VADYBA

2021 Nr. 2 (37)

Journal of Management

DESIGN THINKING: AN INNOVATIVE EDUCATIONAL METHOD IN ADVERTISING

Isabel Palomo-Domínguez
University of Seville

Abstract

Design Thinking is one of the most recognised innovation methodologies today. Companies such as Apple, Amazon, Google, IBM, Uber, Deutsche Bank, Procter and Gamble or Nike turn to it to design their products, services, work processes and strategic plans.

This methodology runs along a path other than verbal and linear thinking. Moreover, its purpose is not to storage knowledge. Instead, design thinking proposes a more intuitive solution creation model that seeks functionality. It is based on innovation and originality, avoiding preconceived questions that would lead to conventional answers.

At the same time, it is a method that requires collaborative work and encourages the creation of multidisciplinary teams. It offers tools to the participants to manage a diversity of opinions and build a global solution enriched by their variety of perspectives. For this reason, design thinking also plays a vital role in forming and managing work teams and solving conflict situations.

Regarding the broad range of professional fields in which design thinking has application, the competitive advantage it offers to the organisations and its role in facilitating teamwork, this methodology can play an essential role in the training of future professionals. Hence, experts proposed to insert design thinking techniques into university study plans every day with more frequency.

This article incorporates the results of a teaching innovation project based on creating a Design Thinking Workshop as an educational tool applied in the subject of Advertising Strategy within the Communication Degree of a Spanish university centre.

Among the motivations that promoted the workshop, we highlighted the applicability of this method in the advertising process; furthermore, the need to strengthen students' competencies in the face of leadership and cooperation in teamwork. This workshop also means the opportunity to promote multidisciplinary workgroups with other specialities besides Advertising, such as Audiovisual Communication.

This workshop, proposed as a pilot project, intends to evaluate the capacity of design thinking as an applied method and its feasibility of implementation within the academic program. Likewise, to measure the perception that students and teachers themselves had of the method.

We launched a questionnaire to the students and held a discussion session with the teachers to measure this perception. The results showed an upbeat assessment of the method and its application to the educational field of advertising. Other relevant achievements were a greater motivation in students and their ability to work in a team.

Among the main conclusions, we highlight the suitability of this methodology in teaching advertising and its ability to improve students' skills for future incorporation into the professional field.

As ways to expand the study, for future research, we highlight the interest in measuring the perception generated by the application of this method in the teaching of advertising in companies where students do internships.

KEY WORDS: Design thinking; advertising; innovation; educational method; creativity; strategy.

JEL classification: M37, M53, O31.

Introduction

The different design thinking techniques occupy a prominent place in many professional fields. Either as innovative methodologies for market research, which allow us to understand consumers better, design new products, the composition of more efficient work teams, in strategy generation and decision-making processes or define new business models.

More than a simple methodology, design thinking is an approach that seeks to solve problems collectively and collaboratively, from a perspective of maximum empathy with its stakeholders (Toledo *et al.* 2017).

This methodology comes from the disciplines of engineering and design. Although today it has proven to be versatile enough to generate solutions in many fields of science and the business world. In a way, the design and engineering practitioners have contributed the most to spreading this perspective in other sectors since it is an internalised method that they apply naturally in their work and daily lives (Grots & Creuznacher 2016).

We could say that working with the design thinking method is, *per se*, a process that stimulates creativity and generates learning, whatever the purpose for which we intend to apply it. This methodology itself generates knowledge and solutions. According to Stickdorm *et al.* (2018), the lack of closed techniques in design thinking enhances the competence of those who use this method since they have the chance to create new tools or complete and transform the existing ones. In this sense, design thinking also stimulates entrepreneurship and foster a transformation that creates value (Gloppen, 2009).

Authors such as Clark & Smith (2008), Groeger & Schweitzer (2014) and Snyder *et al.* (2018) relate the methodology of design thinking with the leadership capacity. They point to the fact that the use of these techniques stimulates the competence to make decisions and, in turn, serves to design balanced workgroups, where each member feels empowered by developing a role that he/she understands and that constitutes an essential piece for the functioning of the designed solution.

Miller (2017) wonders if design thinking, more than a method or philosophy, is a new liberal art. Instead, 'the' new liberal art. All this is in the context of a world where the most developed countries promote the liberal arts as a means to reinforce innovation and human capital, with an alleged enzymatic effect to impulse a more competitive global economy.

In a market as dynamic as that of Communication, design thinking acquires an especially significant relevance; since its professionals are required to know new methodologies that facilitate teamwork, improving the results of the projects and their development processes.

