



# ROLEX

<i>Name</i>	<i>ID</i>
<i>Omar ElHussieny</i>	2019/07727
<i>Dina Khaled Hassan</i>	2019/06030
<i>Esraa Abdelaziz</i>	2019/11407
<i>Haneen Hassan</i>	2019/07263

*Dr. Engy Mohamed Saleh*

## Table of Contents

<b>Abstract</b>	<b>2</b>
<b>The Field of Investigation</b>	<b>2</b>
<i>Research Background</i>	2
<i>Problem Statement</i>	3
<i>The Research Objectives</i>	3
<i>Research Questions</i>	4
<i>Definitions of Key Terms</i>	4
<b>Literature Review</b>	<b>5</b>
<b>Theoretical Framework and Hypotheses Development</b>	<b>6</b>
<b>Research Method</b>	<b>7</b>
<i>Research Design</i>	7
<i>Research Time Horizon</i>	7
<i>Sample and Data Collection Procedure</i>	8
<i>Operationalization of the Variables</i>	8
<i>Data Analysis Technique</i>	8
<b>Results</b>	<b>9</b>
<b>Discussion and Conclusion</b>	<b>20</b>
<b>References</b>	<b>21</b>
<b>Appendix</b>	<b>23</b>

# **A Study of the Relationship between the Perceived Quality, Price, Design, Awareness, and Brand Image: Evidence from a Watch Company**

## **Abstract**

This paper aims to study the factors that affect the brand image and their relationships. We are using Rolex company as the case study. In this paper, past research literatures are used to support the study. We are going to study four of the factors that affect the brand image that are perceived quality, design, price, and awareness. The importance for such a study is to help companies understand more about how their brand image can be affected and to improve it accordingly, as having a positive brand image affects how customers perceive such a brand positively. This purpose of the study is hypotheses testing. Also, this study is causal, and it aims to test the relationship between the independent variables and the dependent one by conducting a questionnaire. The research time horizon is cross-sectional. Lastly, the results show that there is a positive relationship between perceived quality, design, price, awareness, and the brand image. According to the analysis, companies can figure out how can each variable and its measurements affect their brand image positively or negatively.

**Keywords** *Brand image, Perceived Quality, Design, Price, Awareness*

## **The Field of Investigation**

### **Research Background**

When a brand introduces a new product or service to the world, 9 times out of 10, it already has a bunch of competitors out there. This is where the business owner (or marketing department if we're talking about a bigger, more established brand) needs to get creative and figure out how to stand out and cut through the noise. A great way of differentiating your brand from that of your competitors is through having a strong brand image.

A person might base their brand image of your company on a first-hand experience they had as a customer. However, forming this opinion does not always have to involve an actual purchase. It could be based on something that someone else said about your brand, whether that's online, via a media outlet or an influencer review, or word of mouth.

What's important to note is that your brand image is based on someone's perception. So, you don't have direct control over it. But there is a range of other factors that you do have control over that can influence how someone perceives your brand, such as your brand personality, voice, positioning, messaging, values, social media, prices, design, awareness, and perceived quality.

Rolex SA is a British-founded Swiss watch designer and manufacturer based in Geneva, Switzerland. Founded in 1905 as Wilsdorf and Davis by Hans Wilsdorf and Alfred Davis in London, England, the company registered the word 'Rolex' as the brand name of its watches in 1908, and it became Rolex Watch Co. Ltd. in 1915. After World War I, the company moved its base of operations to Geneva because of the unfavorable economy in the United Kingdom. In 1920, Hans Wilsdorf registered Montres Rolex SA in Geneva as the new company name (montre is French for a watch (timepiece)); it later became Rolex SA. Since 1960, the company has been owned by the Hans Wilsdorf Foundation, a private family trust. According to Forbes, Rolex is one of the top 100 most recognized and most powerful brands in the world. The name "Rolex" is immediately recognized by people all over the world, even those un-affiliated with the luxury watch industry.

Rolex can credit this brand recognition to its work on its brand image and positioning. People both inside and outside of the luxury watch world recognize the name “Rolex.” People associate the brand name with success and luxury and imagine Rolex wearers to live a lavish lifestyle. A Rolex watch can be used as a status symbol, showing people that the wearer has achieved a level of success and stability, which have allowed them the means to purchase a Rolex watch. This strong and positive brand image can largely be attributed to the people that are seen wearing Rolex watches.

Today, many celebrities and athletes are seen wearing Rolex watches. This idea started in 1927 when Hans Wilsdorf had Mercedes Gleitze wear a Rolex Oyster around her neck as she attempted to become the first woman to swim across the English Channel. Today, athletes such as Phil Mickelson, Roger Federer, and Lindsay Vonn are proud Rolex ambassadors, often spotted wearing their Rolex watches. Celebrities, like Jennifer Aniston, as well as historical figures, such as Martin Luther King and Ronald Reagan, proudly wore their Rolex watches as well. That’s just a few of the celebrities known for wearing Rolex watches as it has a high brand image.

This brand positioning, started by Wilsdorf in 1927, ensures that Rolex watches are constantly out in the face of the public, as well as being associated with the wealthy and successful. When those unfamiliar with the luxury watch industry see their favorite athlete or celebrity wearing a Rolex watch, it creates interest and curiosity in the piece. Rolex watches are then perceived to be the watch of choice for the rich, successful, and famous, giving the brand an image of superiority.

Because of its high-profile endorsements, innovative nature, and restrictions on importation, Rolex has an image of superiority and exclusivity, making it a very desirable brand.

## Problem Statement

As the brand image of any company affects the purchasing power of consumers and the way they perceive such a company, studying it and the factors affecting are very important for companies to keep their brand’s position in the market, and to improve it. Accordingly, we are going to study the factors that affect the brand image like perceived quality, price, design, and awareness.

## The Research Objectives

Independent Variables	Objectives
Perceived Quality	<ul style="list-style-type: none"><li>- To study the effect of perceived quality on brand image.</li><li>- To determine the perceived quality affecting brand image.</li></ul>
Design	<ul style="list-style-type: none"><li>- To study the effect of design on brand image.</li><li>- To determine the design affecting brand image.</li></ul>
Price	<ul style="list-style-type: none"><li>- To study the effect price on brand image.</li><li>- To determine the price affecting brand image.</li></ul>
Awareness	<ul style="list-style-type: none"><li>- To study the effect of awareness on brand image.</li><li>- To determine the awareness affecting brand image.</li></ul>

## Research Questions

Independent Variables	Research Questions
Perceived Quality	What is the effect of perceived quality on brand image?
Design	What is the effect of design on brand image?
Price	What is the effect of price on brand image?
Awareness	What is the effect of awareness on brand image?

## Definitions of Key Terms

### *Brand Image*

Brand Image is how customers think of a brand. It can be defined as the perception of the brand in the minds of the customers. This image develops over time. Customers form an image based on their interactions and experience with the brand. These interactions take place in many forms and not necessarily involve the purchase or use of products and services.

### *Perceived Quality*

Perceived Quality is the impression of excellence that a customer experiences about a product, brand, or business, derived through sight, sound, touch, and scent. It is the customer's perception of a product's reliability and robustness, the impression of care and craftsmanship invested in its manufacture, the sense of richness and strength of the materials used, the evident fine attention to detail, and the feeling of the depth of engineering behind the design.

### *Design*

Brand Design can be defined as one of the crucial marketing practices of creating the name, logo, design, and the symbolic elements related to the brand to create a distinctive identity in comparison to the other brands in the market and providing impetus to the product differentiation.

### *Price*

Price is a compared exchangeable value. In an exchange one must make a comparison between the value of the goods to be given and the value of those to be received." This indicates that the goods on either side of the exchange may be deemed to be the price of the other goods.

### *Awareness*

It is the extent to which customers are able to recall or recognize a brand under different conditions. Brand awareness is one of two dimensions from brand knowledge, an associative network memory model. Brand awareness is a key consideration in consumer behavior, advertising management, and brand management. The consumer's ability to recognize or recall a brand is central to purchasing decision-making. Purchasing cannot proceed unless a consumer is first aware of a product category and a brand within that category. Awareness does not necessarily mean that the consumer must be able to recall a specific brand name, but they must be able to recall enough distinguishing features for purchasing to proceed.

# Literature Review

## 1. *Brand Image*

Brand image is an important part of brand equity since it communicates the brand's value to customers. Kotler (2001) defined image as "the set of beliefs, ideas, and impression that a person holds regarding an object. So, when we talk about brand image, we're talking about a mental picture of the brand based on the beliefs, thoughts, and impressions of individual consumers. Both consumers and businesses have various perspectives on it. Moreover, brand image is "how a brand is perceived by consumers" (Aaker, 1996, p. 71), it has its origin in the minds of consumers. Images are the interpretation of their beliefs and values. Fishbein and Ajzen (1975) gave the classification of human beliefs as descriptive, informational, and inferential. Consumers' descriptive beliefs are based on their actual encounters with the product. Informational people are those who are influenced by external stimuli and sources such as society, advertisements, and communities. Inferential beliefs are those that are formed as a consequence of interpretations based on previous product experiences. Those Levels of beliefs were discussed to comprehend the variety of pictures that may be produced as a result of these beliefs.

## 2. *Perceived Quality*

As Perceived quality is one of the main factors that affect the brand's image, it is important to understand its meaning and how it is defined by different academics. Zeithaml (1988) defined perceived quality as consumer's own point of view and feeling towards a product's overall performance. Also, Aaker (1991) defined perceived quality as the perception of customers of a product or a service, with respect to what is believed to be the purpose or the objective of such a product or a service, compared to its different alternatives. He also added that perceived quality thus differs from various concepts that are related, such as: actual/objective quality, which is the best expected outcome of a product or a service, product-based quality, which are the components of a service or a product or what is included in it, as features, and ingredients, and manufacturing quality, which is the production best quality aiming to obtain zero defects. Though there are other several definitions of perceived quality stated by many scholars, they all agree that it is what consumers think of the overall tangible and intangible dimensions or components of a product or a service, such as durability, reliability, features, performance, conformance, serviceability, and aesthetics.

## 3. *Design*

In today's world of globalization and intense competition, it became critical for businesses to do provide a diverse range of products merchandise in order to meet a wide range of customer needs. By their very character, customer needs differ greatly. It could be as simple as a modification in the product's appearance, or it could be a new functionality need that requires a complete rebuild of the item. It has always been a struggle for companies to meet all of the client needs while being profitable. This was stated by Zeid.

## 4. *Price*

There are many definitions for Price like: "Price is a replaceable value that can be compared." "In a transaction, the value of the commodities to be provided and the value of the items to be received must be compared." This means that the price of the items on both sides of the trade might be regarded as the price of the other commodities. Price represents the same capacity with respect to some specific item, the amount of which is stated; tradeable value expresses the power of buying with regard to products in general everyday discourse, the word price conjures up the concept of monetary worth, or the purchase power of an item expressed in dollars. Price is defined as "the statement of a thing's exchange value in units of exchange value." The term price has taken on the sense of a commodity that is considered comparable to another. In most circumstances, price refers to the amount of money required to get a thing.

