

**The Eminence of Incubation in Creative Procces
As The Basic Reason of Recreation Space
Development at Work**

Diena Yudiarti¹ Hani Amalia²

Product Design Department

Creative Industry Faculty – Telkom University

dienayud@telkomuniversity.ac.id

Abstract. *Creative People are known to be different in their perceptions and interpretations of their work problems, depending on the characteristics of the current situation occur (Dorst & Cross, 2001). The creative process that people usually see cannot be seized by any methodology, but the creative people actually implement different types of methods. Methods have flexibility in processes, actions, and appreciations (Roozenburg & Dorst, 1998; Stempfle & Badke-Schaub, 2002). Creative people usually have unique characteristics while doing their job. They need some supportive situations or environments to embrace the imagination as they create an idea of the creative process. Sometimes, the ideas come out in unexpected situations, either in a relaxed situation or under pressure situations. The second stage of creative thinking from the four stages presented by Graham Wallas (1926) is the Incubation Stage which becomes the focus of this research. The need for the incubation stage will be used as one of the variables of the user aspect approach for leisure facility design which is the output expectation from this research for the recommendation of designing the facility in a Co-Working Space.*

Keywords: Characteristic Analysis, Incubation, Creative Process, Leisure Time, Leisure Facility, Co-Working Space

INTRODUCTION

Creative People are known as different in their perception and interpretation to their work problems, depend on situation and characteristics that currently occur (Dorst & Cross, 2001). The creative process cannot be seizing by any methodology, but actually creative people apply different kinds of methods. The methods those have flexibility in process, action, and re-appreciation (Roozenburg & Dorst, 1998; Stempfle & Badke-Schaub, 2002). Thus, the results of this study have important implications for works culture of creative people. As in the second stage of creative thinking from the four stages presented by Graham Wallas (1926) is the Incubation Stage which becomes the focus of this research.

Thinking in creative process is reduced to form basic cognitive operations of generation, exploration, comparison and selection (Stempfle & Badke-Schaub, 2002). Design thinking requires motivations, strategies and priorities of expert creative people, the cognitive activities in shaping creative process and the creative people' qualities to produce distinctive thinking and create valuable ideas (Stewart, 2011).

The problem faced is tend to contectualized within larger systems of relationships, connections and settings of agenda (Cross et al., 2011).

The work environment of creative people which sometimes cannot be set at the time it works and rigid office systems, making some creative people are not comfortable or not suitable for work in formal companies. They need some situation or environment that support to embrace the imagination when they create ideation of creative process.

Each creative people usually make their own comfort environment for their workspace, they can bring their toys, their personal belongings, music players, etc. In the phase of exploration, some creative process mostly occur when they brainstorming to each other creative people while they play together, so do not be surprised if we found many toys or sports equipment in creative people workspace. Some creative people have a good awareness about their thinking and acting because they can self-reflect their business, but some creative people also have lack of self-reflection and get stuck and suffer in their routines (Stampfle & Badke-Schaub, 2002).

Therefore, the growing of creative industries in Bandung, whether it has its own office location or rented area of Co-Working Space (CWS), for further explanation the author will call Co-Working Space with CWS. CWS itself is an office that has a rental office system that also adapts the development of some work characteristics that increasingly turns day increasingly requires both flexibility seraca space or time (Utami, 2017). Although initially the main objective of the CWS establishment was not just renting office space but also as a synergistic community container, a place for its users to develop their networks and generate new ideas (Uzzaman, 2015).

1.1 Research Objective

A team of creative people are encouraged to explore the problem of the task, find the opportunities, and create ideas. Kathryn Best (2006) said there are three key words in creative process; they are freedom, focus and budget. This study will explore how the creative people's behavior when they are facing work pressure.

The need for an incubation period in the creative process is significant to the density of work pressure experienced by some creative people in present and future times. The number of demands perfection of the work enough to make the level of stress in the work increases. This is where the incubation period is needed on the sidelines of the density of work activities. For future research, it is expected about the design of facilities / areas that can support the needs of the incubation period.

1.2 Scope of The Research

This study has some limitations, in terms of industrial sector and location, the creative industries to be selected are creative industries that have creative process, and for location will be narrowed to CWS in Bandung area. Considering the creative industries to be chosen has similar cultures and behaviors.