Specifically, in the case of Advertising, techniques are needed that provide an innovative approach and allow us to know the recipient we are addressing in greater depth. On the other hand, and without detriment to specialised knowledge, this labour sector demands highly versatile professionals capable of developing multidisciplinary and multimedia projects, being very important the mastery of diverse communication techniques.

From the perspective of the communication process (Rodrigo, 1995), advertising is characterised by having two issuers: on the one hand, the advertiser and on the other, the agency. When talking about design thinking, we can affirm that this method is present in both scenarios. One of the areas in which this methodology has the most significant impact is in the marketing departments of large companies, especially those seeking to promote change through innovation (Luchs et al., 2015; Reinecke, 2016).

Meanwhile, in advertising agencies, the application of design thinking techniques is practised daily as springs that activate the strategic and creative approach of the campaigns. Thus, tools such as 'brainstorming', 'sketchnoting' or 'personas', typically considered within the spectrum of design thinking (Panke, 2019), are frequently used in advertising agencies worldwide (García-Uceda 2011).

Furthermore, scientific research in Communication is another context where design thinking builds solutions. Not only as an object of study but also as the research method. For example, we quote Ngamvichaikit (2021), who developed a working model based on design thinking to solve a problematic situation. The author analyses the complex reality of digital advertising in pharmaceutical companies and focuses on the conflict situation that arises between the interests of advertisers, the respect for the rights of users and consumers, the possibilities offered by the new advertising media and the slow pace of legislation, which has not yet given response to situations related to digital media.

In short, given all the possibilities that design thinking presents in the professional development of the Communication and Advertising sectors, we consider the suitability of applying it in the academic field as an instrument for the training of university students in these disciplines. It seems logical and necessary to start preparing future professionals with the tools that will allow them to achieve a more competitive and advanced position in the market.

Theoretical framework

An approach to the design thinking methodology

This method began to develop in the past decade of 70 at Stanford University with a theoretical approach. It quickly burst onto the business scene and started to have a practical application in prestigious design consultancies such as IDEO (Romero & Duarte 2016).

The method provides a work scheme that facilitates the generation of innovative ideas. Its main characteristics include a non-linear way of thinking, its ability to integrate different disciplines, favour collaborative work and focus its attention on the human being (Brown 2009; Gonen 2019). In this sense, the Institute of Design at Standford (2012:3) describes the correct application of the method from the following premises:

- "Human centred": Design addresses people; people are the source of inspiration and the final jury on the quality of the design.
- "Show, don't tell": It is necessary to communicate in a visual, universal, powerful way, connected with emotions.
- "Radical collaboration": It is impossible to do design thinking individually. Collaboration is synonymous with enrichment.
- "Mindful of process": Those who put the method into practice must know its purpose and structure, becoming aware of the function that each step fulfils.
- "Culture of prototyping": The prototype not only serves to validate the idea but is also part of the innovation process.
- "Bias towards action": Thinking only works when it leads to action.

It is convenient to differentiate design thinking from what Johansson-Sköldberg et al. (2013) call the discourse of "designerly thinking". This last concept refers to the academic study of the professional practice of designers. That is designerly thinking analyses the designers' skills and abilities. It also reflects on their capacity for non-verbal thinking and generates a theoretical construct based on these issues.

However, design thinking goes beyond the strict scope of design, proposing a practical problem-solving method that is not only aimed at designers. In other words, design thinking involves transferring the mental operation of design to other professional fields, such as administration or management.

The method includes five phases (Romero & Duarte 2016; Pande et al. 2020). In a journey through them, we can see parallels with the advertising creation process (Tevi & Koslow 2018; Turnbull & Wheeler 2017).

Phase 1: Empathise. It is an obligatory first step that connects with the interests and needs of the recipient, public or audience for whom we intend to develop the design. Design thinking is very similar to the advertising strategy, which requires knowing the target to support the rest of the elements of the plan.

Phase 2: Define. It consists of defining and describing a work perspective based on the users' needs and their insights. In advertising, insights generate an affective

bond between the brand and the public; they promote an emotional connection that appears to go beyond the purely commercial intentions of conventional advertising. They serve to build a bridge between the brand and the consumer, growing a deep and symbolic relationship. "An insight is that revelation or discovery about the ways of thinking, feeling or acting of the consumer fresh and not obvious, that allow to feed communication strategies, branding and innovation" (Quiñones 2013:34). Sometimes, the term insight is overused to designate any element that elicits the identification of the public. The experts consulted by Sebastián-Morillas et al. (2020:346) highlight the need to resort to authentic and powerful insights that are "a consensual, universal or revealing truth".

