Teodora COSTACHE

THE USE OF QUALITY MANAGEMENT SYSTEMS IN LOGO DESIGN

Abstract: This case study wishes to highlight the use of the quality management systems in the scenario of a design company that has the mission to create a logo associated with an oil company. With the help of the quality management systems, the designer will be able to highlight the main points the logo wishes to meet, clarify doubts in case of managing a team, and also avoid the failure that could lead to the loss of customers in the future. The quality management systems that are used to ease the work of a designer in order to satisfy the customer can also be used as a logical example in order to achieve success in different domains that may or may not be related to logo design.

Keywords: logo, management, design, creation, quality, analyze

1. INTRODUCTION

Logo design might sound simple for the majority of people that are not aware of how working in this domain is. As a consumer, you take a look at the logo of the product that you are buying, the place that you are visiting or the service that you are using.

The colors and shape are the main interest points that the human eye seeks and sends to the memory. In case of a bad logo design, these elements will be forgotten, but if the designer uses his knowledge right, the logo might become iconic.

In order to obtain the perfect logo and also to satisfy the customer, the designer needs a few hints to know that the path he is following is right, and if not, to spot the errors in time, to fix them and finish the project with success. This is the part where the quality management systems step in to clear all the questions, dead ends and ambiguities that may occur in the chase of a good result.

2. WHAT IS QMS?

The quality management system [1] [2] [3] (QMS) is a set of rules and processes that a company has to follow in order to lead a project to the end. The company focuses on these systems to be able to make a clearer and safer way in achieving a successful creation that satisfies the customer.

By using the quality management systems, a working team is able to save time, to focus and divide correctly the main tasks, to spot errors before they can affect the result and to fix the discrepancy that may occur between the company and the client. Diagrams, a quality management system, are able to break main issues and topics in parts easier to be clarified and understood.

3. THE USE OF QMS IN LOGO DESIGN

In the scenario of a design firm receiving the task to design the logo for an oil company, using QMS improves internal communication and the quality of the final design.

In the process of creating the logo for the oil company, designers should focus primarily on customer requirements, because satisfying him is the main goal. At the same time a research on the competing oil companies is mandatory, so they can form an idea about the actual market demands.

3.1 The affinity diagram

This particular diagram is the starting point in using QMS for logo design, because it helps the designer team determine the focus points and the main characteristics that need to be accomplished by them.
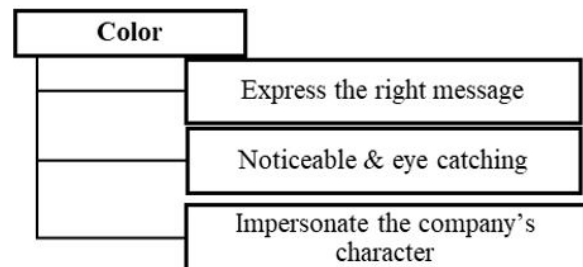

Fig. 1 Characteristics of the Color

Figure 1 presents the color of the logo as one of the main subjects, which is linked to the characteristics that need to be fulfilled. For an oil company, the color should inspire fire and energy.
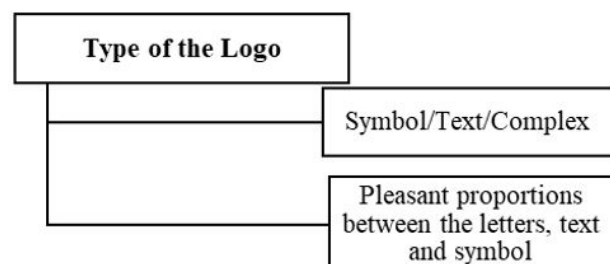

