the survey, some suggestions were made about the overall way in which Pizza Hut could change its marketing strategy so that more people would perceive Pizza Hut in an agreeable manner. To begin this analysis, an overview of Pizza Hut's history and marketing approach has been given.

Marketing Approaches

In the past, Pizza Hut focused on establishing itself as a family brand; essentially Pizza Hut wanted to be the restaurant that families came to spend quality time at. With arrangements such as the Book-It Program, Pizza Hut would heavily market to school-age children and their families. However, in recent years, Pizza Hut has turned towards marketing for millennials. Pizza Hut now assumes its main customers to be millennials who are looking to order something fast while hanging out with their friends. This change in target market has completely changed the way in which Pizza Hut creates its advertisements and promotional campaigns.

However, through the survey results, it becomes apparent that there is a disparity in consumer perception of the Pizza Hut Brand. Although a majority of the participants viewed the Pizza Hut Brand as "extroverted", there was also a significant portion of the participants that viewed Pizza Hut as "lazy" and even "old". In fact, a common thread found between a majority of the responses was that participants described Pizza Hut as an "extroverted old person attempting to

remain trendy”. As a result, it becomes apparent that not all of participants view Pizza Hut in the way that the company wishes to be viewed.

Solutions

The best representatives of any brand are the employees. As a result, Pizza Hut can change consumer perception by hiring more hard working employees so that consumers can directly see this change and then correlate the brand with the employees. In fact, on the open-ended questions, many of the participants stated that they essentially thought of the delivery person and cashier when asked to describe Pizza Hut as a person. Thus, by training employees to react quickly to consumer demands and creating a better organizational subculture at the base level, the problem of diverging brand perceptions can be solved.

In addition, brand perception is also largely dependent on the type of advertising and promotional campaigns that a company puts forth. In order to get rid of the stigma of Pizza Hut being associated with laziness, more ad campaigns can be done that show a working man or woman coming home from work and picking up a pizza. Furthermore, more emphasis can be put on the customer service and the fast delivery time so that Pizza Hut isn't seen as lazy.

Conclusions

After gathering data about the brand perception of Pizza Hut using the creative questionnaire, it became apparent that by employing distinct surveying methods, a more holistic perspective can be established. After conducting research about events and instances that activate the subconscious mind, three main methods were concluded upon as being the best suited for survey research. Drawings are a great way to activate the subconscious mind because psychologically, the human brain is wired to react to symbols and archetypes in a more direct manner, for pictures are what even the earliest humans used to communicate. Assigning animate qualities to different abstract concepts allows participants to correlate two different ideas better. Furthermore, humans are generally social creatures, so it is easier for participants to convey their thoughts. Open-ended questions also foster more creativity, and therefore the responses that participants give are much more accurate.

However, each type of question has its benefits and weaknesses. Multiple choice questions with drawings as answer choices are good for gaining a general perception efficiently. Open-ended questions are much more specific, but they take more time to analyze and it can be difficult to tabulate the data into a readable format. Questions with animate qualities can be used in conjunction with the other forms of questions mentioned above to surpass conscious bias. As a result, it becomes apparent that each type of question is appropriate to use in different instances based on the sample size and the type of data required.

Another interesting but rather unexpected find made from this study is that many participants viewed employees as direct representatives of the brand. As a result, lazy employees caused the entire brand to be painted as lazy. Thus, it is important that companies emphasize customer service so that the consumer brand perception remains consistent with the target brand image.

Given that this study was conducted in a restrained time period, results were only acquired from the Dallas/ Fort Worth area. Thus, if this study were to be conducted again, a larger sample size would be taken that spanned different cities so conclusions could be made about a larger population. Furthermore, it would be interesting to use the survey created for the purpose of this study to also measure consumer perception of other pizza brands. Using this data, comparisons could be made about how the creative questions speak for other pizza brands. This data could be used to guide changes in marketing plans and operations for the respective brands tested.

Overall, this study provided considerable insight over how survey bias can be overcome using distinct methods of surveying that focus on activating the subconscious mind.

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