### 5. Awareness

Social media is an effective marketing tool that deliver awareness. In the first place, companies always aim to build a loyal relationship with consumers and nowadays companies mainly focus on millennials as brands should adjust their content on social media platform to attract users so, awareness will be created. Company's content and customers indirectly influence offline purchases through two methods, one of them is consumer involvement, it is driven by the heuristic motive, which has a great influence on offline purchases. In addition to brand awareness, when customer is already aware with the brand, this definitely increase offline purchase. Besides, millennials already help in increasing awareness, by which, their engagement of brands on social media and the quality of material they are mostly posting.

## Theoretical Framework and Hypotheses Development

Since brand image is one of the most important topics companies are concerned with. Brand image is the dependent variable. Accordingly, we have to study the variables that affect brand image such as perceived quality, design, awareness, and price which are the independent variable.

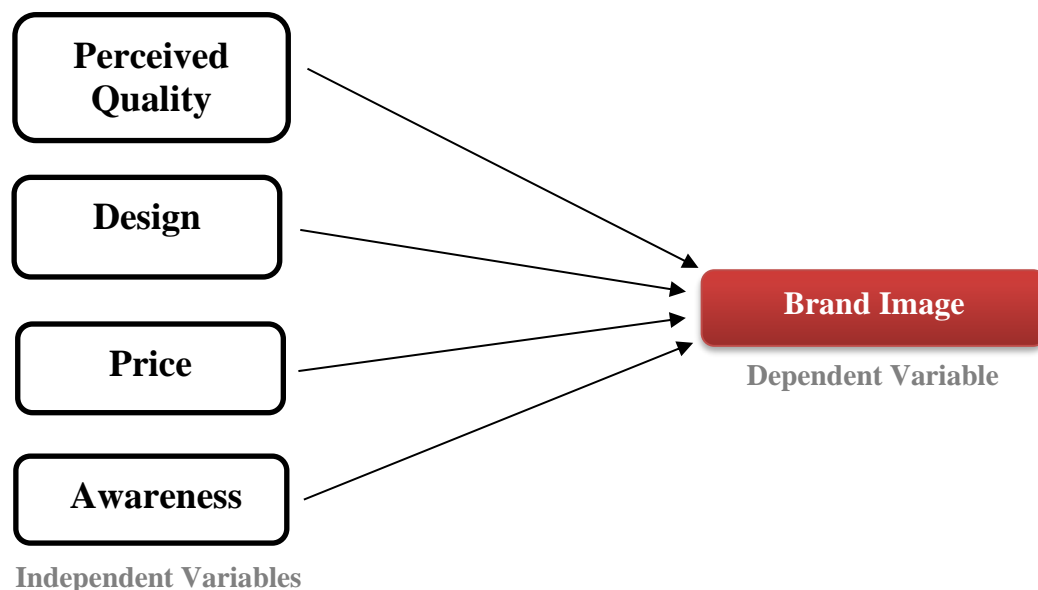
The higher the perceived quality of a product or a service and costumers, the greater the possibility of developing positive feelings towards a brand. Therefore, the better is the brand image.

The design is the first thing that the consumer notice during the purchasing phase, it has a huge effect on its brand image, it can easily grab the attention of the customer towards a certain product.

The price has a huge impact on the brand image of a product, the higher the price of a product the more luxurious it appears in the eye of the consumer, the lower the price of a product the less fancy it seems in the eye of the consumer.

In order to deliver a positive brand image, the company has to be concerned about raising awareness.

### Conceptual Model





## Hypotheses

### *Directional*

#### **Hypotheses 1**

The higher the perceived quality of a product or a service, the stronger the company's brand image.

#### **Hypotheses 2**

The better the design of a brand the stronger the company's brand image.

#### **Hypotheses 3**

The higher the price of a product or a service the stronger the company's brand image.

#### **Hypotheses 4**

The higher the brand awareness the stronger the brand image.

### *Nondirectional*

#### **Hypotheses 5**

There is a relationship between the perceived quality of a product or a service and the company's brand image.

#### **Hypotheses 6**

There is a relationship between the brand's design and the company's brand image.

#### **Hypotheses 7**

There is a relationship between the price of a product or a service and the company's brand image.

#### **Hypotheses 8**

There is a relationship between the brand awareness and its image.

## Research Method

### Research Design

#### *The Purpose of the Study*

It is Hypotheses testing, as the research aims to study the effect of the independent variables, perceived quality, price, design, and awareness on the dependent variable, brand image, and study the relationship between them. Also, to test the hypotheses through conducting a questionnaire.

#### *Type of Investigation*

It is Causal, as the research aims to study the independent variables' effect on the dependent variable (cause-and-effect).

#### *Research Strategy*

This research is considered Survey research, as the information was collected through questionnaire sent to a number of respondents in order to test the research hypotheses.

#### *Extent of Researcher Interference*

The researcher interference is considered minimal, as there is no manipulation of the researcher, and the research is done with no control of the variables.

#### *Study Setting*

The setting is contrived as it is done in an artificial environment.

#### *Units of Analysis*

Individual, as the research is targeting consumers individually to study how can the independent variables affect how they find or perceive a brand's image, (Rolex).

### Research Time Horizon

The study is sent to a single sample only once, so it is considered Single-Cross Sectional.



## Sample and Data Collection Procedure

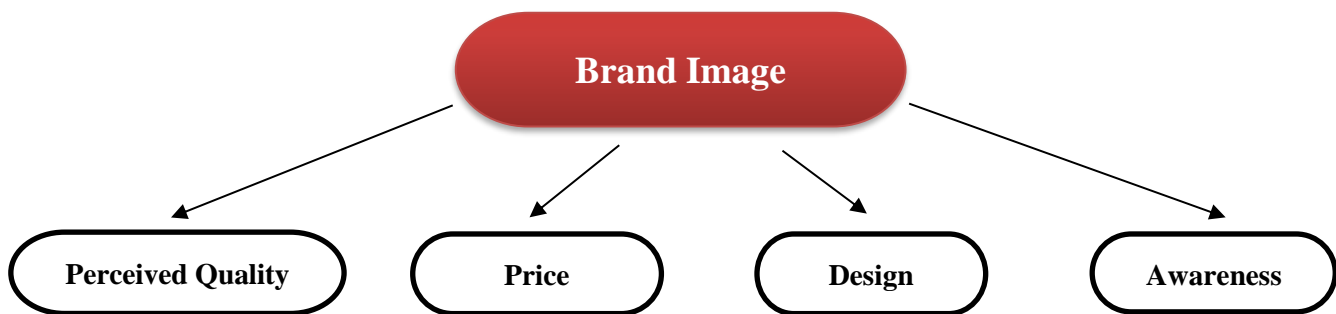
### *Data Collection Method*

Survey (questionnaire) Method, as the study was conducted through a questionnaire sent to a number of respondents testing all the variables and their effect on the dependent variable which is the brand image.

### *Sampling Design*

Nonprobability sampling technique was used as it is impossible to reach all the population in a short time. Also, convenience sample was chosen as the questionnaire was sent to groups on WhatsApp, so anyone who came across it (available) can fill it out.

## Operationalization of the Variables



Could be Measured by	Could be Measured by	Could be Measured by	Could be Measured by
1- Durability. 2- Number of Breakdowns. 3- Variety of Features. 4- Reliability.	1- Segmentation. 2- Positioning. 3- Location. 4- Payment Methods.	1- Color. 2- Material. 3- Logo. 4- Shape.	1- Source. 2- Reachability. 3- Variability of ads.

## Data Analysis Technique

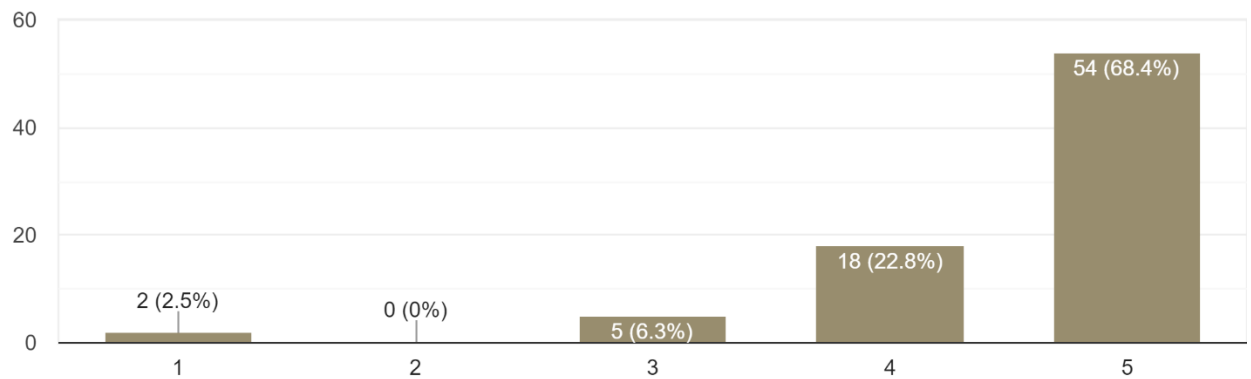
Through Excel sheet.

## Results

The Questionnaire was conducted on Google Forms and received 79 responses.

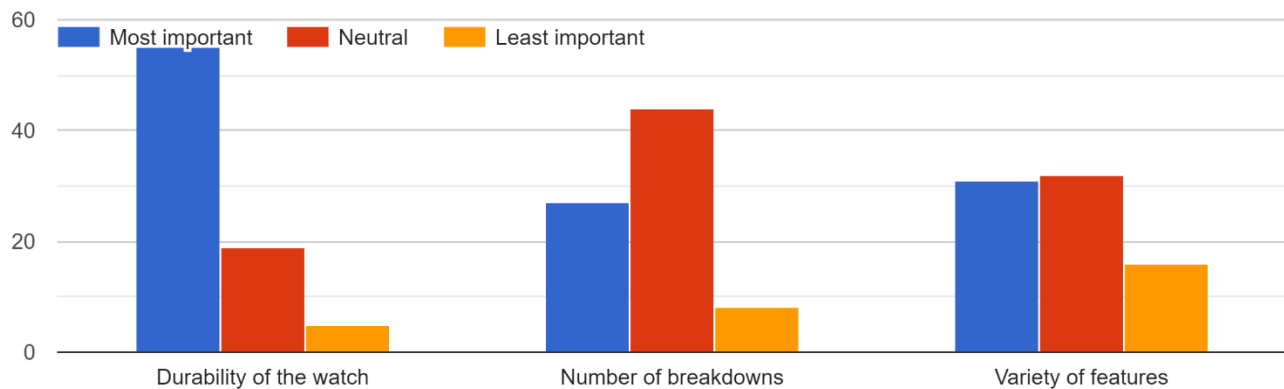
1- On a scale from 1 to 5, how do you think perceived quality affects a brand's image?