Fig. 2 Characteristics of the logo type

As shown in fig. 2, regarding the client's demands, the logo type to be chosen needs to find an aesthetic balance between its elements.
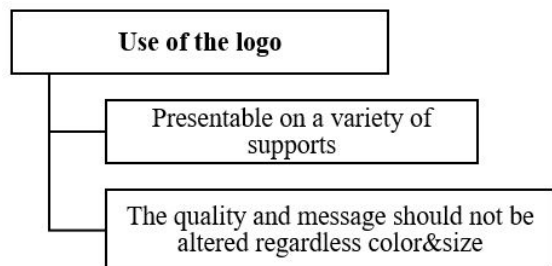
Use of the logo

Presentable on a variety of supports

The quality and message should not be altered regardless color&size

Fig. 3 Characteristics of the use

Regardless of the size, colors (rgb/black & white) and supports, the logo needs to maintain its quality and prestige, as shown in fig. 3.
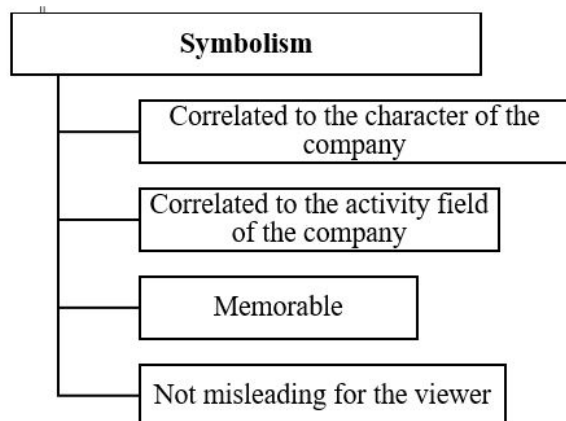
Symbolism

Correlated to the character of the company

Correlated to the activity field of the company

Memorable

Not misleading for the viewer

Fig. 3 Characteristics of the symbolism

The symbol used as an element in the logo should send a clear, direct message to the viewer, expressing the character of the oil company and its field of activity (fig. 4). The wrong choice of the symbol might be misleading to the viewer, creating a bad impression.
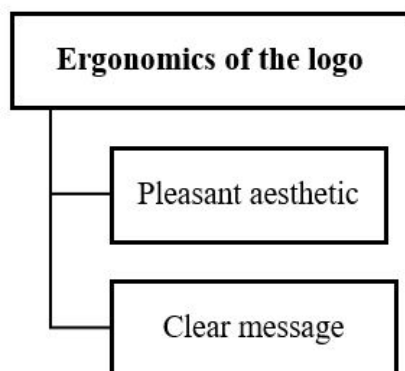
Ergonomics of the logo

Pleasant aesthetic

Clear message

Fig. 4 Characteristics of logo ergonomics

Ergonomics is a branch of science that studies the relationship between the man and the environment he lives in. These days, the human eye is bombarded with bright commercials, logos and messages. As long as our sight is not pleased with what is around, ergonomics steps in to solve the problem. In logo design, an overwhelming color choice and a complicated symbol might confuse the eye that sends further the wrong message to the brain.

A logo must be pleasant to the viewer, needs a good contrast between colors and the lettering has to be legible. These elements combined in the creation of a logo have the mission to present to the human eye a simple, clear message, speaking everybody's language regardless age or intellect (fig. 5).

3.2 Gantt diagram

Within a small design firm, a client's demand to create a logo that will belong to a petroleum company can seem complicated, especially when it comes to dividing activities for each team member.