Phase 3: Ideate. At this point, it is time to articulate the concept, turn it into an idea. Both for this method, as in advertising, the use of the brainstorming tool facilitates creative production. It releases mental blocking as a solution to fight against the stress that involves the obligation to generate an idea, leaving the mind free to suggest any element, image, concept or word that freshly comes to thought when addressing a specific topic (Putman & Paulus 2009).

Phase 4: Prototype. In this phase, the idea is embodied, made tangible so that others can understand it and understand the elements that constitute it. In addition, this phase serves to check if all the previous elements constitute a complete and functional whole. This step, continuing with the analogy with advertising, would be assimilated to elaborating the demo of a tv commercial from its storyboard.

Phase 5: Test. Finally, we can evaluate the performance achieved and capture user feedback. It is the moment to assess the achievements and apply the possible rectifications or improvements for future projects. In advertising, this phase occurs in the campaign pretest and posttest.

Other authors propose a more open description of the model, warning that the phase structure is not so closed (Johansson-Sköldberg et al. 2013; Puga et al. 2018). However, it is necessary to alternate divergent and convergent phases (Brown 2009; Cross 2011). Thus, in the empathising phase, new members are sought who offer new knowledge or needs; that is, the spectrum broadens (divergent phase). In the definition step, this information is summarised (convergent phase). Subsequently, the process is reopened in search of a variety of ideas (divergent phase). In the prototype, the project materialises in a body (convergent phase). As a closing, another opening step seeks to know the valuation of other users (divergent phase).

Given the versatility and flexibility that the design thinking methodology presents, the variety of techniques developed from this perspective is wide. The researcher Panke (2019) counted up to 47 different tools, including journey maps, role play, focus groups or mindmaps.

Two of the most popular design thinking techniques are empathy maps and LEGO® SERIOUS PLAY®, both developed in the workshop proposed in our research. Empathy maps seek to get into another person's shoes to understand him/her better. This person can be a client, a consumer, a competitor, a co-worker. The method uses a canvas with four quadrants in which the participants answer four questions about the analysed person: what he/she says, what he/she does, what he/she thinks, what he/she feels. The information to answer these questions comes from observing the subject and conducting interviews (Valentim et al. 2017).

LEGO® SERIOUS PLAY® "is a method that enables constructive reflection and dialogue processes. During a structured process, participants use LEGO bricks to create models that express their thoughts, reflections and ideas" (Lego 2010: 12). It includes four phases: during the first, the participants become familiar with the challenge they are pursuing; in the second, they begin to build by letting their hands express their ideas and thoughts; in the third, reflect and explain what they have built and justify the reasons; finally, they incorporate the knowledge acquired in the previous phases and through the feedback of the other participants. As of June 2010, LEGO® SERIOUS PLAY® is an open-source tool that can be used, shared and adapted by everyone who makes the proper attribution reference.

Application and scope of the design thinking methodology

For innovative organisations that intend to lead a competitive change, the design thinking method provides a new approach to problems, which is a first step to achieving more original solutions. In addition, these solutions are more interesting when they incorporate the judgment of the consumers. Nevertheless, it is not easy to deal with all the different ideas by those who participate in the project and consumers' opinions. It is necessary to find a technique that allows us to work with varied proposals, sometimes even contradictory and reconcile them in a global solution. One of the significant advantages that design thinking provides is offering a multitude of techniques that share a common methodological philosophy and offer instruments for participants to collaborate, debating, managing and building consensus based on diversity of knowledge and points of view (Liedtka 2018); what we have previously described as a process that evolves from divergent phases to convergent phases (Brown 2009, Cross 2011).

As already noted, the applications of this methodology are extraordinarily varied. It promotes differentiation in a highly competitive environment in the business field. It generates ideas and new products, new experiences for the user and strategic plans (Serrano & Blázquez 2016).

For example, a revealing case is in software engineering and the role of design thinking in improving interface design and user experiences. On this occasion, the method serves to value the subjectivity provided by different users and specify it in a solution efficiently, shortening the research time of developers (Márquez et al. 2021).

In the case of advertising agencies, design thinking generates a competitive advantage and encourages those agencies that put it into practice to anticipate the changing reactions of the public, launching surprising and better-received proposals. At the same time, design thinking becomes an essential tool for joint work between

the agency and the advertiser to define strategic elements such as the briefing or the communication plan. Furthermore, it facilitates taking information from the advertiser to the agency and the collaborative work between both parties (Qupt *et al.* 2019).

Considering that design thinking provides competitive value in the current labour market, it is logical to think about the need to make an effort to incorporate it into university study plans, as is frequently recommended in studies in business sciences and communication sciences (Arias-Flores 2019; Cevallos 2015; IDEO 2012; Lee & Benza, 2015; Panke 2019; Puga *et al.* 2018).