79 responses



- 54 respondents (**68.4%**) think that perceived quality **highly affects** the brand image.
- 18 respondents (**22.8%**) think that perceived quality **affects** the brand image.
- 5 respondents (**6.3%**) think that perceived quality has a **neutral effect** on brand image.
- 2 respondents (**2.5%**) think that perceived quality **weakly affects** the brand image.

2- Rank each element from the most important to the least important regarding the perceived quality of watches on affecting the brand's image



### Durability

- 55 respondents (**69.6%**) think that **durability of the watch is the most important dimension** of quality compared to number of breakdowns and variety of features in affecting brand image.
- 19 (**24%**) think that its importance is **neutral**.
- 5 (**6.3%**) think that it is the **least important** dimension.

### Number of Breakdowns

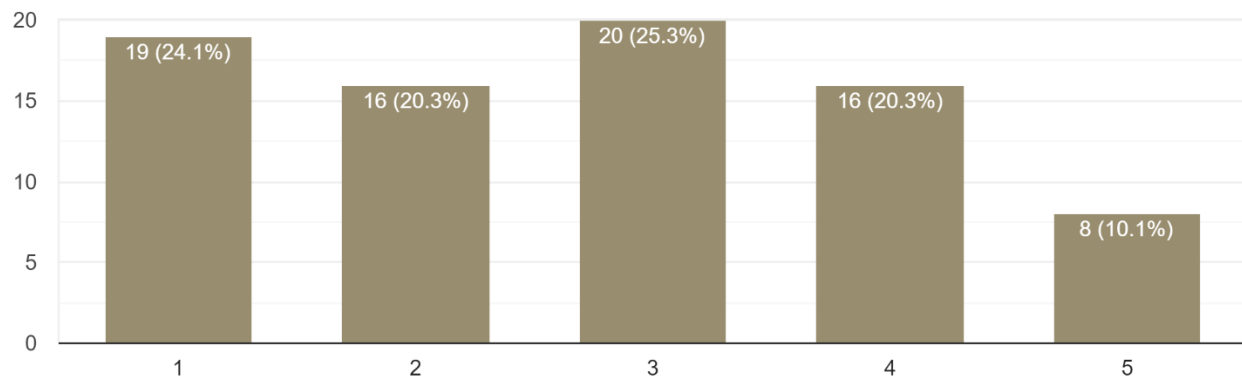
- 44 respondents (**55.7%**) think that the importance of the **number of breakdowns** is **neutral** regarding the dimensions of quality in affecting the brand image.
- 27 (**34.2%**) think that it is the **most important** dimension.
- 8 (**10.1%**) think that it is the **least important** dimension.

### Variety of features

- 32 (**40.5%**) think that the importance of **variety of features** is **neutral** regarding the dimensions of quality in affecting the brand image.
- 31 (**39.2%**) think that it is the **most important** dimension.
- 16 (**20.3%**) think that it is **the least important** dimension.

- 3- "When a company has a positive brand image, I immediately rely on such a company in offering what I desire". How much do you agree with this sentence?

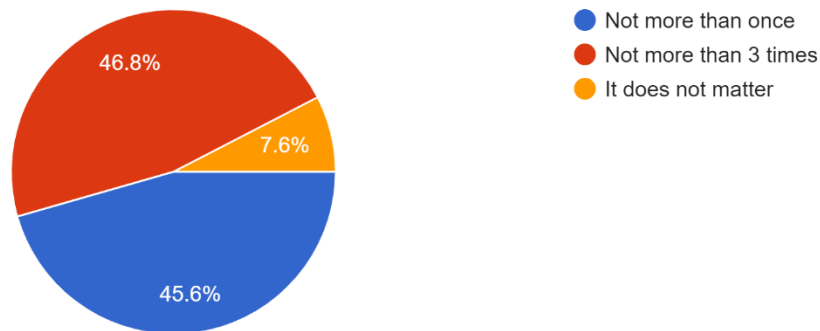
79 responses



- 20 respondents (**25.3%**) responded **neutral**.
- 19 respondents (**24.1%**) responded **strongly agree**.
- 16 respondents (**20.3%**) responded **agree**.
- Another 16 respondents (**20.3%**) responded **disagree**.
- 8 respondents (**10.1%**) responded **strongly disagree**.

4- In your opinion, what is the acceptable number of breakdowns that will still keep the brand's image as it is?

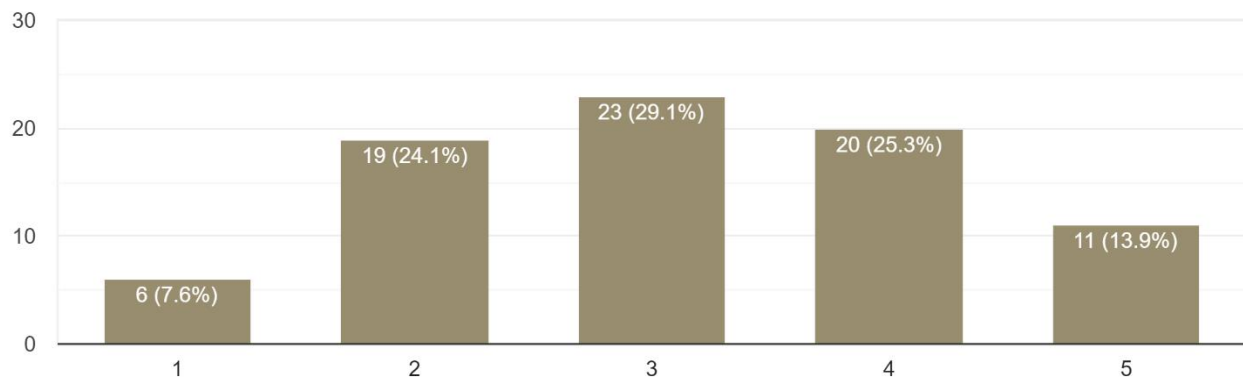
79 responses



- 37 respondents (**46.8%**) responded **not more than three times**.
- 36 respondents (**45.6%**) responded **not more than once**.
- 6 respondents (**7.6%**) responded **it does not matter**.

5- "If a watch includes various features, it means that the quality I will perceive is high." How much do you agree to this sentence?

79 responses

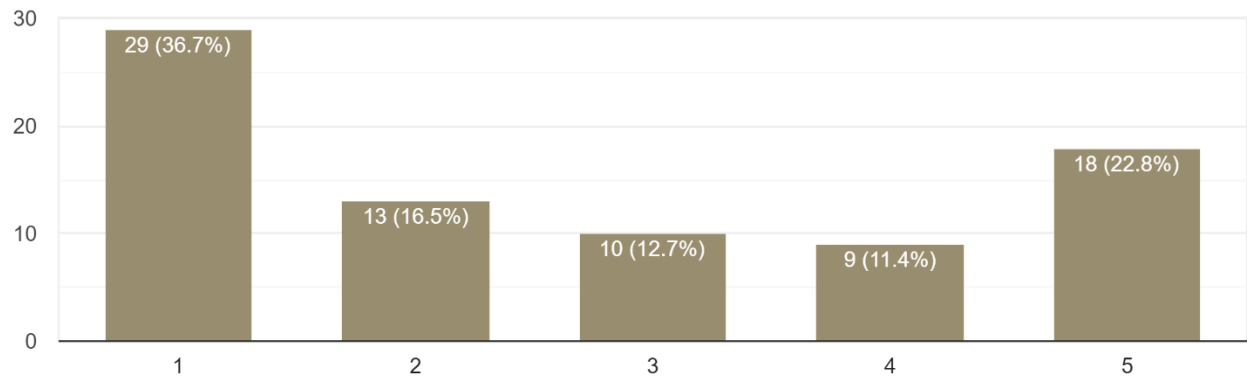


- 23 respondents (**29.1%**) responded **neutral**.
- 20 respondents (**25.3%**) responded **disagree**.
- 19 respondents (**24.1%**) responded **agree**.
- 11 respondents (**13.9%**) responded **strongly disagree**.
- 6 respondents (**7.6%**) responded **strongly agree**.

6-

Does the design of the product affect the brand's image?

79 responses

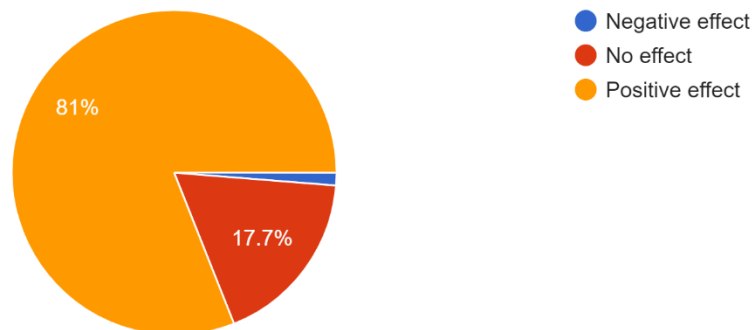


- 29 respondents (**36.7%**) **strongly agree** that the design of the product **highly** affects the brand image.
- 18 respondents (**22.8%**) **strongly disagree** that the design of the product **highly** affects the brand image.
- 13 respondents (**16.5%**) **agree** that the design of the product affects the brand image.
- 10 respondents (**12.7%**) think that the relationship is **neutral**.
- 9 respondents (**11.4%**) **disagree** that the design of the product affects the brand image.

7-

In your opinion, to what extent does the design of the logo affects the brand image?

79 responses

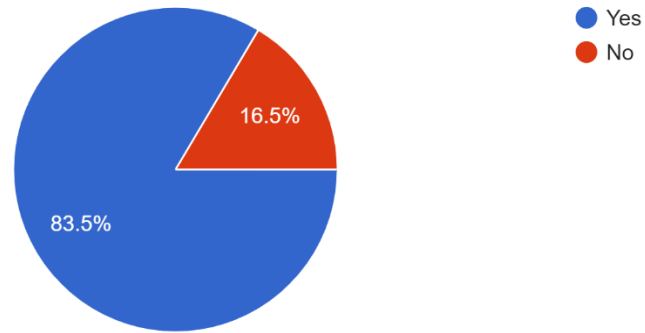


- 64 respondents (**81%**) think that the logo design has a **positive effect** on the brand image.
- 14 respondents (**17.7%**) think that logo design has **no effect** on the brand image.
- 1 respondent (**1.3%**) think that the logo design **negatively affects** the brand image.

8-

Have you ever purchased a product because its color attracted you?