The planning of the activities assigned to each person in the design team can be solved with the Gantt chart (fig. 6), which is drawn up in order to invest the given time correctly, without losses.
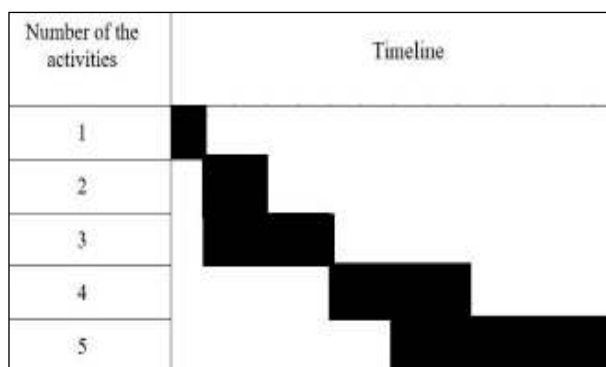
Number of the activities	Timeline
1	
2	
3	
4	
5	

Fig. 5 Example of Gantt chart

3.3 Cause effect diagram

This particular quality management instrument is used to find out what went wrong during the making of the logo in case of an unsatisfied client. The project failure usually finds its reasons within the Cause-Effect Diagram. Its use in the logo design of this article will be discussed in the following chapter.
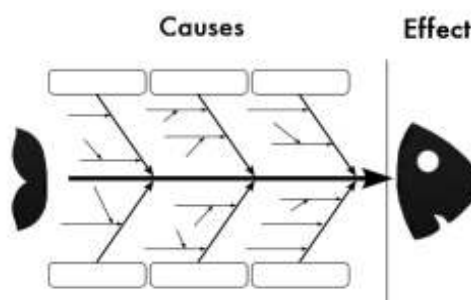
Causes   Effect

Fig. 6 Cause Effect/Fishbone Diagram [4]

3.4 Software used for logo creation

There are many image altering softwares. Since computers have become easily accessible, developers

have created a large number of tools used by designers regardless their level of professionalism for creating or editing images or photos. They vary by ease of use, price and complexity, the most popular being CorelDraw, GIMP, Adobe Illustrator, Adobe Photoshop.

For the creation of the oil company logo described in this scientific paper, the Adobe Photoshop CC has been used, thanks to its ease of use (user-friendly interface), variety of tools and stability.

4. USING QMS TO ANALYSE LOGOS BELONGING TO A FICTIVE OIL COMPANY

The process of creating logos for companies is well known to follow a basic curve in which the designer is presenting many different logo designs to the client or project owner, the latter choosing the preferred one.

This chapter describes how logo design can also rely to different quality management practices, to improve the main characteristics of a logo, this of course meaning remembrance, good quality design, choice of color pallet and most importantly, helping the company to gain better profit.

The following passage is presenting how different quality management procedures can alter a logo and what advantages do quality management procedures present when comparing to the basic method of developing a logo for a client or company.

The logo of the fictive oil company OISTRO created in the previous scientific paper will be presented along other versions of it. The logos will be analyzed and improved with the help of QMS.

4.1 The affinity diagram used for analyzing logo suggestions

As it was previously discussed, an oil company logo should focus on fulfilling not only the five requirements which are color, Ergonomics, Use, Type of the logo and Symbolism, but also the characteristics liked to them.

The name of the oil company proposed in this article is OISTRO, a fictive gas station that chose its name by combining the words OSTRICH and OIL.

Fig. 7 1st Logo suggestion [6]

The first suggestion for the Oistro logo, is a complex one, using rectangular shapes, bold letters, and the ostrich's figure as the symbol (fig. 8). This version

may have the right colors, also frequently used by other popular oil companies, which are yellow, an impersonator of the sun and the energy, and black, the color of the rough oil coming from the ground. This color combination linked together by white is for sure eye catching and easy to be noticed. It impersonates the company's character by presenting the symbol of an ostrich head and the bold, capital letters do not fail in making a statement.

Fig. 8 Small logo (left) logo in grayscale (right) [6]

Unfortunately, the complexity of the ostrich's head hinders the use of the logo in various sizes, the symbol of the logo becoming unintelligible when decreased (as seen in fig. 9 left). The shapes of the logo are also bad chosen, because the viewer might have a hard time guessing the field in which the company is activating.

Last but not least, a powerful logo shall maintain the viewer's interest regardless its color scheme. This logo suggestion becomes plain and boring when in grayscale (fig. 9 right). Concluding the analysis, this version of the logo fails to be the chosen one.