Project description

Workshop context

Under the title "Initiation Workshop to Design Thinking applied to Advertising Strategy", the teaching innovation project was developed during April and May 2019 at the San Isidoro University Centre (attached to the Pablo de Olavide University, Seville, Spain).

It was addressed to students in Third Year Degree in Communication, specialising in Advertising and Public Relations, within the subject Advertising Strategy. Due to its interdisciplinary nature, the project also aimed to reinforce the students' audiovisual skills.

Before designing the workshop, we analysed the possible uses of the method concerning the specific contents of this subject. Among others, we identified the following ones:

- Work hand in hand with the advertiser, knowing his point of view, needs, motivations and interests.
- Identify the opportunities of new products before their audiences; design their differential advantage and positioning.
- Know in-depth consumers, their psychographic profile and interaction with brands.
- Evaluate the effect generated by advertising messages on consumers, the reason for such effects and, ultimately, measure the results of advertising campaigns.
- Develop innovative and efficient strategies, fully adapted to the target market.
- Achieve a global vision of the brand, specifying the messages and means to reach the target audience.

On the other hand, the workshop responded to a need identified in the students. The teachers noticed that the students had difficulties coping with collaborative work, mainly when composing work teams and distributing responsibilities. In this sense, the workshop was proposed as a reinforcement to help them acquire this competence.

In short, the project arose with the future intention of establishing interdisciplinary workgroups among students from the specialities in Advertising and Audiovisual Communication, intending that they develop collaborative tasks and generate arguments for discussion and analysis between different labour sectors.

Didactic purposes of the workshop

- Teach an innovative and versatile methodology in the advertising field.
- Provide students with tools that promote strategic and creative thinking focused on teamwork.
- Train the students to jump into the professional field. This aspect implies reinforcing the students' audiovisual skills to give them a greater degree of autonomy in the production of audiovisual pieces with different discursive strategies.

Structure of the workshop

Sixteen students participated in the workshop, fifteen of them from the speciality of Advertising and Public Relations and one guest student from the speciality of Audiovisual Communication.

They worked distributed in three teams; each focused on creating a campaign for an advertiser from the actual marketplace. There was also an audiovisual coverage of the main session to make a video with the workshop's conclusions.

The entire workshop included six work sessions distributed in the following phases:

- Preparation phase:

Session 1. Theoretical introduction to Design Thinking. After explaining the method, we practiced various design thinking techniques to define an advertiser's objectives and know its target audience. Moreover, we provided the students with didactical material and references to delve into the design thinking method.

Session 2. Students received a short training reinforcement to refresh their audiovisual skills, already acquired in the previous subject of Audiovisual Technology.

- Development phase:

Session 3. Workshop. The three groups mentioned developed a session of LEGO® SERIOUS PLAY® to design the copy strategy of the advertiser for whom they had decided to work. The students themselves carried out an audiovisual coverage of the process that includes recording testimonies and explanations about the application of the method. Subsequently, students edited a summary video with the main conclusions.

- Results and evaluation phase:

Session 4. Viewing, assessment and debate. The class watched the videos and discussed the performance of the workshop, assessing the learning acquired and the strategic conclusions reached.

Session 5. Evaluation by the students. The students responded to a questionnaire to evaluate the developed workshop. The completion of it was voluntary and anonymous.

Session 6. Evaluation by the teaching staff. The teachers reviewed the entire process, analysed the students' evaluations and shared their impressions about the workshop's relevance as an innovative learning tool, raising criticisms and improvements for a possible future edition. They wrote the memory.

Methodology

Research Objects

- Investigate and assess the perception of students and teachers about the expediency of applying the design thinking method in the subject of Advertising Strategy.
- Examine the feasibility of applying this methodology in the academic program and its work schedule.
- Determine whether the design thinking workshop can be replicated or not in other subjects of the Degree.

Evaluation techniques

- Questionnaire to students. Participation is voluntary and anonymous. The questionnaire includes three closed-ended questions with a 5-point Likert scale; and three open-ended questions.
- Discussion session carried out with the lectures and subsequent memory writing.

Results

Student's evaluation

Of the 16 students in the workshop, 15 participated in its evaluation.

In the first three questions, they were asked to give their assessment on a 5-point Likert scale, where 1 represents the minimum value, 5 corresponds to the maximum and 3 is the intermediate position.

The interquartile range (k = q3-q1) measures the degree of consensus in the group response. According to Mateos-Ronco & Server (2011), on a 5-point Likert scale, the acceptable level of consensus occurs when the interquartile range is equal to, or less than 1 (k ≤ 1), and unanimity occurs when k = 0.

To the question 1 (Q1), "In your opinion, do you consider the workshop was well connected with the contents of the subject?" the answers obtained are shown in Table 1 and Fig. 1.