2.LITERATURE REVIEW

As mentioned earlier, this study focuses on the need for an incubation period in the creative process at CWS, from their work characteristics, we know how important the recreational facilities in their work areas are to improve their own performance.

2.1 Creative People at Work

Design ability used to be a collective or shared ability, and it became regarded as an exceptional talent in recent times, something that people must retain some knowledge that differ to other (Cross, 2011). Design follows divine inspiration, in many levels of human behavior and many techniques for derive reasoning (Craig, 2001). Creative people's thoughts may wander laterally and free-associated to bring out the unconscious ideas. The complexity and variety of information derived can suggest a lot of unconscious assumptions that are folded into the problem-solving process. Some assumptions derived from the default each individual's knowledge. Creative people might invoke knowledge from their domain experiences and skills, thus the

conceptual ideas may direct the development of a solution unconsciously (Craig, 2001). Creative People find some factors in their daily routine appear to be natural and almost unconscious (Cross, 2011). Creative People themselves are known with terrible at explaining about they work, about how they design, when creative people talk spontaneously about what they actually do, the most of all they talk almost exclusively about the outcomes not the process or the activities (Cross, 2011). The average work of creative people is to find opportunities and resolve problems encountered.

Creative process to manage design problem, does not miss to enhance the Divergent and Convergent Thinking, which are the most crucial things in brainstorming. Divergent thinking is the ability to explore and capture different, unique or variant ideas which are related to one theme of design problem faced while convergent thinking is the ability to find the “correct” solution to the given problem. By nature, creative people are reflective beings and need to go through periods of divergent (debate and dialogue and lateral thinking) and convergent (processing ideas on one’s own) thinking (Best, 2006).

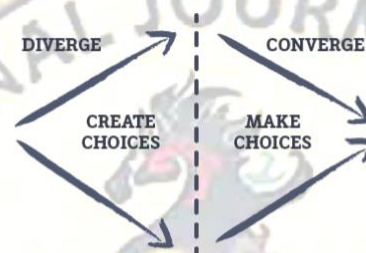


Figure 1, Divergent dan Convergent Thinking (Brown, 2009)

The ideation processes those are supported by both of divergent and convergent thinking, when making possibilities by divergent thinking and narrowing the possibilities related to availability and capability of sources and resources by convergent thinking. Both types of thinking are part of the design thinking concept which are done when the creative processes occur.

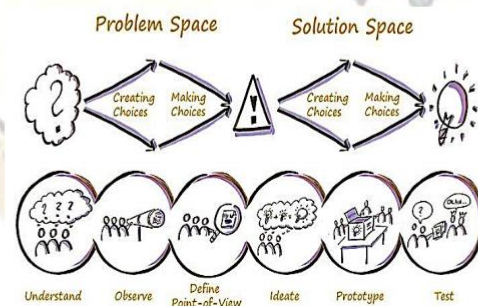


Figure 2, Design Thinking Steps and Mind-Sets (Brown, 2009)

2.3 Cognitive Thinking Stages in Creative Process

A creative thinking has a process that is organized in the form of stages. The creative process is also an important component in the world of education, especially for creative people, art workers and / or designers. A cognitive activity that generates a new view of a problem found or encountered and the result is not limited to something pragmatic or in other words seen from the point of view of its usefulness.

In psychology, a creative cognitive activity has four stages in the process (Wallas, 1926), namely:

- a. Preparation:** This first stage is the stage of formulating a problem found or encountered and planning the initial effort to solve it.
- b. Incubation:** This second stage is a period in which no meaningful effort is made for the problem-solving thinking directly to the problem, in other words the attention is diverted momentarily to other things beyond the problems encountered. This incubation period frees the mind for a moment from the exhausting things of the mind due to too hard / heavy looking for problem solving.
- c. Illumination:** Here is the period where insight or deep understanding is obtained as the stage of enlightenment of the problem. The stages in which comprehension is increasing, ideas emerge and complement each other for problem solving, which in turn breakthrough creative ideas emerge one at a time in this stage.
- d. Verification:** The final stage of the creative process is a test of understanding that has been obtained and proposed solutions to problem solving to prove the legitimacy of the ideas or solutions obtained.