Fig. 9 Various sizes of the second logo suggestion

The second suggestion is a complex logo composed by a minimalist figure of an ostrich and a bold, capital wordmark, as seen above in figure 10. It accomplishes the ergonomics by being aesthetically pleasant, the symbol, picturing an ostrich on wheels is exactly the message of speed of the services that the company wants to send to the customers. This logo can easily be used in various sizes supported by different types of materials by being simple and black. Sadly, the fact that the color palette is not the basic used by the majority of petroleum companies, the logo becomes misleading. The viewer would rather think about a wheel vulcanizing station, without linking the symbol to a gas station.

Although this second logo suggestion fulfilled most of the diagrams subjects, the fact that it doesn't inspire a gas station makes it not fitting in the posture of the company's image.

As the final proposal for Oistro's company logo, there has been brought minor but significant improvements to the logo created in the previous variants. The color scheme has been preserved, but the symbol of the ostrich got a bit more details, by adding its eyes and the fire-like tail (fig. 11).

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Fig. 10 Improvements of the past logo

The neck was also separated from its body for a more minimal look, and the sharp edges of the triangle became soft corners for a safer look. The triangle is the symbol of fire, the sharp corners were rounded to suggest a wild fire that was tamed by humans to be used as their advantage.

This complex logo uses colors the majority of petroleum companies used in their remarkable logos, which are red, yellow and black. This means that the viewer can easily get the message and also link the logo directly to a gas station.

The shapes, figures and wordmark are good proportioned, the color palette is aesthetically pleasing, but the R might be hard to read, especially if the logo is small, this meaning that the title of the company might be altered by the substitution of the letter with a symbol. To fulfill the characteristics of the flexibility a logo needs, the symbol representing the letter R was removed. The results were better, and the impact of the logo was preserved in different sizes and also black and white (fig. 12).

Fig. 11 Black white various sizes of the logo

In conclusions, with minor further changes guided by the affinities diagram, this version of the logo might be the best one for the Oistro petroleum company.

4.2 Gantt chart used for properly scheduling of the logo creation

As discussed at 2.2., Gantt charts represent the core tool of the quality manager. When used in creating a logo, the manager helps the project team to solve a series of specific tasks in an organized manner. The tasks are time-based and follow a finish-to-start rule. The chart shown below will split the several tasks of a single designer in a way that a whole project team can work to create a better logo. For example, the OISTRO Company has a deadline of 14 days to create a new logo for its brand. The Gantt chart is split in 7 main activities, as shown in figure 13.
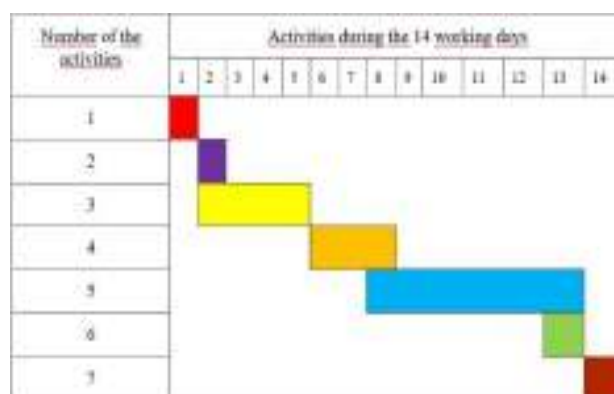

Fig. 13 Gantt Diagram in planning activities

The numbered activities are described as such:

1. OISTRO Company contacts a designer team to start working for a new logo.
2. Project initiated by the project owner, while presenting it to the designer teams.
3. The project teams will be split up for 3 different types of analysis: one will be responsible of researching the company's legacy and history, the second team will study current market competition identity. Finally the third team will carry out surveys for the company members to figure out preferred color pallet, style and complexity.
4. The chief designer and the three designer teams are filtering the information gathered during stage 3. In this stage the designer team also start drawing sketches based on the drawn conclusions.
5. This is the brainstorming stage in which all the stakeholders are choosing the best three logos from the lot.
6. A fresh outside opinion (from a trusted person) is welcomed to choose the best option out of the three logos for the OISTRO Company.
7. Sending deliverables to client and project closing procedures are carried out.