79 responses

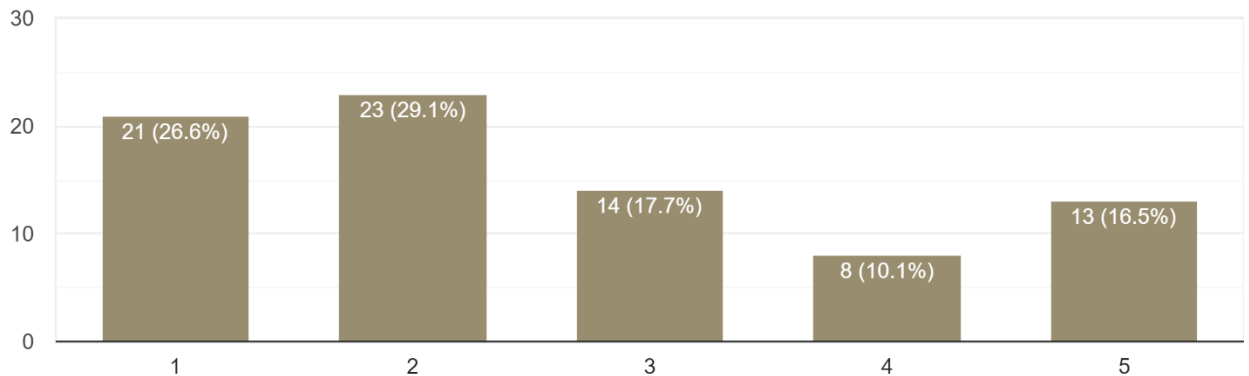


- 66 respondents (**83.5%**) responded **yes**.
- 13 respondents (**16.5%**) responded **no**.

9-

Would you choose a product over another because its material looks more luxurious?

79 responses

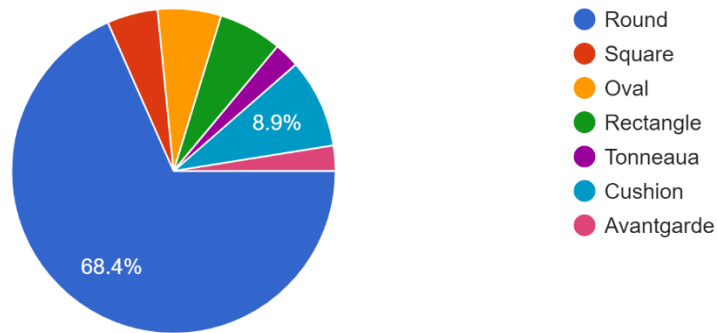


- 23 respondents (**29.1%**) **agree** that they could choose a product because of its material.
- 21 respondents (**26.6%**) **strongly agree** that they could choose a product because of its material.
- 14 respondents (**17.7%**) neither agree nor disagree (**neutral**).
- 13 respondents (**16.5%**) **strongly disagree** that they could choose a product because of its material.
- 8 respondents (**10.1%**) **disagree** that they could choose a product because of its material.

10-

Which shape of these would you buy?

79 responses

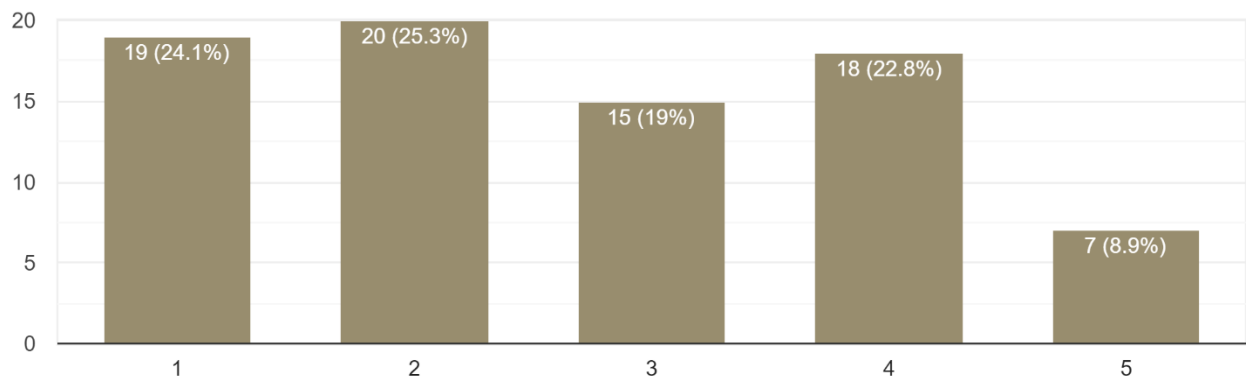


- 54 respondents (68.4%) prefer the **round** shape.
- 7 respondents (8.9%) prefer the **Cushion** shape.
- 5 respondents (6.3%) prefer the **Oval** shape.
- 5 respondents (6.3%) prefer the **Rectangle** shape.
- 4 respondents (5.1%) prefer the **Square** shape.
- 2 respondents (2.5%) prefer the **Tonneau** shape.
- 2 respondents (2.5%) prefer the **Avantgarde** shape.

11-

To what extent do you think the price affects the brand image?

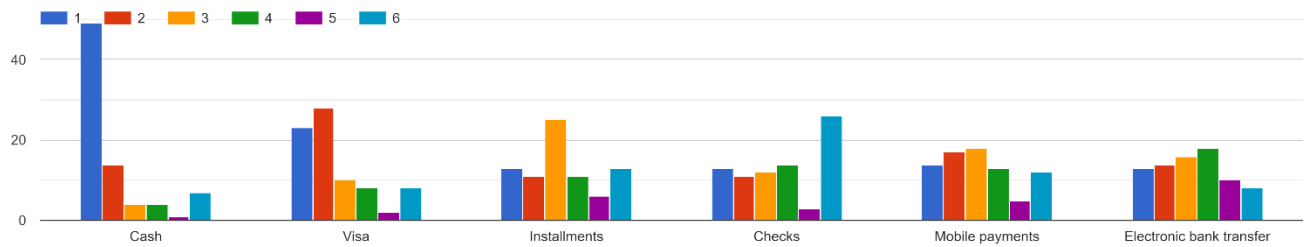
79 responses



- 20 respondents (25.3%) **agree** that the price affects the brand image.
- 19 respondents (24.1%) **strongly agree** that the price affects the brand image.
- 18 respondents (22.8%) **disagree** that the price affects the brand image.
- 15 respondents (19%) neither agree nor disagree (**neutral**) that the price affects the brand image.
- 7 respondents (8.9%) **strongly disagree** that the price affects the brand image.



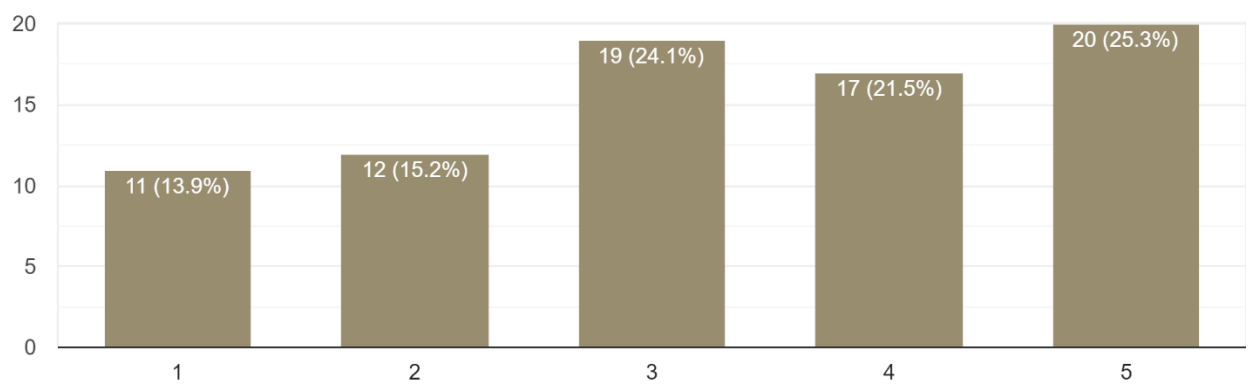
12- Rank your preferred payment methods



From 1 to 6, **1: Most preferred, 6: Least preferred**

- 1: 49 respondents (**62%**) think that **cash** is the **first (most) preferred** payment method.
- 2: 28 respondents (**35.4%**) think that **visa** is the **second preferred** payment method.
- 3: 25 respondents (**31.6%**) think that **installment** is the **third preferred** payment method.
- 4: 18 respondents (**22.8%**) think that **electronic bank transfer** is the **fourth preferred** payment method.
- 5: 5 respondents (**6.3%**) think that **mobile payment** is the **fifth preferred** payment method.
- 6: 26 respondents (**32.9%**) think that **checks** is the **sixth (least) preferred** payment method.

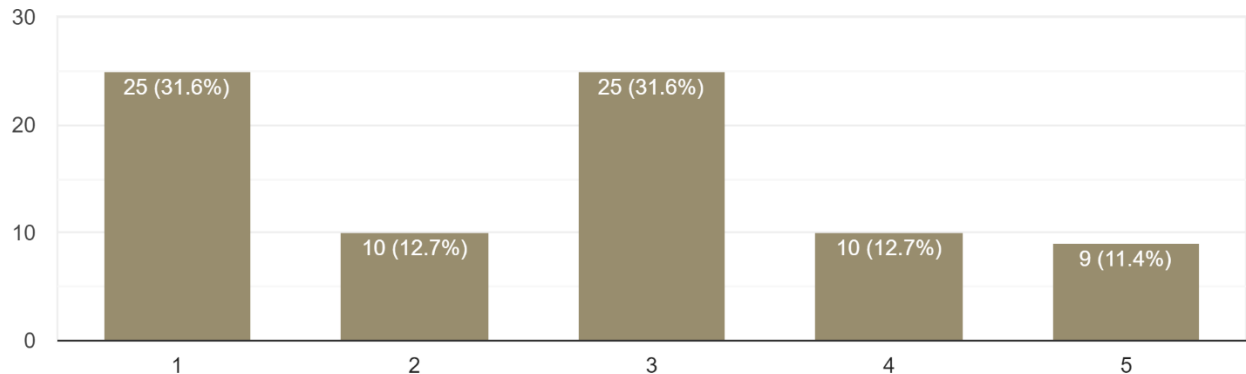
13- From your own point of view, do you think that the retail's position affects the watch's price?  
79 responses



- 20 respondents (**25.3%**) **strongly disagree** that the retail's position affects the price.
- 19 respondents (**24.1%**) neither agree nor disagree that the retail's position affects the price (**neutral**).
- 17 respondents (**21.5%**) **disagree** that the retail's position affects the price.
- 12 respondents (**15.2%**) **agree** that the retail's position affects the price.
- 11 respondents (**13.9%**) **strongly agree** that the retail's position affects the price.

- 14- The positioning of Rolex in the consumer's mind greatly affects the prices of the watches. How much do you agree to this sentence?

