

# COMPARATIVE ANALYSIS OF DESIGN COMPETITIONS IN CERAMICS SECTOR: OPPORTUNITIES TO FOSTER INNOVATION IN CERAMICS INDUSTRY

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## ABSTRACT

Comparative analysis of 60 design competitions in the ceramics sector was made against a sample of 654 design competitions in other sectors, differences were analyzed and several innovation models were identified that could be incorporated from design competitions in other sectors into the ceramics sector. This paper provides summarized insights about the study, and furthermore lists several proof-of-concepts in the form of opportunities and interaction tools that could be applied for ceramics competitions in order to foster growth and development in the ceramics industry.

**Keywords:** Design competitions, ceramics design competitions, ceramic awards, ceramic prize, design awards, design prize, innovation through competitions.

## 1. INTRODUCTION

### 1.1 Status Quo of Design Competitions, Awards, Contests, Prizes and Challenges

In the very beginning, design competitions were merely tools for public administrations to collect best architectural projects, first noted competition dates back to 2500 years which was an architectural competition to design the Acropolis in Athens (Philippopoulou 2009). In the twentieth century, after thousands of years and hundreds of contests, competitions have spread to many other fields of art and design. Today, thanks to advancements in the digital platform and information and communication technologies, each year more than five hundred international design competitions are held in addition to thousands of local competitions. These competitions no longer search for the “beautiful” but they have new aims such as “out of the box thinking”, “innovative collaboration”, “outsourcing design”, “subsidizing design” or “brand communication”. Design competitions also grow in size, from “sketches” to “prototypes” to “just ideas” to “complex product/service systems”, (Cabirio 2010) and shifted in a direction to be more “multi-disciplinary” than ever. New aims such as “commu-

nity building”, “customer base formation”, “database building”, “co-branding with designers”, “recruiting of employees”, “money making”, “creating standards”, “social working”, “brainpower collection”, “trend identification and research”, “legitimacy creation” (Helgesen, 1994) have come to be. Many design competition platforms have been created allowing end-users to take part in the production process by means of interactive product customization, product evaluation and feedback contributions. Meanwhile, ceramics competitions have also become popular, and a study on the ceramics awards and prizes were conducted by analyzing 60 different ceramics competitions in order to underline potential gaps and opportunities and some proof-of-concept demonstrations about how design competitions and innovation contests could be efficiently utilized in the ceramics field to foster the development and innovation in the industry are provided.

### 1.2 Status Quo of Ceramic Art and Design Competitions, Awards, Prizes, Contests and Challenges

Ceramics, unlike other fields of fine-arts, is much more connected to design because of the wide

usage of ceramics for industrial production and it has a unique position in the arts and design sphere as being part of both the “design” and “art” fields almost equally. Therefore, there are two major types of competitions for ceramics: Artistic Ceramic Competitions and Ceramic Design Competitions. They differ from each other substantially. Our research of 507 design competitions + 60 competitions that are focused mainly on ceramics gives us the following insights regarding the status-quo of ceramics competitions, awards and prizes: Artistic Ceramic Competitions can be separated into two types: First “Pure” competitions where only Ceramics entries are accepted. These “pure” ceramic competitions are usually organized by arts galleries and museums, and it costs 30-40 euros to join on average (10% of the competitions, which are organized by museums and governments, are free to join), submission is usually possible by taking a photo of the final work or art-piece, meanwhile conceptual works are not welcome. Selected or shortlisted entries are shipped to the arts gallery where there would be an exhibition. In almost all cases, the work must be “marked for sale”; meaning that you cannot join these competitions for the sake of exhibition or award (unless organized by the governments or museums). You must almost always opt-in to join the exhibition and you must always let the competition organizer to sell your works. The gallery or organizer usually takes on average 30 to 40 percent of the sales price of the work, they issue a certificate and you earn money by selling your work. The second type of Ceramic Competitions are “Category” competitions, where ceramic works are accepted under “Fine-Art” or “Arts” Competitions. There are thousands of such competitions. Ceramic Design Competitions are separated under two main categories: First there are the “Pure” ceramic competitions where designers are asked to design an object, in ceramics. These competitions are rare such as the Franz Award. Secondly, there are “Free Material” competitions where ceramics is allowed as materials for product design, there are thousands of such competitions, some examples are design competitions aimed at Tableware or Bathroom

products where ceramics are usually the main material of choice. Finally there are “Make Use Of” competitions usually organized by governments for ceramic tiles sector such as Ceramic Tiles of Italy, or Tiles of Spain competitions, where the participants are required to use ceramics materials in other design fields such as Architecture. When compared to other (507) design competitions, (Cobanli, 2011) ceramics competition and awards sector has a gap in the portfolio: especially there are almost none co-creation competitions which you would see in other sectors. Co-creation is highly beneficial for any industry today as innovation is also defined as people creating value through the implementation of new ideas. (Littman 7).