4.3 Cause-effect diagram used for spotting the errors in logo design

As chapter 2.3. explained, the cause effect diagram is one of the best ways in finding out why the design of the logo has failed. The failure of the logo is, in this particular case, considered to be the effect of all the causes that occurred during the process of design.

Pictured in figure 13, the classic fishbone diagram explaining the effect of a failed logo through its main causes, these being the client, the inefficient team, the design company itself and the logo attributes. Linked to these main causes are the secondary points that can argument the forming of the big four reasons that led to the design of an inefficient logo.
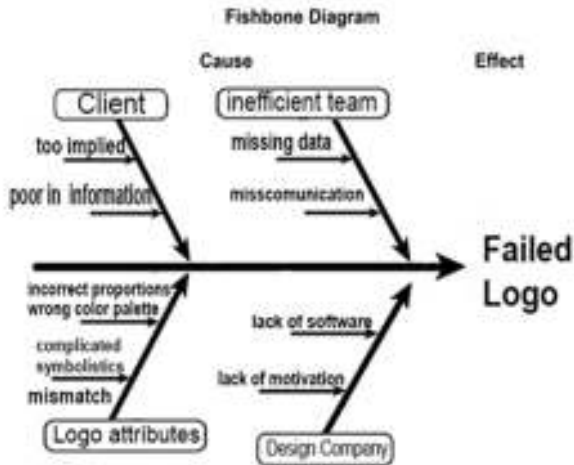

Fig. 13 Classic fishbone Diagram

Because the original diagram and its branching of causes might be confusing, it has been rethought, as pictured in figure 14, so it can be easier to follow and to understand regardless the amount of data that will be introduced in this system.
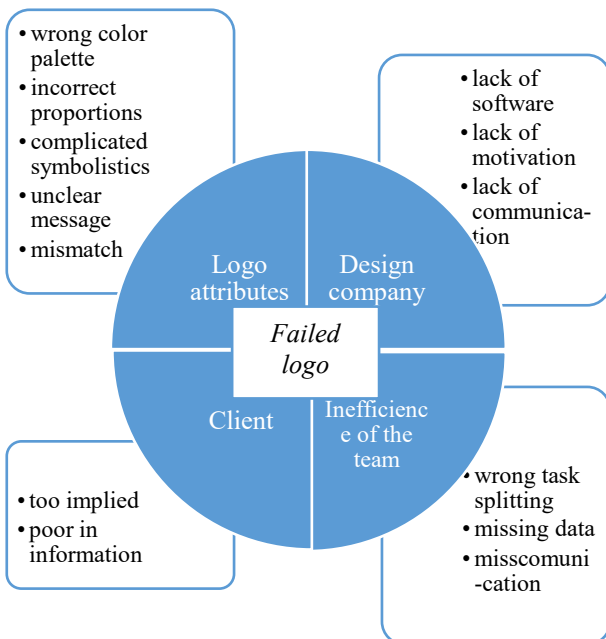

Fig. 14 Reinterpreted Fishbone diagram

To exemplify the use of the fishbone diagram, the logo present in figure 15 is considered to be a bad suggestion, an inefficient one because of its attributes, meaning it has complicated symbolistic, its figure being too complex to fulfill some of the characteristics a logo should stand out with. Another cause for the failure of the logo can be the design company that lacked in communicating with the client, or the client for being too vague. If these causes will be resolved in the future, the designer will be able to rethink and improve the result.