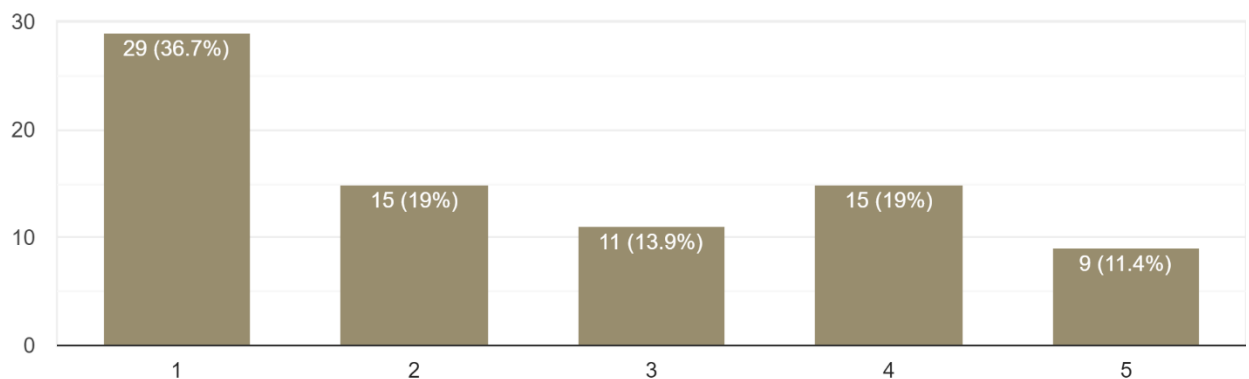
79 responses



- 25 respondents (**31.6%**) **strongly agree** that positioning affects the price.
- 25 respondents (**31.6%**) neither agree nor disagree (**neutral**) that positioning affects the price.
- 10 respondents (**12.7%**) **agree** that positioning affects the price.
- 10 respondents (**12.7%**) **disagree** that positioning affects the price.
- 9 respondents (**11.4%**) **strongly disagree** that positioning affects the price.

- 15- Does awareness of a product affects the brand's image?

79 responses

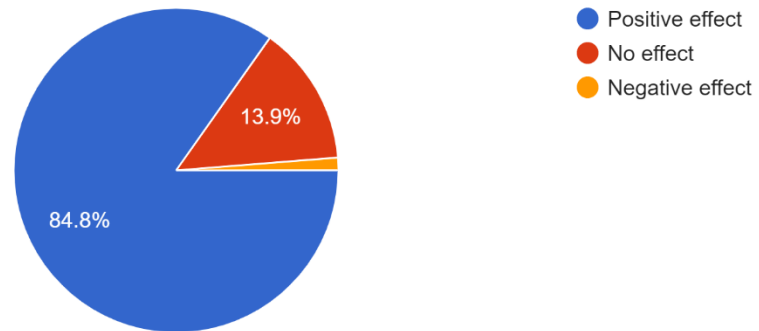


- 29 respondents (**36.7%**) **strongly agree** that awareness affects the brand image.
- 15 respondents (**19%**) **agree** that awareness affects the brand image.
- 15 respondents (**19%**) **disagree** that awareness affects the brand image.
- 11 respondents (**13.9%**) neither agree nor disagree (**neutral**) that awareness affects the brand image.
- 9 respondents (**11.4%**) **strongly disagree** that awareness affects the brand image.

16-

How do you think ads affect the brand's image?

79 responses

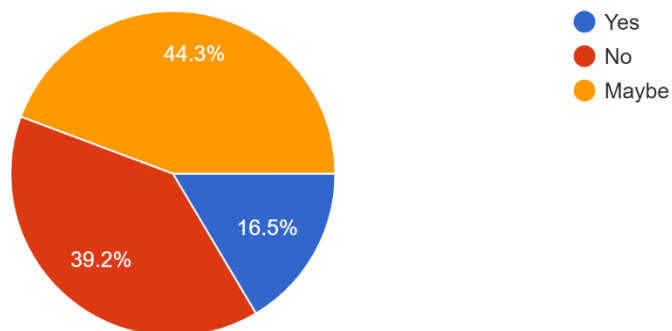


- 67 respondents (**84.4%**) think that ads have **positive effect** in affecting the brand image.
- 11 respondents (**13.9%**) think that ads have **no effect** in affecting the brand image.
- 1 respondent (**1.3%**) think that ads have **negative effect** in affecting the brand image.

17-

From your point of view, would you buy a watch from a brand you are not aware of?

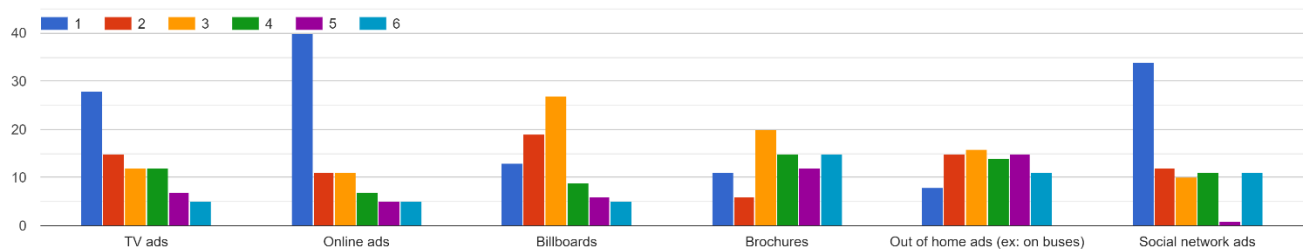
79 responses



- 35 respondents (**44.3%**) responded **maybe**.
- 31 respondents (**39.2%**) responded **no**.
- 13 respondents (**16.5%**) responded **yes**.

18-

Rank the most advertisement channels that grab your attention from the most preferred to the least preferred.



From 1 to 6, 1: Most preferred, 6: Least preferred

Online ads

- 40 respondents (50.6%) responded (1) out of 6.

Social Network ads

- 34 respondents (43%) responded (1) out of 6.

TV ads

- 28 respondents (35.4%) responded (1) out of 6.

Billboards

- 27 respondents (34.2%) responded (3) out of 6.

Brochures

- 20 respondents (25.3%) responded (3) out of 6.

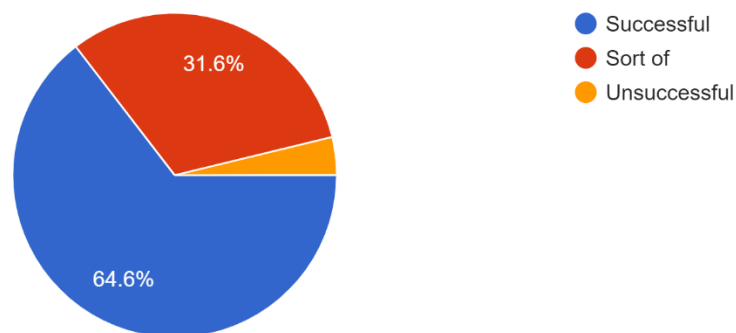
OOH

- 16 respondents (20.3%) responded (3) out of 6.

19-

From your point of view, do you think Rolex is successful in making good brand awareness?

79 responses

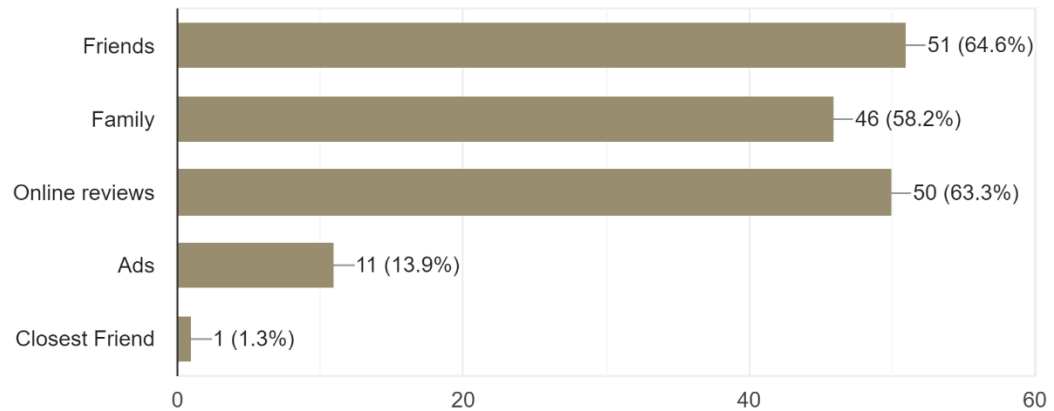


- 51 respondents (64.6%) think that Rolex is **successful**.
- 25 respondents (31.6%) think that it is **sort of**.
- 3 respondents (3.8%) think that Rolex is **unsuccessful**.

20-

Which of these sources do you take into consideration before purchasing?

79 responses

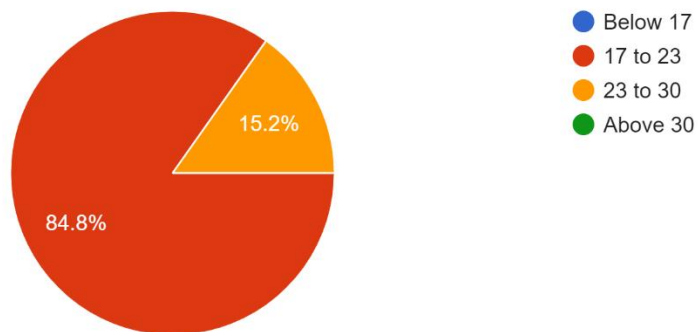


- 52 respondents (**65.8%**) take **friends'** opinions before purchasing.
- 50 respondents (**63.3%**) take **online reviews** into consideration before purchasing.
- 46 respondents (**58.2%**) take **family's** opinions before purchasing.
- 11 respondents (**13.9%**) take **ads** into consideration before purchasing.

21-

Age?

79 responses

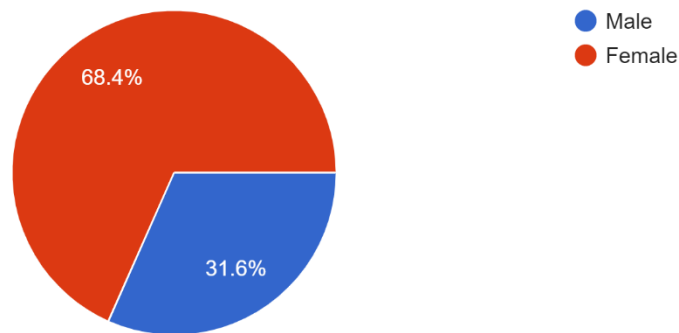


- 67 respondents (**84.8%**) are from **17 to 23** years old.
- 12 respondents (**15.2%**) are from **23 to 30** years old.

22-

Gender?

79 responses



- 54 respondents (**68.4%**) are **females**.
- 25 respondents (**31.6%**) are **males**.