60% of the students affirmed that the design thinking workshop was "absolutely connected" with the subject's contents (5 points). Likewise, the average valuation (mean) is 4.53. Regarding the distribution of the responses, we observe that this score represents the set of answers, considering that the interquartile range (k) is 1.

Table 1. Responses to Q1

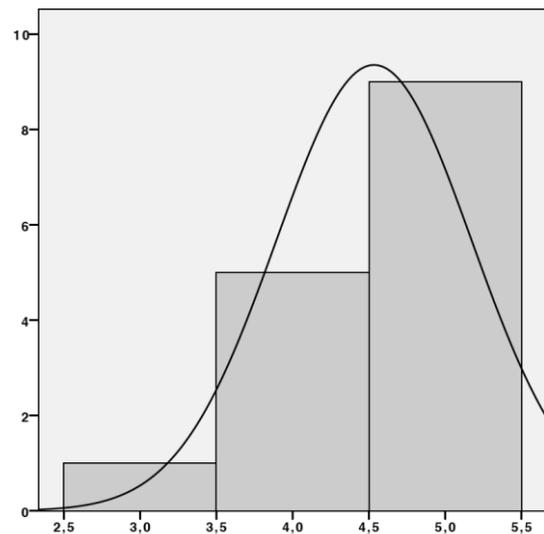| Responses					
Point	**1**	**2**	**3**	**4**	**5**
Freq.			1	5	9
%			6.7%	33.3%	60%
Distribution parameters					
Mean	**Med.**	**Mode**	**q₁**	**q₂**	**k**
4.53	5	5	4	5	1

Fig. 1. Distribution of the responses to Q1

To the Q2, "In your opinion, was it useful to get a deeper understanding of the advertiser brand and define its copy strategy?" the answers obtained are shown in Table 2 and Fig. 2.

In this question, there was a unanimous response from the group (k = 0), where the bell curve is slightly shifted to the right (negative asymmetry); that is, there are more responses above the mean (4.13).

Table 2. Responses to Q2

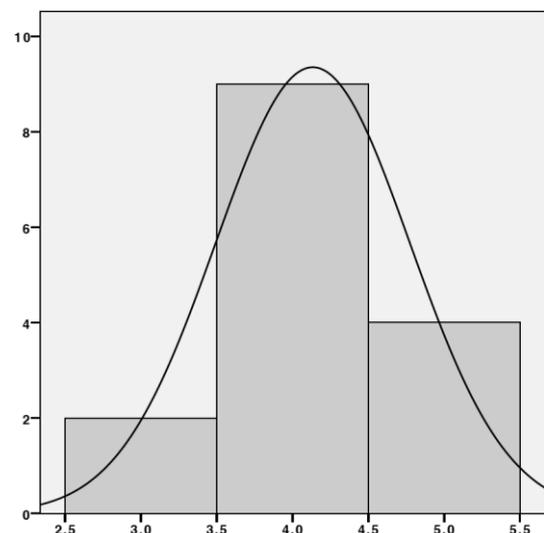| Responses					
Point	**1**	**2**	**3**	**4**	**5**
Freq.			2	9	4
%			13.3%	60%	26,7%
Distribution parameters					
Mean	**Med.**	**Mode**	**q₁**	**q₂**	**k**
4.13	4	4	4	4	0

Fig. 2. Distribution of the responses to Q2

To the question, "In your opinion, was the design thinking workshop a profitable learning for the professional practice of advertising?" the answers obtained are shown in Table 3 and Fig. 3.

On this occasion, the average assessment of the group of students is 4.33. The mode and the median also coincide around the value 4. Again, we got a consistent group response, with a bell curve slightly displaced to the left (positive asymmetry), which shows more responses below the mean value.

Table 3. Responses to Q3

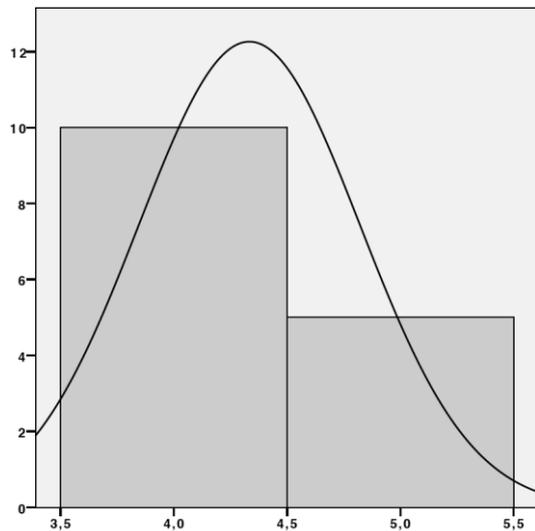| Responses					
Point	1	2	3	4	5
Freq.				10	5
%				66.7%	33.3%
Distribution parameters					
Mean	Med.	Mode	q_1	q_2	k
4.33	4	4	4	5	1