The second stage which is the stage of incubation becomes the focus of this research discussion, where this stage is actually very helpful in the creative process, because in fact in this stage we can solve the problem without us knowing it. Forgetting or diverting for a moment the thought of a heavy problem-solving demands can help for the discovery of new ideas that are more suitable. So, stopping the problem-solving process and easing moments of brain activity for a while can help to rearrange the thoughts on the problems at hand.

2.4 The Co-Working Space (CWS)

An increasingly flexible work pattern leads to changes in the hierarchy of work patterns, such changes that cause workers to no longer be sheltered in the company. Where it creates the phenomenon of Co-Working Space (CWS) used as a meeting place for workers with relations and colleagues. CWS is a place that offers work space with a much more open office concept with other space. In addition, CWS can also be interpreted as a place used for seeking social interaction, community building, sharing and searching for ideas or concepts, as well as a place that can be used by workers who are bored with the atmosphere of the office, workers who have no office and do not want to work in home. In general, CWS is a rental office business, so to be able to use it, the workers must be required to pay the rent. CWS is more widely used or used by freelancers, IT, digital marketing, start-ups and creative people. This is because CWS has both material and non-material benefits. Where materially, users can save on expenses to rent offices with high rental value, while non-material benefits are as follows: (1) A more conducive working environment; (2) Users can share insights with other visitors; (3) Users can build community and open other business; (4) Enter the media radar; (5) Getting all the necessary needs in completing the work in one place.

Currently, CWS is one of the facilities that workers are enjoying. It is not separated with the values provided CWS. (Kwiatkowski & buczyński, 2011) states there are five values that can be taken from CWS, namely: (1) Collaboration; (2) Community; (3) Sustainability; (4) Openness; and (5) Accessibility.

In designing a CWS, there is no need for a uniform theory or characteristic. CWS stands by providing facilities and services that vary. According to Holm Friebe (2008)

to form ideal CWS, it is necessary to apply the following points: work area, social area, contact room, business room, information area, play / recreation area, development area, leisure area, meeting room, organizing and storage space.

2.5 Recreation Facility in an Office Area

Recreation area is a space that is utilized by its users to remove the fatigue or incubation period required in the stages of the creative process. Recreation Area is a facility created with the concept of entertainment or play. The area in the office is a fun environment to enjoy because it increases productivity and happiness. The workplace is one of the biggest sources of stress in the business world. Over and over, the team needs a few minutes to relax in a quiet place to feel refreshed and energized again.

Well-designed recreation areas can help workers returning to work with the same dedication and enthusiasm. Therefore, absolute attention should be made in designing recreational areas in the office space because the requirements and office culture vary from office to office.

3 Research Methodology

Essentially, research is an attempt to find the truth or to further justify the truth. The efforts to find the truth are made by philosophers, researchers, and practitioners through the model or specific model. This kind of model is called paradigm. Paradigm is a set of assumptions that are held together, a concept or proposition that direct way of thinking which used by researcher logically (Bogdan & Biklen, 1982). Methodology focused on how we acquire knowledge, and so for this research conducted qualitative approach as the interpretivist paradigm.

3.1. Qualitative Approach

Qualitative research believes that there is regularity in society. Eventually qualitative research is the systematic activities to discover the theory of situation, not to test a theory or hypothesis. Therefore, epistemologically, qualitative research still acknowledges the empirical fact as source of knowledge but not use the existing theory as a basis for verification. In qualitative research, the process of research is more important than the result itself. Only with the involvement of researcher in the data collection process which is the result can be accounted for (Creswell, 2013).

This research constructed Case Study as the research strategy, the data collected by observation and develops structured interview as the confirmation of the phenomenon occurred by the object research itself. The identification of the phenomenon about behavior of creative people in the way of them thinks and works in creative industry.

3.2. Case Study

The selected case of this research focused in creative processes in creative industry. The examination was about the behavior of creative people in creative processes of creative industry. The multiple sources in this research covered by some creative teams those were in different project in the same creative industry. The member of the project team could be consisting by the same or different individual; it is depend on the project itself.

3.3. Literature Study

Literature studies taken and related to this research are more on the characteristics and culture of creative people in the work, creative work area of the work in this study is limited to the area of Co-Working Space, as well as an explanation of the stages of the

creative process, especially the need for incubation in work. Literature study as the validation of triangulation of the two data taken are interview data and observation.