---

## Discussion and Conclusion

According to the questionnaire analysis, the majority of responses (68.4%) believes that perceived quality highly affects the brand's image. This shows that there is a positive relationship between the perceived quality and the brand image, so hypotheses 1 was proved to be accepted. Also, the analysis shows that (69.6%) of the respondents believe that Durability of the watch is the most important dimension in measuring the perceived quality compared to number of breakdowns and variety of features regarding its effect on the brand image. Moreover, regarding reliability as a dimension in measuring the perceived quality, it was shown that (25.3%) responded neutral; however, the percentage of the agreement side is greater than the disagreement side, (44.4%) responded agree and strongly agree, which means that reliability is also an important dimension in measuring the perceived quality regarding its effect on the brand image. Regarding the number of breakdowns of the watch as a dimension in measuring the perceived quality in affecting the brand image, (46.8%) think that in order not to affect the brand image negatively the number of breakdowns should not exceed three times at most. Lastly, regarding the variety of features as a dimension in measuring the perceived quality in affecting the brand image, (29.1%) claim that the relationship is neutral; however, the percentage of disagreement is greater than the percentage of the agreement, as (39.2%) disagree and strongly disagree with this point. So, this means that variety of features is not a critical dimension in measuring the perceived quality and its effect on the brand image. In short, it was proven that hypotheses 1 is correct as perceived quality has a positive relationship with the brand image, and the most important dimension of perceived quality in affecting the brand image is the durability.

Furthermore, according to the survey responses there are (53.2%) of the respondents agreed that the design of the product affect brand image, so this positively relates to the hypotheses 2 statement and accepted. Also, (81%) believed that the design of logo affects the brand image of the product and that positively related to the hypothesis and accepted. Moreover, (85.5%) voted for yes when it came to purchasing a product because of its color which leads to a positive relation with hypotheses 2 and accepted. Besides, there is a total of (55.7%) agreed that they would prefer a product over another because it seems more luxurious. In addition, all customers are interested about choosing a specific shape to their watch, (68.4%) chose round shape and that confirms that the shape of the watch

influences the purchase decision and the brand image of the product, this positively relates to the hypotheses 2 statement and accepted. At last, according to the survey responses there is a positive relationship between the design and the brand image of the product which directly impact the purchase decision of the customers.

We also conclude that the price does affect the brand image of the product as a total of (49.4%) of the survey responses agreed about that. Moreover, by taking into consideration the variety of payment methods that affect the purchase decision of the consumer. and by making the cash method the main payment method as it was the most favorable for the consumer (62%), it will also increase the flexibility of payment for the customer, so it will lead to a positive brand image. Furthermore, the picture of Rolex and how it is positioned in the mind of the consumer will greatly affect the price of the consumer (as a cheap or expensive product) so it also affects the brand image of Rolex as a total of (44.3%) of the survey responses agreed about that. We also conclude that the effect of price, payment methods and the positioning of Rolex in the mind of the consumer has a positive relation related to the hypotheses 3 statement and it do except it. On the other hand, about the retail position and how it affects the watch price (25.3%) of the responses strongly disagree and (21.5%) of the responses disagree that the price should not vary between the retailers according to its position and it the watch price should remain the same in every retail shop.

Lastly, we emphasis from the analysis the positive relationship between brand awareness and brand image, as (55.7%) of total respondents agreed about this positive relationship which accept hypotheses 4 clearly. However, (44.3%) of respondents chose that they could (maybe) buy a product from an unfamiliar brand which reject hypotheses 4 and deny the relationship between two variables. On the other side, (88.4%) of total respondents are positively affected with brand image through ads which positively related to the hypothesis and approved that there is a positive relationship between brand awareness and its image and findings clarified that online ads are the absolute preferred channels to grab audience attention and got the highest rate of respondents (44 respondent). Finally, 64.6% of respondents agreed that Rolex has its own successful plan to make a good brand awareness, that is one of many reasons behind choosing “Rolex” to be the best figure company related to the topic (brand image).

## References

- Akhter, S. H. (2009). Niches at the edges: price-value tradeoff, consumer behavior, and marketing strategy. *Journal of Product & Brand Management*, 136- 142.
- Economics 504. (2021, 12 13). Retrieved from <https://www3.nd.edu/~cwilber/econ504/504book/outln3b.html>
- Fetter, F. A. (1912). *The definition of price*. American Economic Association.
- Fratto, G. M., Jones, M. R., & Cassill, N. L. (2006). Journal of Fashion Marketing and Management: An International Journal. *An investigation of competitive pricing among apparel retailers and brands*, 387-404.
- Ordóñez, L. D. (1998). The Effect of Correlation between Price and Quality on Consumer Choice. *Organizational Behavior and Human Decision Processes*, 258-273.
- Prices of production. (2021, 12 11). Retrieved from Wikipedia: [https://en.wikipedia.org/wiki/Prices\\_of\\_production](https://en.wikipedia.org/wiki/Prices_of_production)
- Setiawan, E. B., Kartini, D., Afiff, F., & Rufaidah, P. (2016). IMPACT OF PRICE FAIRNESS ON BRAND IMAGE AND PURCHASE INTENTION FOR LOW COST CAR IN INDONESIA. *International Journal of Economics, Commerce and Management*, 300-308.
- Biel, A. L., & Aaker, D. A. (2013). *Brand Equity & Advertising: Advertising's Role in Building*. Taylor and Francis.
- Carlos Bou Llusar, J., & Camisón Zornoza, C. (2000). Validity and reliability in perceived quality measurement models. *International Journal of Quality & Reliability Management*, 899-918.
- Iqbal, N., Min, H., & Nan, J. (2013). Influence of Retailer's on Brand Image:.



- Jian, L. Z., & Yazdanifard, R. (2014). The Overall Review of Perceived Quality Determinants: Which are the Most Significant Indicators? *Global Journal of HUMAN-SOCIAL SCIENCE: E Economics* , 7-12.
- Vantamay, S. (n.d.). Understanding of Perceived Product Quality: Reviews and Recommendations.
- Malik1, M. E., Naeem2, B., & Munawar3, M. (2012). Brand Image: Past, Present and Future. *Journal of Basic and Applied*.
- History of Rolex watch*. (2022, 2 2). Retrieved from watchngold: <https://watchngold.com/2021/10/29/hello-world/>
- Perceived Quality*. (2022, 2 2). Retrieved from Perceived Quality: <https://perceivedquality.co/>
- Brand awareness*. (2022, 2 2). Retrieved from Wikipedia: [https://en.wikipedia.org/wiki/Brand\\_awareness](https://en.wikipedia.org/wiki/Brand_awareness)
- Annisa Marliawati, D. C. (2020). Impacts the Brand of Experience and Brand Image on Brand Loyalty: Mediators . *Management Analysis Journal*.
- Hsu, Y. (2015). Design-oriented strategy typology. *Journal of Engineering, Design and technology*.
- Orrensalo, I. H. (2018). Brand Image as a Facilitator of Relationship Initiation. In I. H. Orrensalo.
- Paula, E. (2017). IDENTITY, POSITIONING, BRAND IMAGE AND BRAND EQUITY COMPARISON: A. *Independent Journal of Management & Production*.
- ZEID, R. K. (2005). Mapping product design specification for mass. *Journal of Intelligent Manufacturing*.
- Brand Design - Definition, Importance, Examples and Process*. (2022, 2 2). Retrieved from Marketing91: <https://www.marketing91.com/brand-design/#:~:text=Brand%20Design%20can%20be%20defined,impetus%20to%20the%20product%20differentiation>
- Dabbous, A., & Barakat, K. A. (2020). Bridging the online offline gap: Assessing the impact of brands' social network content quality on brand awareness and purchase intention. *Journal of Retailing and Consumer Services*.
- Jensen, J. A., Walsh, P., Cobbs, J., & Turner, B. A. (n.d.). The effects of second screen use on sponsor brand awareness: a dual coding theory perspective. *Journal of Consumer Marketing*.
- Raising Brand Awareness for Nonprofit Organizations*. (2022, 2 2). Retrieved from MemoryFox: <https://www.memoryfox.io/raising-brand-awareness-nonprofit/>
- Romaniuk, J., Wight, S., & Faulkner, M. (2017). Brand awareness: revisiting an old metric for a new world. *Journal of Product & Brand Management*.
- What Is Brand Image? - Importance & Examples*. (2022, 2 2). Retrieved from Feedough: <https://www.feedough.com/brand-image-explanation-examples/>
- STRATEGIC INNOVATIVE MARKETING: 6th ic-sim, pafos,cyprus 2017*. (2020). SPRINGER NATURE.

## Appendix

### Questionnaire

- 1- On a scale from 1 to 5, how do you think perceived quality affects a brand's image?  
(interval/Likert)
  - 1= weakly affect
  - 2= somehow weak affect
  - 3= neutral
  - 4=somehow strong affect
  - 5=strongly affect
- 2- Rank each element from the most important to the least important regarding the perceived quality of watches on affecting the brand's image (ordinal)

*Column: Durability of the watch, Number of breakdowns, variety of features*

- 1= most important
  - 2= neutral
  - 3= least important
- 3- "When a company has a positive brand image, I immediately rely on such a company in offering what I desire". How much do you agree with this sentence? (interval/Likert)
    - 1=strongly agree
    - 2=agree
    - 3=neutral
    - 4=disagree
    - 5=strongly disagree
  - 4- In your opinion, what is the acceptable number of breakdowns that will still keep the brand's image as it is? (ratio)
    - 1= not more than once
    - 2= not more than 3 times
    - 3=it doesn't not matter
  - 5- "If a watch includes various features, it means that the quality I will perceive is high." How much do you agree to this sentence? (interval/Likert)
    - 1= strongly agree
    - 2= agree
    - 3= neutral
    - 4=disagree
    - 5= strongly disagree
  - 6- Does the design of the product affect the brand's image? (interval/Likert)
    - 1= strongly agree
    - 2= agree
    - 3= neutral
    - 4=disagree
    - 5= strongly disagree
  - 7- In your opinion, to what extent does the design of the logo affects the brand image? (staple)
    - 1= positive effect
    - 2= no effect
    - 3= negative effect
  - 8- Have you ever purchased a product because its color attracted you? (nominal/dichotomous)
    - 1= yes

- 2= no
- 9- Would you choose a product over another because its material looks more luxurious?

(interval/Likert)

- 1= strongly agree
- 2= agree
- 3= neutral
- 4=disagree
- 5= strongly disagree

- 10- Which shape of these would you buy? (nominal)

- 1= round
- 2= square
- 3= oval
- 4= rectangle
- 5= tonneau
- 6= cushion
- 7= avantgarde

- 11- To what extent do you think the price affects the brand image? (interval/Likert)

- 1= strongly agree
- 2= agree
- 3= neutral
- 4=disagree
- 5= strongly disagree

- 12- Rank your preferred payment methods (ordinal)

*Columns: Cash, visa, installments, checks, mobile payments, electronic bank transfer*

- 1=1
- 2=2
- 3=3
- 4=4
- 5=5
- 6=6

1 most pref,6 least pref.