Fig. 3. Distribution of the responses to Q3

To the open-ended question, "Use three words to assess the design thinking workshop", the answers obtained reveal an upbeat assessment on the method in which innovation and cooperative work are the main advantages founded (Fig. 4).
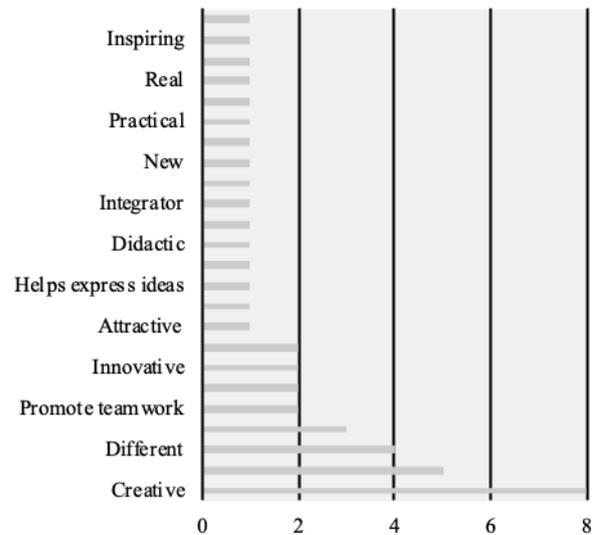

Fig. 4. Distribution of the responses to Q4

To the open question, "Concerning possible future editions of the workshop, what aspect would you propose to improve?" the students who responded supported the continuation of this method in following years and within other subjects (Fig. 5).
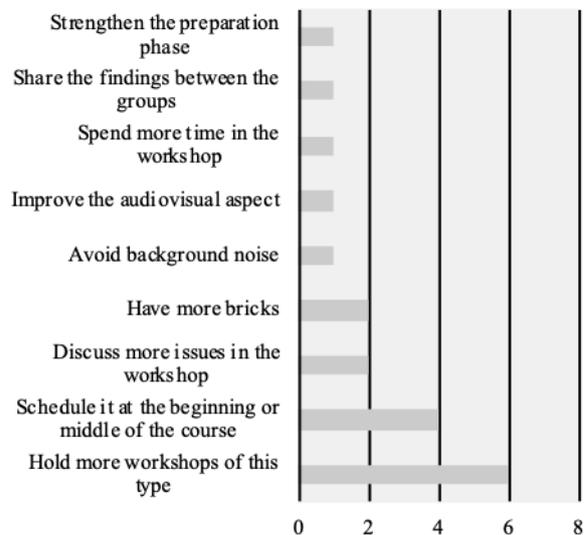

Fig. 5. Distribution of the responses to Q5

To the open question "Observations", the students who answered provides the following comments:

"It is useful because it implies leaving the type of habitual practices, being entertaining and favouring the sharing of knowledge among colleagues".

"It was a positive fact that a student from another speciality (Audiovisual Communication) also participated".

"These types of workshop facilitate learning and bring the student closer to the professional market framework."

"It helps the cohesion of the group".

"It serves to know the advertiser from an unusual point of view".

Lecturer's evaluation

In general, the assessment of the lecturers involved is very positive. They constated the achievement of the workshop's didactical purposes and highlighted a significant level of motivation and satisfaction in the students.

With a view to possible future editions, the lecturer proposed the following improvements:

- Avoid developing the workshop at the end of the academic year, which may be more profitable at the beginning or in the middle.
- Explore other techniques within this methodological approach to applying other workshop versions in this or other subjects.
- Explore the possibility of opening the workshop to volunteer students of other specialities of the Communication Degree (Audiovisual Communication and Journalism).

Subsequent workshops

After an upbeat assessment of the results obtained in the workshop, two new design thinking workshops took place in the following academic year (2019-2020).

One of the workshops in the context of the same subject, Advertising Strategy. In this case, it focussed on the study of the target audience. For this, the empathy map (a design thinking tool) complemented the advertising technique of the buyer persona. The hybridisation of both procedures was of particular interest.

The other workshop was developed on the subject of Corporate Communication. The students themselves had to choose which specific design thinking tool could be more suitable to manage a situation of internal communication crisis in an organisation.

Discussion and conclusions

The evaluation of the workshop provided by students and lecturers allows us to respond to the research objectives. Likewise, the realisation in the following academic year of two new workshops inspired by the design thinking method has a probative value, as it demonstrates the perceived suitability, viability, and applicability in other subjects of the degree.