3.4. Data Collection

Data collection in qualitative approach involves much more from focus in on the actual types of data and procedures for gathering them (Arifin and Susanto, 2011). By observing in the field, researcher has a great deal to pay close attention, watch, and listen carefully, noticing what is seen, heard, smelled, tasted, or touched. Researcher as the instrument that absorbs all sources of information and carefully scrutinizes the physical setting to capture its atmosphere and indicate the unconscious signals influence human behavior (Neuman, 2006).

3.4.1. Observation

Through observation, researchers can also know factors important for a thorough understanding of the research problem but that were unknown when the study was designed. Although we may get truthful answers to the research questions that asked, we may not always ask the right questions (Mack *et al*, 2005). To understand detail of interactions in the context and then develop a deep understanding of how its parts relate to the whole (Neuman, 2006).

3.4.2. Interview

Based on Sugiyono (2010) interview is used as data collection techniques to find problems that must be investigated, and if the researcher want to know the things of the informants with more in-depth information and if the number of informants is a little.

This research collects data taken from interview and observation / observation methods directly to the field about the behavior of the creative people as they work, and the literature data as triangulation. The results of the study were analyzed and formulated into conclusions and recommendations for designing recreational facilities in the work area of creative people.

3.5. Analysis Data

Triangulation facilitates validation of data through cross verification from two or more sources by combining multiple observers, theories, methods, and empirical materials as the application and combination of several research methodologies in the study of the same case or phenomenon (Bogdan & Biklen, 2006). (Wiki). This research triangulates the data collections which are the observation, interview and documents (figure 7). The observation was the major data collections in this research; the literature review as the path of theming data collection to reshape the model from the phenomenon occurred; and lastly the structured interview as the confirmatory data about the phenomenon that captured in observation stage.

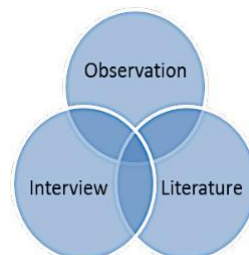


Figure 3. Data Triangulation

4. Discussion

The author's background as a designer gave a big reason to choose the object research in this study which is the creative people. Initially the author only had the idea in the object research, but couldn't be narrowing the research topic in where and which part is interesting to be examined. Because, if the topic research too broad to examined it was afraid that the study carried out the shallow and insignificant contribution to the science and research. Then the author contacted several sources to discuss the trend that was happening in creative people's work area. Thus the findings are explained in the parts below and followed by the findings in observation.

4.1. Interview Analysis

The participants were successfully contacted by the author are the expert creative people those had more than 5 years experiencing in creative industry, there are four participants: (1) A graphic designer who opened a brand consultant together with a colleague, when the interview conducted their business was in a fluctuate; (2) A product design lecturer who had approximately 10 years' experience in creative industry and his wife joined him together in an interior design consultant; (3) An economist who has passion in design field especially in automotive and made an automotive apparels production with some colleagues in 2004; and lastly (4) A litterateur who has skills in graphic design that even his skill is above average, when the author interviewed him after many years of experience in creative industry he preferred to work from home.

As a comparison from of all participants interviewed, they had a similar voice regarding the high pressure of work and demands from supervisors, clients and consumers. They mention at a time when the idea does not grow and their thinking is stuck, it makes them stressful. To relieve stress, they incubate or avoid a moment and empty their minds from work that makes them tired. How they can avoid the fatigue can vary, such as by watching television, watching videos on youtube or similar portals, playing a musical instrument for those who can play it, play console games, play ping pong and similar light sports; as well as playing cards or board games that they have.

When asked where they are playing, the average answer can be anywhere, for activities with small equipment and equipment, sometimes they do it still in the same place they work. If it requires more equipment and equipment they choose to move to another area that is more likely, in this recreation area. Only the existing recreation areas are considered not suited to their desired needs. Therefore it is necessary to redesign the recreation area that can accommodate the needs and desires of the creative people during the incubation period.

4.2. Observation Analysis

There are two types of CWS users, Regular Users and Unregular Users. Regular Users differentiate by the management employees of the CWS and the regular members of the CWS. The other, Unregular Users are Daily-Tenants and Guests.

The majority of CWS users are not aware of any recreation facilities. This is because the facility of play space is still often converted to other activities, there is no further socialization, as well as toys that are available only toys that are digital and the number is not much. CWS users assume that they need a play facility that can refresh their minds, but does not bother other users if the user is playing noisy.