- 13- From your own point of view, do you think that the retail's position affects the watch's price?

(interval/Likert)

- 1= strongly agree
- 2= agree
- 3= neutral
- 4=disagree
- 5= strongly disagree

- 14- The positioning of Rolex in the consumer's mind greatly affects the prices of the watches. How much do you agree to this sentence? (interval/Likert)

- 1= strongly agree
- 2= agree
- 3= neutral
- 4=disagree
- 5= strongly disagree

- 15- Does awareness of a product affect the brand's image? (interval/Likert)

- 1= strongly agree
- 2= agree
- 3= neutral
- 4=disagree
- 5= strongly disagree

16- How do you think ads affect the brand's image? (**staple**)

- 1= positive effect
- 2= no effect
- 3= negative effect

17- From your point of view, would you buy a watch from a brand you are not aware of?

(**dichotomous**)

- 1=yes
- 2=no
- 3=maybe

18- Rank the most advertisement channels that grab your attention from the most preferred to the least preferred. (**ordinal**)

*Columns: TV ads, online ads, Billboards, Brochures, out of home, social network ads*

- 1=1
- 2=2
- 3=3
- 4=4
- 5=5
- 6=6

1 most pref,6 least pref.

19- From your point of view, do you think Rolex is successful in making good brand awareness?

(**nominal**)

- 1= successful
- 2- sort of
- 3- unsuccessful

20- Which of these sources do you take into consideration before purchasing? (**ordinal**)

- 1= friends
- 2= family
- 3=online reviews
- 4= ads
- 5= other (closest friend)

21- Age? (**ratio**)

- 1= below 17
- 2= 17-23
- 3= 23-30
- 4= above 30

22- Gender? (**nominal**)

- 1= Female
- 2= male

### *Excel Sheet*

For the link → **Analysis Sheet**

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
1	Timestamp	On a scale from 1 to 5, how Rank each element from Rank each element from Rank each element from "When a company has a In your opinion, what is th "If a watch includes vari Does the design of the pr In your opinion, to what e Have you ever purchase Would you choose a pro Which shape of these vc To what do you think the Rank your preferred pay Rank your preferred pay														
2	1/1/2022 20:26:36	5	1	1	1	2	2	2	2	1	1	1	3	1	1	1
3	1/1/2022 20:27:32	5	2	2	2	5	1	5	5	2	1	3	3	4	3	4
4	1/1/2022 20:27:46	1	1	2	1	3	2	1	1	1	1	3	4	3	1	2
5	1/1/2022 20:28:08	4	1	2	1	4	2	4	3	1	1	1	1	3	1	2
6	1/1/2022 20:31:02	4	1	2	1	3	2	2	2	1	1	2	1	2	1	2
7	1/1/2022 20:32:09	5	3	2	1	1	1	3	1	1	1	1	1	3	2	1
8	1/1/2022 20:32:43	5	1	2	1	4	2	3	5	1	1	5	1	3	4	3
9	1/1/2022 20:32:46	5	1	1	1	1	3	2	5	1	1	1	1	1	1	1
10	1/1/2022 20:33:46	5	2	1	3	3	1	5	5	1	1	4	1	3	1	6
11	1/1/2022 20:34:01	5	1	1	2	1	1	4	1	1	1	1	1	2	2	1
12	1/1/2022 20:34:22	5	1	2	3	3	2	3	1	1	2	2	1	1	1	2
13	1/1/2022 20:34:56	4	1	1	1	2	1	3	3	1	1	1	1	2	2	1
14	1/1/2022 20:35:08	4	1	2	1	3	2	2	1	2	2	1	1	1	1	2
15	1/1/2022 20:35:13	5	1	1	3	1	1	3	1	1	1	1	4	1	1	1
16	1/1/2022 20:35:55	5	1	3	2	1	2	4	4	1	1	1	6	1	1	2
17	1/1/2022 20:36:07	4	1	1	2	4	2	5	2	1	1	2	4	1	1	3
18	1/1/2022 20:37:38	4	1	1	1	1	2	1	4	1	2	1	2	1	2	6
19	1/1/2022 20:39:43	5	3	2	1	4	2	5	5	1	2	2	5	5	1	2
20	1/1/2022 20:40:19	5	1	1	1	1	2	2	1	1	2	1	1	2	1	2
21	1/1/2022 20:40:46	3	1	2	3	3	2	4	3	1	1	3	1	3	1	1
22	1/1/2022 20:41:51	4	1	2	1	4	2	3	4	1	1	5	1	4	1	3
23	1/1/2022 20:41:53	5	1	2	1	2	2	4	1	2	1	1	1	4	1	4
24	1/1/2022 20:42:10	5	1	2	1	5	1	5	5	1	1	5	1	5	1	2
25	1/1/2022 20:42:33	4	2	2	1	3	1	3	1	1	1	4	1	2	1	2
26	1/1/2022 20:42:34	5	3	2	3	1	2	2	1	1	1	5	2	2	6	6
27	1/1/2022 20:42:49	4	1	2	1	3	1	4	5	1	1	5	1	4	4	4
28	1/1/2022 20:43:50	5	1	2	3	5	1	2	1	1	1	2	2	2	1	2
29	1/1/2022 20:45:44	5	1	3	2	2	1	3	2	1	1	3	1	3	1	2
30	1/1/2022 20:46:24	3	2	1	2	2	3	2	2	1	1	2	2	1	2	5
31	1/1/2022 20:47:38	3	3	2	1	3	3	5	4	1	1	4	1	5	1	3
32	1/1/2022 20:47:59	5	1	1	2	3	1	3	2	1	1	2	3	2	6	5
33	1/1/2022 20:48:43	5	1	3	2	4	2	4	5	1	2	2	1	4	1	4
34	1/1/2022 20:49:09	5	1	1	2	3	1	2	2	1	1	1	1	2	1	2
35	1/1/2022 20:49:17	5	1	1	1	3	1	4	5	2	2	4	1	4	1	2
36	1/1/2022 20:49:32	5	1	2	2	1	2	5	1	1	1	3	3	1	2	4
37	1/1/2022 20:49:47	5	1	1	1	1	2	1	2	1	2	2	1	2	1	2
38	1/1/2022 20:50:02	1	1	3	2	2	1	2	1	2	1	2	1	1	1	1
39	1/1/2022 20:51:34	5	2	1	2	2	2	3	3	2	1	2	1	4	1	2
40	1/1/2022 20:52:14	4	1	2	2	2	2	4	2	1	1	2	6	3	2	1
41	1/1/2022 20:52:26	5	1	2	2	5	2	5	5	1	1	5	1	5	4	3
42	1/1/2022 20:53:07	4	1	1	2	2	1	2	1	1	1	1	3	2	1	2
43	1/1/2022 20:54:02	5	1	2	2	4	2	2	2	1	1	3	1	2	1	3
44	1/1/2022 20:55:04	3	2	1	1	5	2	3	1	1	1	3	1	3	2	2
45	1/1/2022 20:55:11	5	1	1	2	4	3	3	4	1	2	3	6	4	2	1
46	1/1/2022 20:58:51	5	1	1	3	1	2	2	1	1	1	1	1	2	1	3
47	Form Raccourcie 1															
50	1/1/2022 21:14:17	5	1	2	2	3	1	3	4	1	1	3	1	4	6	6
51	1/1/2022 21:23:34	5	1	2	2	4	1	4	2	1	1	2	1	1	2	1
52	1/1/2022 21:24:47	5	2	1	1	1	2	4	1	1	1	2	5	4	6	2
53	1/1/2022 21:25:23	5	1	1	1	1	1	1	1	1	1	3	1	1	1	2
54	1/1/2022 21:34:05	5	2	1	3	1	1	4	3	1	1	2	1	1	1	2
55	1/1/2022 21:39:35	4	1	2	2	4	2	3	5	2	1	3	1	4	4	4
56	1/1/2022 21:40:02	5	2	1	2	1	2	2	4	1	1	2	1	3	1	1
57	1/1/2022 21:43:25	5	1	2	3	5	1	4	5	1	1	5	1	4	5	6
58	1/1/2022 21:43:42	5	1	2	1	1	1	1	1	2	1	2	6	4	3	1
59	1/1/2022 21:45:09	5	1	2	2	4	2	5	1	1	1	4	1	1	2	6
60	1/1/2022 21:49:56	5	3	3	3	5	3	5	4	2	1	5	4	5	1	2
61	1/1/2022 22:12:52	4	1	2	2	2	2	3	4	2	2	4	2	5	3	4
62	1/1/2022 22:19:21	5	4	1	2	2	1	1	3	2	2	3	1	1	6	4
63	1/1/2022 22:26:32	4	1	2	2	2	2	2	2	1	1	2	1	4	1	2
64	1/1/2022 22:28:08	5	2	2	1	1	1	1	1	2	1	1	1	1	1	1
65	1/1/2022 22:29:16	5	1	2	1	3	1	2	5	1	1	5	7	4	2	1
66	1/1/2022 22:32:42	5	1	1	2	3	2	3	2	1	1	5	1	1	1	2
67	1/1/2022 22:33:44	5	1	2	1	3	1	2	1	1	1	1	1	2	1	2
68	1/1/2022 22:34:41	5	1	2	2	3	1	1	1	2	1	2	1	4	1	2
69	1/1/2022 22:36:52	5	1	2	1	3	2	1	1	1	1	1	1	2	1	1
70	1/1/2022 22:46:09	5	1	1	2	3	1	3	5	1	1	5	1	1	6	1
71	1/1/2022 22:50:59	5	2	3	2	5	1	4	4	3	1	4	1	4	2	3
72	1/1/2022 22:55:20	5	2	3	3	3	2	3	3	1	1	2	1	4	2	3
73	1/1/2022 23:32:03	4	2	2	2	4	1	3	5	1	2	3	1	3	3	3
74	1/1/2022 23:39:37	3	2	1	3	3	3	4	5	1	1	5	7	1	1	1
75	1/1/2022 23:48:36	4	1	2	3	2	2	4	3	2	1	2	1	2	1	2
76	1/1/2022 23:49:01	5	1	2	3	1	1	3	1	1	1	1	4	1	1	1
77	1/1/2022 23:59:10	5	2	1	3	4	2	3	1	1	1	1	3	1	2	1
78	1/1/2022 20:21:53	4	2	1	1	1	1	3	4	1	1	4	6	5	1	1
79	1/1/2022 0:27:41	5	2	2	1	4	1	3	1	1	1	1	1	3	1	1
80	1/1/2022 0:36:13	4	2	2	1	4	2	5	1	1	1	2	6	2	6	4
81	Equation	answer	answer2	answer3	answer4	answer5	answer6	answer7	answer8	answer9	answer10	answer11	answer12	answer13	answer14	answer15
82	Max	5	3	3	3	5	3	5	5	3	2	5	7	5	6	6
83	Min	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
84	Average	4.544	1.367	1.759	1.610	2.722	1.620	3.139	2.671	1.203	1.165	2.608	2.063	2.671	1.924	2.519
85	STD	0.823	0.603	0.625	0.752	1.310	0.626	1.163	1.607	0.435	0.373	1.409	1.621	1.308	1.553	1.560
86	CountF	2	55	27	31	19	36	6	29	64	66	21	54	19	49	23
87		0	19	44	32	16	37	19	13	14	13	23	4	20	14	28
88		5	5	8	16	20	6	23	10	1		14	5	15	4	10
89		16				16		20	9			8	5	18	4	8
90		54				8		11	18			13	2	7	1	2
91													7		7	8
92													2			