The workshop carried out has been innovative, exciting and motivating for the students, helping them work in groups and develop their strategic thinking. At the same time, it has served as a connection with the business reality of our time, characterised by being diverse, changing and where creativity and versatility are essential.

Among its strong points as a didactic tool, we can affirm that the workshop is related to the contents of the subject and, in general, to the work processes of advertising. Likewise, its application with academic purposes is viable due to the use of resources, time and teaching staff that it requires.

This type of workshop brings students closer to practical knowledge that will improve their skills when they enter the job market. In addition, as it is a technique that promotes creative thinking, it will strengthen the students' capacities for adaptation and search for innovative solutions in advertising and other fields.

As a means of improvement in the face of possible editions, we suggest extending the evaluation of the method to active professionals in the advertising, audiovisual communication or journalism sector. We propose to conduct a new survey in the companies where the students carry out their internships in the final cycle of their degree.

In short, this real experience shows that the design thinking methodology is applicable and beneficial for teaching in the area of Communication, more specifically advertising. In addition, we offer information on the organisation of the workshop, its strengths, weaknesses and proposals for improvement. For these reasons, we understand that this research will be of interest to professionals in university education and companies that seek to improve the skills of their students and employees when working as a team and creating innovative solutions.

References

Arias-Flores, H., Jadán-Guerrero, J., & Gómez-Luna, L. (2019). Innovación educativa en el aula mediante Design Thinking y Game Thinking. *Hamut'ay, 6*(1), 82-95.

Brown, T. (2009). *Change by Design: How Design Thinking Transforms Organizations and Inspires Innovation.* Harper Collins, New York.

Cevallos, J. R. D. (2015). *Plan de negocio de Lecolective: cómo crear una agencia de diseño y publicidad.* Universidad de Comillas, Madrid.

Clark, K., & Smith, R. (2008). Unleashing the power of design thinking. *Design Management Review, 19*(3), 8-15.

Cross, N. (2011). Design thinking: Understanding how designers think and work. Oxford, Berg.

García-Uceda, M. E. (2011). *Las claves de la publicidad.* ESIC Editorial, Madrid.

Glen, R., Suciu, C., & Baughn, C. (2014). The need for design thinking in business schools. *Academy of management learning & education, 13*(4), 653-667.

Gonen, Esra (2019). Tim Brown, Change by Design: How Design Thinking Transforms Organizations and Inspires Innovation. *Markets, Globalization & Development Review, 4*(2).

Groeger, L., & Schweitzer, J. (2014, July). Transformational leadership, design thinking and the innovative organization. In *European Group for Organizational Studies Conference*, [revised 2021 09 15], https://bit.ly/2XjY4KF

Grots, A., & Creuznacher, I. (2016). *Design Thinking: Process or Culture?* In Walter Brenner & Falk Uebernickel (ed.), *Design Thinking for Innovation*, 183–191. Springer, Cham.

Gloppen, J. (2009). Perspectives on design leadership and design thinking and how they relate to European service industries. *Design Management Journal, 4*(1), 33-47.

IDEO (2012). *Design Thinking for Educators* [revised 2021 09 10], https://bit.ly/3CdtGQN

Institute of Design at Standford (2012). *Mini guía: una introducción al Design Thinking* [revised 2021 09 11], https://bit.ly/3Efjqtf

Johansson-Sköldberg, U., Woodilla, J., & Çetinkaya, M. (2013). Design thinking: past, present and possible futures. *Creativity and innovation management, 22*(2), 121-146.

Lee, C., & Benza, R. (2015). Teaching Innovation Skills: Application of Design Thinking in a Graduate Marketing Course. *Business Education Innovation Journal, 7*(1), 43-50.

Lego (2010). *Open-source: Introduction to LEGO® SERIOUS PLAY®* [revised 2021 09 10], https://bit.ly/2XmxhNu

Lewrick, M., & Link, P. (2015). Design thinking tools: Early insights accelerate marketers' success. *Marketing Review St. Gallen, 32*(1), 40-51.

Liedtka, J. (2018). *Why design thinking works. Harvard Business Review, 96*(5), 72-79.

Luchs, M. G., Swan, S., & Griffin, A. (2015). *Design thinking: New product development essentials from the PDMA*. John Wiley & Sons, New Jersey.

Márquez, B. L. V., Hanampa, L. A. I., & Portilla, M. G. M. (2021). Design Thinking aplicado al Diseño de Experiencia de Usuario. *Innovación y Software, 2*(1), 6-19.