CWS space users interested and feel agree if CWS provide toys as one of recreation facility. The toys they want are cooperative and competitive. They are attracted by toys that have diverse phases of flow, as well as punishment, collecting, and reward on the play process. For their own toy design, they want informative shapes and colors and there are differentiators according to the purpose of the component and the differentiator from the others.

CONCLUSION

The analysis focuses on the incubation needs of creative people such as CWS users who are doing activities or work in the creative field with the demand to create a new creation or develop something that already exists. The analysis is based on the background of the importance of incubation activities in CWS when the user is doing a break from the work done. The CWS user fatigue rate is in the medium to moderate range, although it is still moderate. Users often feel depressed because of the limit workmanship of the tasks obtained. This review aims to support the recommendation that stress levels should be at levels that tend to be less severe and meet the need for better motivation. In addition, users often feel the absence of distractions when tired except for breaks and something that is digital. Digital distractions can make the user's eyes and minds tired if done excessively and uncontrollably.

Based on research conducted, it can be concluded that the CWS users consist of various categories, seen from the age category and work. In these differences, the results of the study show that there are similar complaints, despite the diverse user categories. It concludes that users have a need to address these complaints.

Therefore the need for creative thinking is smooth and clear, the form of exploration that develops for each individual creative people is needed in support of team work in a creative industry organization. Cooperative form of each creative people as the basic capital of an organization can run well and produce good performance or creation as well. If good performance and creation results can occur and continue continuously, it will provide satisfaction to all parties involved and intersect with the performance or creation.

Further analysis of user aspect reviews needs to be done with the aim that the need to address user responses can be met. The analysis is a support for the realization of the solution to be determined, namely toys for play facilities for play space facilities on CWS. User aspect review analysis will result in user mappings that can be applied to toy apps along with other support reviews.

BIBLIOGRAPHY

- 1) Best, K. (2006). Design Management: Managing Design Strategy, Process and Implementation. *AVA Publisng SA*. ISBN: 978-2-940373-12-3.
- 2) Brown, T. (2009). Change by Design: How Design Thinking Transforms Organizations and Inspires Innovation. *Harper Collins Publisher*. ISBN: B002PEP4EG.
- 3) Charron, P. (2011). Divergent Thinking vs Convergent Thinking. *Think Brownstone Inc.*
- 4) Creswell, J. W. (2013) Qualitative Inquiry & Research Design: Choosing Among Five Approaches. Third Edition. *SAGE Publications, Inc*. ISBN: 978-1-4129-9530-6.
- 5) Cross, N. (2001). Designerly Ways of Knowing: Design Discipline versus Design Science. *Design Issues*, 17(3), 49-55

- 1) Cross, N. (2011). Design Thinking: Understanding How Designer Think and Work. *Berg Bloomsbury Publishing Plc*. ISBN: 978-1-84788-637-8.
- 2) Lawson, B. (2005). How Designers Think: The Design Process Demystified. Fourth Edition. *Architectural Press Elsevier*. ISBN-13: 978-0-7506-6077-8.
- 3) Neuman, W.L. (2006). Social Research Methods: Qualitative and Quantitative Approaches. Sixth Edition. *Pearson International Edition*. ISBN: 0-205-45793-2
- 4) Stempfle, J., Badke-Schaub, P. (2002). Thinking in Design Teams: An Analysis of Team Communication. *Design Studies*, 23, 473-496.
- 5) Stewart, S. C. (2011) Interpreting Design Thinking. *Design Studies*, 32(6), 515-520
- 6) Wallas, G. (1926). The Art of Thought. *New York:Harcourt, Brace and Company*.
- 7) Ward, A., Runcie, E., Morris, L. (2009). Embedding Innovation: Design Thinking for Small Enterprises. *Journal of Business Strategy*, 30(2), 78-84.
- 8) Yudiarti, D., Lantu, D.C. (2015). Organizing Creative People in Creative Industry: Preliminary Study About Implementation of Design Thinking in Indonesia. *Proceedings of 5th Business, Economics and Communications International Conference*. Phitsanulok, Thailand.
- 9) Yudiarti, D., Lantu, D.C. (2017). [Implementation Creative Thinking for Undergraduate Student: A Case Study of First Year Student in Business School](#). *Advanced Science Letters*, 23(8), 7254-7257.