Fig. 15 Logo suggestion no. 1[6]

Another example would be the second proposal for the Oistro Petroleum Company pictured in figure 16. The logo attributes are, in this case, not causing the inefficiency of the logo, although the fact that it might be misleading for some of the viewers. The problem stands in the communication between the designer and the client that might have misleaded the team and the task solving.

Fig. 16 Logo suggestion no. 2

5. PREVENTING LOGO FAILURE

The reason of grand errors causing an inefficient logo is considered to be the communication between the designer and client. The missing bridge between the two can be built up with help from both parts.

A prime solution would be creating a small survey by the designer so that the client can be more precise in what he expects from the logo. The survey shall contain questions regarding the elements of the logo. An example of survey can be found in figure 17.
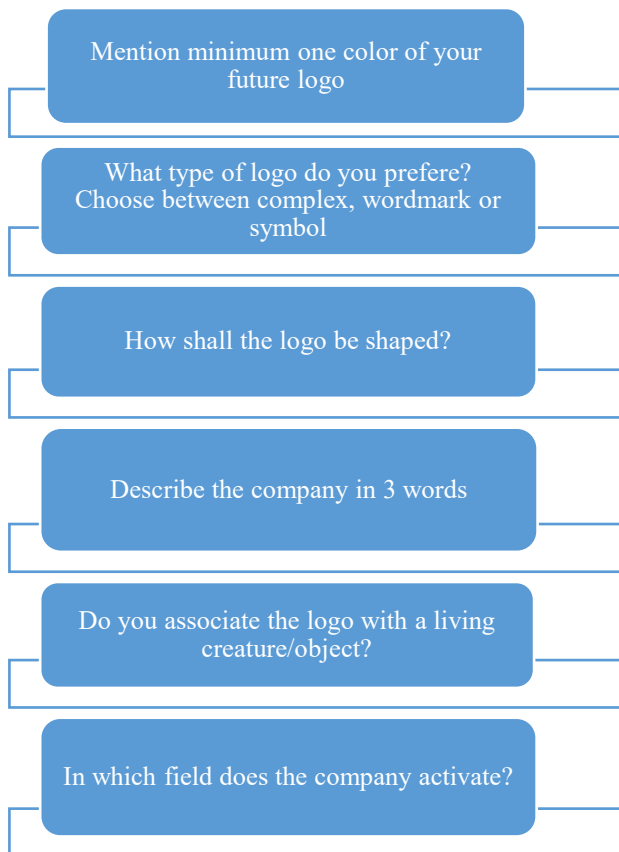
Fig. 17 Survey suggestion for the client

Another thing that the designer can do in its favor is to present to the client a portfolio of logos. The portfolio should contain numerous successful logos belonging to diverse companies so that the client can choose between different styles or get inspired by the previous work of the designer.

Last but not least, forward thinking is a method of saving time by planning everything before it even happens, creating alternative versions of the future to find the path to each one of it. In the design of Oistro's logo, the designer has to figure out how these types of companies evolve during time (as seen in figure 17). This aspect is solved by researching the competition's background to see how their logos have changed during their activity. With all this information, the designer can create a logo that will become iconic by passing the test of time, as shown in figure 18.

Fig. 18 The evolution of the Shell logo [5]

6. CONCLUSIONS

This article presented the use of the quality management systems in analyzing the process of logo design. A variety of quality instruments, such as the affinities diagram and the Gantt chart were applied on different scenarios and logo suggestions dedicated to the fictive oil company called Oistro, in order to establish the main ideas and activities in order to complete the final task, the final design of the logo.

The purpose of using the methods of QMS was to ease the designer's work by investing time correctly, by spotting and solving errors without affecting the final result and last but not least, by learning how to accept failures and consider them a source of inspiration.

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Author:

Eng. Costache Ioana-Teodora, Master student, University Politehnica of Bucharest, Department of Engineering Graphics and Industrial Design, E-mail: teodora.cos94@yahoo.ro