Mateos-Ronco, A. y Server, R. J. (2011). Drawing up the official adjustment rules for damage assessment in agricultural insurance: Results of a Delphi survey for fruit crops in Spain. *Technological Forecasting & Social Change, 78*(9),1542-1556.

Miller, P. N. (2017). Is "design thinking" the new liberal arts? In Peter Marber & Daniel Araya (ed.) *The evolution of liberal arts in the global age* (167-173). Routledge, New York.

Ngamvichaikit, A. (2021). Leveraging Design Thinking for Pharmaceutical Digital Marketing. *Asian Journal of Business Research, 11*(1), 120-140.

Pande, M., & Bharathi, S. V. (2020). Theoretical foundations of design thinking–A constructivism learning approach to design thinking. *Thinking Skills and Creativity, 36*, 100637

Panke, S. (2019). Design thinking in education: Perspectives, opportunities and challenges. *Open Education Studies, 1*(1), 281-306.

Putman, V. L., & Paulus, P. B. (2009). Brainstorming, brainstorming rules and decision making. *The Journal of creative behavior, 43*(1), 29-40.

Puga, B. F., Espilla, A. Z., Unzueta, O. B., & Osa, T. E. (2018). Creatividad y Design Thinking en los TFG de un Grado en Comunicación Audiovisual. *Comunicación: Revista Internacional de Comunicación Audiovisual, Publicidad y Estudios Culturales,* (16), 1-18.

Quiñones, C. (2013). Desnudando la mente del consumidor. Paidós Empresa, Barcelona.

Qutp, M. M., Donia, S. H. A., & El-Sayed, E. E. M. (2019). The strategy of design thinking and its role in enhancing the competitive advantage of advertising organizations. *International Journal of Innovation and Applied Studies, 27*(1), 146-164.

Reinecke, S. (2016). What is it that Design Thinking and Marketing Management can learn from each other? In Walter Brenner & Falk Uebernickel (ed.), *Design Thinking for Innovation*, 151-162. Springer, Cham.

Rodrigo, M. (1995). *Los modelos de la comunicación.* Tecnos, Madrid.

Romero, D. F., & Duarte, J. M. S. (2016). La enseñanza aprendizaje de la comunicación digital a través del Design Thinking. In José Francisco Durán-Medina e Irene Durán Valero (coord.) *TIC actualizadas para una nueva docencia universitaria,* 211-218. McGrawHill Educación, Madrid.

Sebastián-Morillas, A., Martín-Soladana, I., Clemente-Mediavilla, J. (2020). Importancia de los insights en el proceso estratégico y creativo de las campañas publicitarias. *Estudios del mensaje periodístico, 26*(1), 339-348.

Serrano, M., & Blázquez, P. (2016). Design thinking. ESIC, Pozuelo de Alarcón (Madrid).

Snyder, K., Ingelsson, P. and Bäckström, I. (2018). Using design thinking to support value-based leadership for sustainable quality development. *Business Process Management Journal, 24*(6), 1289-1301.

Stickdorn, M., Hormess, M. E., Lawrence, A., & Schneider, J. (2018). *This is service design doing: applying service design thinking in the real world.* O'Reilly, Sebastopol.

Tevi, A., & Koslow, S. (2018). How rhetoric theory informs the creative advertising development process: reconciling differences between advertising scholarship and practice. *Journal of Advertising Research, 58*(1), 111-128.

Toledo, L. A., Garber, M. F., & Madeira, A. B. (2017). Considerações acerca do Design Thinking y Procesos. *Revista Gestão & Tecnologia, 17*(3), 312-332.

Turnbull, S., & Wheeler, C. (2017). The advertising creative process: A study of UK agencies. *Journal of Marketing Communications, 23*(2), 176-194.

Valentim, N. M. C., Silva, W., & Conte, T. (2017). The students' perspectives on applying design thinking for the design of mobile applications. In *Proceedings of the 39th International Conference on Software Engineering: Software Engineering and Education Track* (77–86). IEEE Press, Buenos Aires.

Isabel Palomo-Domínguez is a PhD researcher in the Research Group International Review On Communication and Marketing Mix, IROCAMM (University of Seville, Spain). From 2015 to 2020, she was a lecturer in San Isidoro University Center (attached to the University of Pablo de Olvaide, Seville). In 2020-2021 she made an internship at the Vilnius Tech University and defended her doctoral dissertation at the University of Seville, receiving *cum laude* mention. Her research direction is advertising, innovative formats of marketing communication and its legality. She is also a practitioner in the communication field, founder of PALABRA_ (estudiopalabra.com), a creative studio for advertising. Email addresses: ipalomo1@us.es; isabel@estudiopalabra.com. Spanish phone: +34 629 231 531. Lithuanian phone: +370 665 71019.