## 2. METHODS

Comparison: Two different date sets were created and Data Set 1 averages were compared to that of Data Set 2 to derive statistical information. Data Set 1: In depth statistics and information on 654 Design Competitions (Others, Industry Averages). A Database table of design competitions have been created with 200 columns; for each design competition, the study was conducted by checking 200 key points of information nodes such as target participants, submission models etc. being single nodes. Information was categorized under 18 categories, at first to evaluate the competitions’ overall quality and qualification: evaluation, main details, dates & timeline, fees & costs, submission requirements & details, jury details, secondary details, organizer & sponsors, publishing and award ceremony, contact details, winners obligations, certificates and trophies, eligibility conditions, results, awards and prizes, designers' rights, press release, design brief and furthermore a survey was made that checks how these competitions were functioning; interaction and business models were analyzed and collected information was clustered and common elements were derived as the main methods. The registered 654 competitions information and data was entered from the “call for papers”, “call for submission flyers” and “websites” of the design competitions and results were clustered and statis-

tics were generated in order to derive insights. Data Set 2: 60 Ceramic Design Competitions. A simpler survey was created checking several points of information such as exhibition possibilities, submission type, organizer, commission details, focus etc. The data is purely collected from websites of the ceramics design competitions. Furthermore each website was carefully observed and notes were made, unique approaches, trends and common elements in these competitions were found and results were clustered. Validity: It must be noted that Data Set 1 contains 6 ceramic design competitions that are also found in Data Set 2. Data Set 1 does not cover all the Ceramic Design Competitions as it also does not cover all competitions organized worldwide; for Data Set 1, competitions were added randomly within a two-year period (i.e. based on the timeline of appearance, or when we see a competition randomly without also checking their year of organization, without making any discrimination). So we could say that Data Set 1 is a statistically significant and randomly distributed sample set that could be used as a representative of design competitions organized throughout the worlds. On the other hand Data Set 2 contains almost every single Ceramic Competition that could be found online, also dating back more than 2 years. In any case, timeline usually is not important as a significant portion of the competitions do actually repeat every year.

### 3. RESULTS

It has been found that most of the ceramics design competitions (83.33%) are organized by art galleries and museums. When compared to other sectors this result was found to be surprising (3.26%). Orientation of Ceramics Competitions were mostly based on arts and crafts (93.33%) whereas the sample data in design competitions is less (16.67%). When we look at the exhibition possibilities of submitted entries, we see that ceramics design competitions provide much more options (91.66%) when compared to others (59.16%). On the other hand most of the ceramic competitions oblige the participants to somehow to sell their designs either in the exhibition or to the organizer

(78.33%), this is well above the industry average (11.03%), the cost to join paid the was 37.74 € in ceramics competitions sector, which is quite less than the industry average that is 103.51 €. However the biggest difference was the business models of the competitions; ceramic design competitions mostly are organized to “make money” (41.26%) and “to support design culture” (26.66%), however when we look at the industry average, there are 25 different business models which have almost an equal distribution of 4-5 percent, with making money being more popular as 10 percent. Other reasons to organize a design competition (business models) include “outsourcing innovation”, “hiring people” etc.

## 4. DISCUSSION

The last result (apparent business models) is significantly important for our cause, as it is an indicator that the design competitions for the ceramic industry is not well developed and there is a gap of opportunities to introduce new business models and tools which could be used to support the ceramic industry. Here, an example tool is demonstrated which can be incorporated into competitions in ceramics industry:

### 4.1 Co-Creation Model and Configurator Tool

Co-Creation is the act of cooperatively creating an industrial design with the end-user or designers. Designers are called to submit their industrial design proposals, and end-users are asked to use a “configurator” tool. The configurator tool is a design tool which already contains the technical restrictions within itself so that the designs prepared with the tool will be manufacturing friendly. A sample configurator tool for ceramics competitions could be defined as the following: It is an interactive database driven interface (website or software) where end-users register and create a profile and configure a product using an interface (Prahalad, 50). The tool should have visual interface (with icons) so that users would not need to learn the commands. (Stephen 2004). Using the simple functions, users create a design. The tool already con-

tains the restrictions and do not let users to go “over-creative”; it limits configuration to feasible possibilities (Kratochvil, 2010). A Ceramics company with a CNC could for example have a tool with the following constraints: Thickness, Dimensions, and Concavity. The tools provides options to configure such as changing color, modifying some valuables to change the form, updating images for graphics etc. The tool provides a 3D preview or rendering preview of the work. Users are allowed to submit as many designs as they like. Each design is not stored as an image but as a values in a database. This allows the company to run queries in the data-base to retrieve data sets, which could be used to derive important statistics; for example the company can learn which colors are the most commonly chosen by the end-users, or the desired size of an average vase can be found. Learning user preferences this way can help ceramic companies to organize their inventory better; they could store the preferred colors more or it could also generate more sales leads by producing products with the characteristics that are mostly desired by the users. Using the “co-configurator tool”, in addition to collect new products ideas, is also possible to collect user insights (Ramaswamy 2011), perform trend analysis, create awareness, collect user and client database, communicate brand identity and have authority gains. It is also a way to reduce risks. (Liedtka, 32). Here is a demonstration of a hypothetical configurator tool:

The following is a hypothetical configurator tool where users configure a model by picking options:

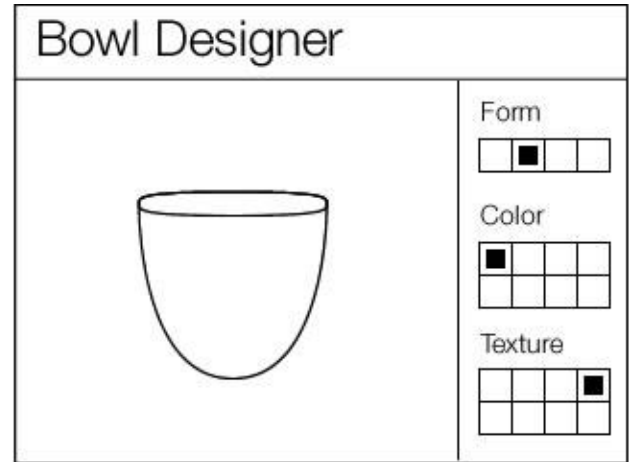


Figure 2. Initial Options (Must be Random)

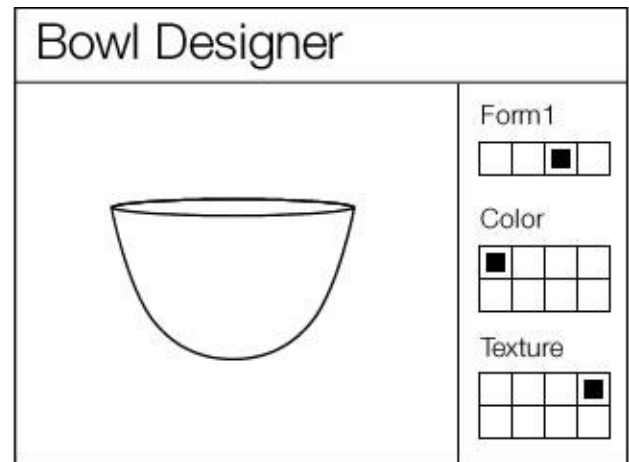


Figure 3. Changing Form (Option1)

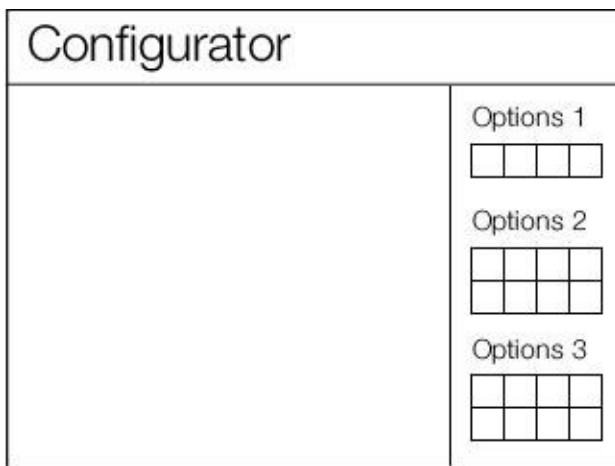


Figure 1. The Interface of a Configurator Tool

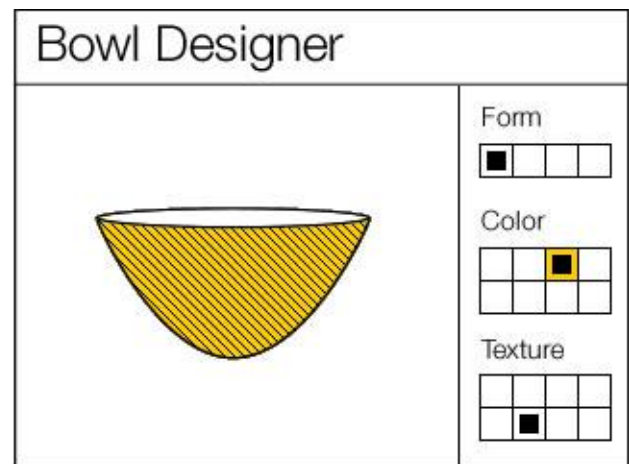


Figure 4. A Total Configuration

## 5. FUTURE WORK

The suggested tool can actually be made and their performance measured. Furthermore, a survey could be created to ask participants about their expectations from design competitions, the results of the survey could be used to develop better design competitions and for the ceramic industry.

## 6. CONCLUSIONS

An in depth study of 714 design competitions were made under two separate data sets and they were compared to each other. Several structural differences were found, underline and reported as results. According to the findings there are many gaps for opportunities for which hypothetical concepts were provided in the discussion section. Based on the differences between the data sets, we could conclude that the competition sector in ceramics industry is not yet well developed and there is a lot of space for improvement for competitions especially in ceramics design competitions, which, if implemented, could potentially be used in the future to foster growth and development in ceramic sectors both at company level and also at the aggregate level through means of better product creation and higher innovation.

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