	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF
1	Rank your preferred pay	Rank your preferred pay	Rank your preferred pay	Rank your preferred pay	From your own point of view	The positioning of Rolex	Does awareness of a pro	How do you think ads aff	From your point of view	Rank the most advertiser	Rank the most advertiser	Rank the most advertiser	Rank the most advertiser	Rank the most advertiser	Rank the most advertiser	From your point of view
2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
3	1	1	2	1	3	3	4	2	2	3	3	3	3	3	3	2
4	1	2	3	4	3	3	1	1	2	2	1	3	2	1	3	1
5	1	3	2	3	2	3	2	1	2	1	6	3	5	2	6	1
6	3	6	6	6	5	3	2	1	1	2	1	1	5	3	1	2
7	3	5	4	6	5	1	1	1	3	4	1	3	5	6	2	2
8	2	3	2	2	3	3	5	1	2	4	5	4	3	2	4	1
9	1	4	4	4	5	1	1	1	2	1	1	2	6	5	1	2
10	6	6	2	6	1	1	5	1	3	1	1	3	6	5	1	1
11	5	3	6	4	3	3	1	1	3	2	1	3	5	4	1	1
12	3	6	5	4	5	1	1	1	3	2	1	3	4	5	6	2
13	4	4	3	4	5	3	2	1	3	1	1	3	4	3	2	2
14	3	6	5	4	1	5	5	2	1	1	3	3	1	3	3	1
15	6	6	2	4	2	2	1	1	3	2	1	3	6	6	1	1
16	6	5	3	4	5	1	2	1	2	5	1	2	6	5	4	2
17	2	4	1	1	3	1	4	1	2	2	1	2	4	4	1	1
18	6	2	1	2	2	1	1	2	2	5	1	1	6	6	2	1
19	6	3	4	5	4	5	1	1	3	3	1	2	5	6	1	2
20	3	3	2	2	2	2	3	1	2	2	1	1	3	2	4	1
21	5	6	6	5	3	3	3	2	1	1	2	3	4	5	6	1
22	3	3	3	3	4	3	1	2	2	4	3	1	2	2	2	1
23	1	1	4	1	5	3	5	1	1	2	1	2	3	4	1	1
24	6	2	3	4	3	5	5	1	3	2	1	3	5	4	1	1
25	5	6	6	6	3	3	1	1	3	1	2	1	4	4	2	1
26	1	1	6	1	2	2	2	1	1	6	6	6	6	5	6	1
27	3	3	1	3	4	4	4	1	2	3	4	2	3	2	3	2
28	3	3	3	3	3	1	2	1	3	5	1	3	4	5	1	1
29	3	4	2	4	3	3	3	1	3	1	2	3	4	5	6	2
30	3	1	3	2	4	2	3	1	2	1	2	3	3	4	3	1
31	4	2	3	2	3	5	4	2	2	4	3	2	1	2	3	3
32	1	1	5	5	1	1	3	3	2	4	4	5	5	1	4	1
33	2	2	1	4	3	5	3	1	2	3	2	2	3	3	2	1
34	1	6	3	5	2	1	1	1	2	1	1	3	4	4	2	2
35	3	4	2	2	4	5	5	1	2	3	4	4	2	3	2	1
36	6	6	5	6	5	1	1	1	3	1	1	1	4	3	4	1
37	6	6	6	6	1	1	3	1	2	1	1	1	6	6	1	1
38	4	2	3	3	5	1	1	1	3	1	1	2	6	4	1	1
39	4	4	3	3	1	1	1	1	3	4	3	4	4	4	1	1
40	6	6	4	5	2	2	3	1	3	5	1	3	6	4	1	2
41	3	3	2	4	5	4	4	1	1	5	5	4	3	4	4	1
42	3	3	1	2	2	1	2	1	1	1	1	2	2	3	1	1
43	3	4	3	3	3	3	2	1	3	4	2	2	3	2	2	1
44	4	6	2	2	1	3	3	1	3	6	3	3	6	3	3	1
45	5	6	3	4	2	4	4	1	3	3	1	2	4	5	1	2
46	1	1	6	3	5	4	1	1	3	1	1	5	3	2	1	1

	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF
48	4	4	1	4	1	2	1	1	3	2	1	1	2	2	1	3
49	6	6	1	1	5	3	1	1	3	3	1	2	1	6	1	1
50	1	1	4	4	4	4	4	1	1	3	5	3	1	3	6	1
51	3	6	6	6	3	1	1	1	3	4	1	1	4	4	1	2
52	2	1	4	1	2	1	1	1	2	5	2	2	1	3	4	2
53	3	1	4	1	1	1	1	1	2	1	6	2	4	5	3	1
54	3	6	5	4	5	1	2	3	3	3	5	2	4	6	1	1
55	2	2	2	2	4	5	1	1	2	4	4	3	2	2	4	3
56	4	4	1	1	3	3	2	1	3	1	3	6	5	1	1	1
57	4	1	2	3	3	5	4	2	3	5	4	3	1	2	6	1
58	6	4	1	1	2	1	1	1	2	1	1	1	1	4	3	1
59	3	2	2	2	2	1	1	1	2	1	2	1	4	3	1	1
60	3	4	4	5	5	2	1	4	2	1	4	2	3	1	4	2
61	3	2	2	2	4	3	2	2	2	2	3	2	3	2	2	2
62	1	1	1	1	3	3	2	1	2	6	3	6	3	3	6	1
63	5	4	6	3	2	3	2	2	2	2	1	5	6	4	3	2
64	4	6	3	3	5	1	1	1	3	1	1	1	1	1	1	1
65	5	6	4	3	4	5	1	2	6	1	4	5	3	2	2	1
66	3	4	3	3	4	3	4	2	3	6	5	6	5	6	6	2
67	4	6	2	5	1	1	1	1	3	1	2	3	6	6	1	1
68	2	4	2	2	4	3	4	1	1	1	1	3	3	2	1	2
69	6	4	3	3	1	2	1	1	3	2	1	6	3	3	1	1
70	6	1	1	1	5	1	1	1	3	1	1	3	1	2	6	2
71	2	2	3	1	4	4	1	1	3	4	1	3	4	4	2	1
72	3	3	3	3	4	4	4	1	3	3	4	3	3	3	3	2
73	1	1	1	1	3	3	4	1	2	3	3	3	1	1	5	1
74	3	5	3	3	4	1	1	1	1	1	1	2	3	2	1	1
75	3	6	4	5	4	3	2	1	3	1	2	5	3	6	4	1
76	4	6	6	4	1	3	1	1	3	2	3	4	6	5	1	1
77	3	6	4	5	5	3	1	1	3	3	1	2	6	5	4	2
78	3	6	1	6	1	4	1	1	3	1	1	5	5	5	1	1
79	6	6	2	2	2	3	4	1	2	1	4	5	5	6	1	2
80	2	2	6	6	2	2	2	1	3	1	6	5	3	5	6	1
81	answer16	answer17	answer18	answer19	answer20	answer21	answer22	answer23	answer24	answer25	answer26	answer27	answer28	answer29	answer30	answer31
82	6	6	6	6	5	5	5	3	3	6	6	6	6	6	6	3
83	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
84	3.316	3.772	3.177	3.278	3.291	2.595	2.494	1.165	2.278	2.620	2.253	2.886	3.709	3.582	2.570	1.382
85	1629	1881	1647	1560	1370	1354	1440	0.406	0.733	1604	1597	1377	1634	1574	1781	0.564
86	13	13	14	13	11	25	29	67	13	28	40	13	11	8	34	51
87	11	11	17	14	12	10	15	11	31	15	11	19	6	15	12	25
88	25	12	18	16	19	25	11	1	35	12	11	27	20	16	10	3
89	11	14	13	18	17	10	15			12	7	9	15	14	11	
90	6	3	5	10	20	9	9			7	5	6	12	15	1	
91	13	26	12	8						5	5	5	15	11	11	

AG	Age?	AI
Which of these sources c	Age?	Gender?
1, 2, 3	2	1
1	2	2
2	3	1
2	2	2
1, 2, 3, 4	2	1
3	2	1
3	2	1
1, 2	2	1
3	2	1
1, 3	2	1
3	2	1
1, 3	2	1
1, 2, 3, 4	3	2
1, 2, 3, 4	2	1
1, 2	2	1
1	2	2
1, 2, 3	3	2
3	2	1
1, 2, 3, 4	2	2
1, 2	2	1
1, 2, 3	2	2
2	3	1
3	2	1
3	2	1
1	2	1
3	3	1
3	2	2
2	2	1
3	2	1
2	2	2
1, 2	2	1
1	2	2
1, 2, 3	2	1
3	2	1
1, 2	2	1
1, 2, 3	2	1
1, 2, 3, 4	2	1
1, 2, 3, 4	2	1
3	2	1
2, 3, 4	2	2
1	2	1
1, 2, 3	2	1
1, 2, 3, 4	2	2
1, 3	2	2
1, 2	2	1
1	2	1

AG	Age?	AI
1, 2, 3	2	1
1, 2, 3	2	2
1	2	1
1	2	1
1, 2, 3	2	1
1, 2, 3	2	1
1	2	1
2	3	2
1, 2	2	1
2, 3	2	1
1	2	2
2	2	2
3	3	1
1, 2	2	1
1, 2, 3	3	2
1, 2, 3, 4	2	2
3, 4	2	1
5	2	2
1, 2, 3	2	1
1, 2, 3, 4	2	1
1, 2, 3	2	1
1, 2, 3	2	2
1, 2	2	2
2	3	1
3	2	1
4	3	1
1, 2, 3	2	1
1, 2, 3	3	1
1, 3	2	1
1, 2, 3	2	2
3	2	1
1, 3	2	2
answer32	answer33	answer34
5	3	2
1	2	1
2.286	2.152	1.316
1.017	0.361	0.468
51	0	54
46	67	25
50	12	
11	0	
1	0	